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## Stalinist Urban Ensembles in East Estonian Oil-Shale Mining and Industrial Town Centres: Formation Mechanisms and Urban Space Identity as the Potential for Spatial Development

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#### Declaration:

Hereby I declare that this doctoral thesis, my original investigation and achievement, submitted for the doctoral degree at Tallinn University of Technology has not been submitted for a doctoral or equivalent academic degree.

Siim Sultson

signature

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## Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade keskuste stalinistlikud linnaansamblid: kujunemise mehhanismid ja linnaruumi identiteet kui ruumilise arengu potentsiaal

SIIM SULTSON



### Contents

List of Publications and Author's Contribution to the Publications	6
Introduction	.12
Background	.12
Topic and Problem	.12
About Terms	.15
Aim and Tasks	.15
Research Questions	.16
The Organisation of This Dissertation	.18
1 Historiography	.19
1.1 Existing Literature on Stalin-era Estonian Urbanism and East Estonian Oil-Shale Minin and Industrial Towns	-
1.2 Literature and Sources, Used in this Doctoral Thesis	.21
1.2.1 The First Group – Theoretical Studies	.21
1.2.2 The Second Group – Sources and Publications, Used for Researching the Issue of t Dissertation	
2 Concept and Methodology	.38
2.1 Methodological Framework	.38
2.2 The First Conceptual Reference Point	.50
2.3 The Second Conceptual Reference Point	.61
2.4 Methodology	.63
3 Results with Discussion	.65
Conclusion	101
References	105
Acknowledgements	127
Abstract	128
Lühikokkuvõte	130
Appendix	133
Publication 1	133
Publication 2	163
Publication 3	191
Publication 4	219
Publication 5	233
Publication 6.	243
Curriculum Vitae	277
Elulookirjeldus	279
Publications	281

### List of Publications and Author's Contribution to the Publications

This doctoral thesis is a summary of the following papers, which are referred to by their Arabic numerals in the text and included as appendices at the end of the dissertation. Current chapter consists of summaries of those publications. The chapter notes which research question is answered and the author's role in each publication.

## I Publication 1. Formation Mechanisms of Stalinist Oil-shale Mining and Industrial Towns in East Estonia: Soviet Nuclear Needs and Local Ambitions

Sultson, Siim. 2019. Formation Mechanisms of Stalinist Oil-shale Mining and Industrial Towns in East Estonia: Soviet Nuclear Needs and Local Ambitions. Journal of Urban History, ...: ... [is being published]

This Publication addresses Research Questions 2, 3a, 3b, 3c and 4.

#### Annotation

Planning of oil-shale mining and industrial towns Kohtla-Järve, Jõhvi, Sillamäe, Ahtme, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme, and Viivikonna was caused by Soviet Union's need for mineral resources, nuclear arms race, army, industry and economy. East Estonian region gained strategic importance for the Soviet Union already in 1940. These towns were planned mostly by non-local architects and stately architectural firms, for instance, Stalinist central gridlines and central urban ensembles of Kohtla-Järve and Sillamäe were designed under the guidance of local architect Harald Arman. As the head of the Department of Architecture of the Estonian SSR, he processed both masterplans and construction plans of those towns during the ambitious planning of oil-shale regions in the mid-1940s and early-1950s. As archival documents show, he processed all plans of East Estonian oil-shale mining and industrial towns. Urban space of East Estonian oil-shale mining and industrial towns was influenced by contemporaneous Stalinist urban space of the rest of Estonia. From 1947 to 1954, the Department of Architecture of the Estonian SSR compiled a planning task for industrial and urban development of the Estonian SSR's region where oil-shale occurs, encompassing a territory of 4000 km<sup>2</sup> – a strategical plan concerning the mineral resources industry continued for the period up to 1970. Meanwhile, Estonia was considered to be a region where crude oil occurred.

#### Author's contribution

The author of this thesis is the sole author of this article, responsible for the research concept, methodology, data collection, and interpretation. This article will be published in a peer-reviewed journal *Journal of Urban History* in 2019.

### II Publication 2. Towards Prosperous Future Through Cold War Planning: Stalinist Urban Design in the Industrial Towns of Sillamäe and Kohtla-Järve, Estonia

Sultson, Siim. 2019. Towards Prosperous Future Through Cold War Planning: Stalinist Urban Design in the Industrial Towns of Sillamäe and Kohtla-Järve, Estonia. Cold War Cities: Spatial Planning, Social and Political Processes, and Cultural Practices in the Age of Atomic Urbanism, 1945–1965: ... [is being published]

This Publication addresses Research Questions 2, 3a, 3b and 3c.

#### Annotation

This article focuses on Estonian industrial towns Sillamäe and Kohtla-Järve and the deployment of Soviet urban design approaches from the mid-1940s through to the mid-1950s. The new industrial towns were built in order to exploit local mineral resources during the occupying Soviet regime and became examples of Stalinist planning, which were intended to be utopias. Stately urban ensembles of those towns formulated a paradigm that was unfamiliar to the existing local urban design and architectural traditions. Sillamäe and Kohtla-Järve were designed under the guidance of stately architectural firms Lengorstroyproyekt and Lengiproshacht residing in Leningrad (St. Petersburg). In the 1950s both towns, with populations of 10 000, had a morphology that allowed them to be developed into much larger industrial centres. Sillamäe and Kohtla-Järve were designed to be model Soviet industrial towns in order to demonstrate the route to a prosperous future. Unlike other Estonian towns, the inhabitants of Sillamäe and Kohtla-Järve were imported from the great Soviet Union. Sillamäe was a 'closed Soviet town' due to the processing of uranium oxides for the nuclear industry and military needs. Kohtla-Järve as an agglomeration consists of six satellite settlements (Järve, Ahtme, Kukruse, Sompa, Oru, Viivikonna with Sirgala) which were collectively regarded to be one oil-shale mining and processing complex in order to produce electricity in large thermal power plants. Though research of Estonian Stalinist urban space considers both Stalinist industrial towns unfamiliar, as they would originate from a parallel dimension, they still have perspective and functional plans that have much in common with the Stalinist central gridlines of Tallinn and Pärnu, planned by local architects. This essay reflects upon the possibilities of integrating the partially abandoned, and mostly Russian-speaking, Sillamäe and Kohtla-Järve into the entire state through the legacy of local Stalinist stately urban ensembles.

#### Author's contribution

The author of this thesis is the sole author of this article, responsible for the research concept, methodology, data collection, and interpretation. This article will be published as a chapter in a peer-reviewed book, *Cold War Cities: Spatial Planning, Social and Political Processes, and Cultural Practices in the Age of Atomic Urbanism, 1945–1965,* in 2019.

### III Publication 3. Estonian urbanism 1935–1955: the Soviet-era implementation of pre-war ambitions

Sultson, Siim. 2017. Estonian urbanism 1935–1955: the Soviet-era implementation of pre-war ambitions. Planning Perspectives, 33(3): 385–409. DOI: <u>10.1080/02665433.2017.1348977</u>

#### This Publication addresses Research Questions 1, 2, 3a and 3c.

#### Annotation

Estonian 1940s–1950s town planning practices show that Stalinist principles were in line with Estonian architects during the 1930s pre-war, independence period. However, between 1944 and 1955, in the context of the Soviet occupation, urban planning was faced with rigid ideological constraints. After the Second World War, Estonian architects were forced to abandon projects in historical city centres, which focused on maintaining local natural conditions and cultural heritage, as well as using local materials. This article analyses *similarity* and *continuity* in the urban space design of the post-war Stalinist period and that of the 1930s. In order to overcome the stagnation in this field of research, the experience and ambitions of 1930s independent Estonia's urban space design are discussed and

compared to practices developed in the post-war Stalinist period. It can be argued that urban space practices developed in the period from 1944 to 1955 fused the Soviet urban space paradigms with the local urban space design of the 1930s independence period. Between 1944 and 1955, the seeming replacement of Estonian urban space took place as a shift through alterations and continuities that forms a similar shifted urban space – the urban space that is formed by similarities and continuities, as well as shifts instead of disruptions. Such an urban space had the potential to influence urban space of East Estonian oil-shale mining and industrial towns.

Some existing town centres, such as in Tallinn, Narva, and Pärnu, were reconstructed after suffering damage in the war, as well as for ideological reasons. Yet, during this time period, most efforts were directed towards building new industrial towns in East Estonia that exemplified a Stalinist utopia; this also presented the Soviet regime with an opportunity to exploit local mineral resources.

#### Author's contribution

The author of this thesis is the sole author of this article, responsible for the research concept, methodology, data collection, and interpretation. This article was published in a peer-reviewed journal *Planning Perspectives* in 2017.

### IV Publication 4. Replacement of Urban Space: Estonian Post-War Town Planning Principles and Local Stalinist Industrial Towns

Sultson, Siim. 2016. Replacement of Urban Space: Estonian Post-War Town Planning Principles and Local Stalinist Industrial Towns. Journal of Architecture and Urbanism, 40(4): 283–294. DOI: <u>10.3846/20297955.2016.1247999</u>

#### This Publication addresses Research Questions 1, 2, 3a and 3c.

#### Annotation

The paper focuses on Estonian urban space research concerning, both the replacement of urban heritage and the establishment of new urban design in the mid-1940s and the 1950s. On the one hand, Stalinist principles introduced by the Soviet occupation reminded a little bit of the independent Estonian 1930s town planning ambitions, and on the other hand, the new principles formulated a new paradigm that was unfamiliar to local urban space tradition. Estonian urban space was compelled to follow the Soviet doctrine by concept, forms and building materials. The result of such a practice was an evolution rather than revolution, implemented by local architects. Sometimes suffering irrational demolitions, the towns got an axially arranged representative, but also a perspective, and functional plans. Some existing towns (for instance Tallinn, Pärnu, Narva) got new centres due to war wreckages and ideological reasons. However, the new urban space was an alternative urban space that, on the one hand, demonstrated conformity to the compulsory official requirements, but, on the other hand, based on independence practice, tried to establish its own local space.

Meanwhile, new industrial towns as examples of Stalinist utopias were built in East-Estonia during the 1940s–1950s in order to exploit local mineral resources by the Soviet regime. In comparison with Tallinn and Pärnu urban space of East-Estonian industrial towns Kohtla-Järve and closed Sillamäe – designed in Leningrad (St. Petersburg) – still need to be researched. Though different from the rest of Estonian towns by details and materials of façades city-like centres of Sillamäe and Kohtla-Järve are somewhat similar to Tallinn and Pärnu by their composition.

#### Author's contribution

The author of this thesis is the sole author of this article, responsible for the research concept, methodology, data collection, and interpretation. This article was published in a peer-reviewed journal, *Journal of Architecture and Urbanism*, in 2016.

## V Publication 5. Alteration in the Awareness of Estonian City Space from Independence to Stalinism

Sultson, Siim. 2016. Alteration in the Awareness of Estonian City Space from Independence to Stalinism. Periodica Polytechnica Architecture, Vol. 47, No. 1: 49–55. DOI: <u>10.3311/PPar.9557</u>

This Publication addresses Research Questions 1 and 3a.

#### Annotation

The article focuses on the alteration of Estonian city space awareness in the period of the mid-1940s to mid-1950s. The article opens stately façade of Estonia as an inevitable prerequisite of a young independent country's identity, formed in the 1930s, as a prologue. The Soviet occupation introduced new principles of the occupying state. However, some of those matched with local architects' dreams and city visions.

Meanwhile, architect and the head of the Department of Architecture of the Estonian SSR Harald Arman tried to balance the two tendencies – local dreams and visions with compulsory foreign principles. As a result, Estonian mid-1940s town planning was quite similar to the pre-war independence period disregarding the rest of the Soviet Union architecture. Some existing towns (for example, Tallinn, Pärnu, Narva) got new centres due to war wreckages and ideological reasons.

At the same time, new industrial towns as examples of Stalinist utopia were built in East-Estonia during the 1940s and 1950s in order to exploit local mineral resources for the benefit of the Soviet regime. While new Stalinist centres were designed in Tallinn, Pärnu, and Tartu by local architects, the new industrial towns represent so-called imperial city space principles elaborated under the guidance of Leningrad construction departments. The article poses questions: Was there any difference between the pre-war independence period city space and Stalinist period city space? Where do the alterations in Estonian city space awareness from the independence period to Stalinism lie in? Though Soviet occupation changed Estonian city space as a materialisation of an ideology, Estonian architects managed to establish an alternate city space that tried to match both with legacy of the independence period and the Soviet principles.

Meanwhile, the Stalinist stately urban ensembles in Estonia provided an opportunity for architects to carry out some of their architectural ideas from the period of independence. The war had left large demolished areas that turned out to be practical playgrounds for architects in Tallinn, Pärnu, Narva and elsewhere in Estonia. As a result, Estonian towns got an axially arranged representative, sometimes enormous, but fairly perspective and functional plans.

#### Author's contribution

The author of this thesis is the sole author of this article, responsible for the research concept, methodology, data collection, and interpretation. This article was published in a peer-reviewed journal, *Periodica Polytechnica Architecture*, in 2016.

## VI Publication 6. How the Estonian architect had to plan "correctly" and forget the "wrong": On planning the urban space of the Estonia from 1944–1955

Sultson, Siim. 2013. Kuidas Eesti arhitektil tuli planeerida "õigesti" ja unustada "vale". Eesti linnaruumi kujundamisest aastail 1944–1955. [How the Estonian architect had to plan "correctly" and forget the "wrong": On planning the urban space of the Estonia from 1944–1955]. Akadeemia 12: 2248–2277.

This Publication addresses Research Question 1.

#### Annotation

The Soviet occupation began to change the practice of urban space in Estonia. After the Second World War ended many places of particular significance, regulation plans and traditional treatment of materials had to be abandoned. Local architectural organisations and the treatment of form and material by Estonian architecture and urban planning were subjugated to the norms of the Soviet Union. If necessary, the urban space had to be changed, the memory purified.

Architecture, as the carrier of public memory, willingly or unwillingly, speaks to nearly everyone and by doing so, the totalitarian system can control the citizen. The urban space had to be efficient, functional, regular, and have prospects. Regular urban planning based on axes is not a characteristic of present-day totalitarian states only. Regularity, hierarchy, and clarity for the sake of a functional town or a settlement have been appreciated since ancient times. The strive for regular urban space has developed historically and is a characteristic of democratic states as well. The ideology, efficiency, and harmony of society have often drawn on the monumentality and harmony of urban planning in the totalitarian society, sometimes at the expense of purifying the memory.

The article concentrates on the Soviet ideological indoctrination of Estonian architects and urban planners. Architects who had arrived from other parts of the Soviet Union were considered more trustworthy. Therefore, the examples in the article do not include Narva, Kohtla-Järve, and Sillamäe, which were planned by all-Union architectural design bureaus as industrial towns significant for the whole Soviet Union. The author concentrates on Tallinn and Pärnu as these were the towns where local architects introduced the most significant changes.

The totalitarian Soviet regime required ideological awareness from urban planners. Paradoxically, the historically tried-out means in combination with ideological symbols had to create the impression of innovations. As the Soviet Union attempted to create a society of the future, everything old had to be abandoned and, if possible, new history planned from scratch. The "correct" urban planning needed ideological guidance: plenary meetings, congresses, directives, propaganda. The training of young architects also had to be ideologically controlled.

The norm of Soviet urban planning in the spirit of socialist realism required the glorification of the Victory; for that three models were used: early-19th century (neo)classicism of St Petersburg, Italian High Renaissance and ancient Rome. Until then, Estonian urban planning had taken contemporary Europe as an example.

Paradoxically, from the purely technical viewpoint, the urban plans of the Stalin era were solutions looking into the future, which the small state would not have been able to realise with its resources.

#### Author's contribution

The author of this thesis is the sole author of this article, responsible for the research concept, methodology, data collection, and interpretation. This article was published in a peer-reviewed journal, *Akadeemia*, in 2013.

### Introduction

#### Background

Town planning and the city space inside it may be taken somewhat as an information communication technology. There one can recognise information recording functions (materialised ideology), communicational functions (massive, seemingly for one purpose, a produced space) and procession functions (computing and communicating ideology through material). Public architecture communicates with everyone, but primarily through grandiose and ensemble-like buildings as memory or ideology carriers. Thus, public architecture, e.g. city space, has always been beloved by authoritarian and totalitarian systems in order to control citizens, their minds and memory.

Similarly, to the interwar period Italy and Germany, Soviet Stalinist town planning seemed anachronistic but paradoxically embodying harmony, functionality, and effectiveness. While strict and radiant urban gridlines most strongly appeared in the states mentioned above, the new trend was quite similar, both in authoritarian and democratic countries. Strictly organised, axial town planning, well known since Roman times through Renaissance and Classicism, in the 20th century is a somewhat functional approach to organising a town gridline. It was supposed to make the state more active and enterprising. According to City Beautiful movement, a stately urban ensemble has always been supposed to embody dignity, power, a harmonious society, and to monumentalize the latter one. On the one hand, the dictatorial state tries to justify its ideology through a traditional urban ensemble, while on the other, to see the same ensemble as trustworthy to crystallise the state's ideology. For instance, both Nazi Germany and Soviet Stalinist architecture and town planning are somewhat similar, with the differences existing mostly in details and sources (Kruft 1994: 423).

In the summer of 1940, independent Estonia was occupied by the Soviet Union. A year later, the Germans took over Estonia and stayed until autumn 1944 when the Soviet Union seized the country for the second time. This occupation would last until 1991, spanning the years of the post-war Soviet Stalinist period, beginning of the Cold War and dictator Joseph Stalin's death in March 1953. Due to the ongoing World War II and the relatively short duration of the occupations, neither the first Soviet takeover nor the German occupation had an impact on Estonian and East Estonian town planning. The post-war Stalinist principles influenced the urban landscape from November 1944 until November 1955, when the Central Committee of the Communist Party of the Soviet Union decided to move away from the characteristically exaggerated architectural style. (Ob ustranenii ... 1955: 8, 11, 13, 15)

#### **Topic and Problem**

Objects of this doctoral thesis are East Estonian oil-shale mining and industrial towns Sillamäe, Kohtla-Järve, Ahtme, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme, Jõhvi and Viivikonna during the post-war Stalinist period (1944–1955) with the focus on Stalinist urban ensembles and urban space of those town centres.

The East Estonian legacy is a result of the Cold War, which formed the core structure and appearance of the oil-shale mining and industrial towns of the Stalin era. Kohtla-Järve, Ahtme, Jõhvi, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme, Viivikonna and Sillamäe as some of those towns formed a backbone of East Estonian oil-shale deposits mining and industry producing electric energy, heating fuel, shale oil, oil-shale gas and oil-shale products for the USSR on the territory of 4000 km<sup>2</sup> during the years of 1944 to 1991.

In 1960, Kohtla-Järve became an agglomeration, consisting of Järve as the centre (usually considered as the core of Kohtla-Järve), Jõhvi, Ahtme, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme,

Viivikonna, Püssi, Oru, and Sirgala<sup>1</sup>. Jõhvi as a historical local administrative centre and pre-war town was remodelled into an oil-shale mining town. Ahtme, Sompa, Kukruse, Kiviõli, Viivikonna, Sillamäe and Kohtla-Nõmme as former villages and settlements were remodelled into oil-shale mining and industrial towns.

East Estonian territory as the area where oil-shale occurred was researched already in the 19th century, and the first attempts to establish the oil-shale industry took place during the World War I, in 1916, two years before establishing the Republic of Estonia. The systematic oil-shale industry was established in the 1920s – thus such an industry was not anything new to Estonia before 1940. Kohtla-Järve was the centre of oil-shale mining and producing oil-shale-based shale oil and gasoline since the mid-1920s. During the seizure of the country by the Soviet Union, the new regime considered East Estonia as a resource for oil-shale that, for example, could supply Leningrad (St Petersburg) and north-west Russia with electricity, gas and liquid fuels. Between two Soviet occupations, in 1941–1944, Germany was interested in East Estonian oil-shale as well. Ahtme, Sompa, Kukruse, Kiviõli, Viivikonna, Sillamäe and Kohtla-Nõmme as former villages and settlements were remodelled into oil-shale mining and industrial towns. Jõhvi as a historical local administrative centre and pre-war town was remodelled into an oil-shale mining town.

Meanwhile, Kohtla-Järve and Sillamäe were designed to be exemplary "socialist" industrial cities between the 1940s and 1950s. At the beginning of the Cold War, East Estonian industrial region became one of the most strategically critical western territories in the Soviet Union. For instance, neither Lithuania nor Latvia had been equipped with such a vast and complex industrial area. In North Lithuania, there was cement industrial town Naujoji Akmenė (nearby ancient Akmenė) founded in 1947–1953, and in South Lithuania, a paper industrial town Grigiškės was remodelled in 1948. In North Latvia, there was a peat industrial town Seda established in 1953–1959.

Sirgala as an oil-shale mining town, Oru as a peat-mining town and Püssi as a particleboard industrial town were established at the turn of the 1950s and 1960s.

Stalinist urban ensembles of centres of Kohtla-Järve, Sillamäe, Ahtme, Sompa, Jõhvi, Kukruse, Kiviõli, Kohtla-Nõmme, and Viivikonna form an architectural, urban space and planning perspectives of those East Estonian oil-shale mining and industrial towns. This thesis considers Järve according to historical traditions as Kohtla-Järve and is focused on East Estonian Stalin era oil-shale mining and industrial towns leaving the textile industry town Narva out of focus.

Against the background of other oil-shale mining and industrial towns, Sillamäe as a closed town was focused on the production of oil-shale-based uranium oxides that made the town famous for the Soviet nuclear industry, and it was crucially strategical during 1944–1952 (1955). Before World War II, the town was a small settlement nearby the shale-oil industry.

East Estonian oil-shale mining and industrial towns got their structure and appearance mostly after World War II. Nowadays, since those towns are mostly not planned by local architects (e.g. the documents are in Russian, some documents are in Russia, et cetera), their appearance seems to differ from the Stalinist appearance of the rest of Estonian towns. The appearance of the East Estonian Stalinist oil-shale mining and industrial towns is considered different and unfamiliar in Estonia.

In line with official Stalinist ideology, Soviet town planning needed to stand in opposition to the West, in order to elevate socialist principles against capitalism. During the Stalinist period, masterplans and urban space of East Estonian oil-shale mining and industrial towns were discussed in professional periodical publications, such as "ENSV Arhitektide Almanahh"

<sup>&</sup>lt;sup>1</sup> Though due to long data processing, the 1959 census results show majority of them as being incorporated into the agglomeration, meanwhile presenting the results of Kohtla-Järve alone (Eesti Statistika 11 March 2019)

(Almanac of Estonian SSR Architects). Authors included architect Voldemar Tippel (Tippel 1948a: 54–59), Arman and architect Ivan Starostin (Arman & Starostin 1951: 7–18), architects Voldemar Meigas (Meigas 1951: 19–30) and Vsevolod Tihomirov (Tippel & Tihomirov 1951: 31–43). After Stalin's death, scholarship around urban space and town planning seemed much less prevalent. There was merely an occasional generic reference in post-Stalin Soviet period literature. For instance, in the 1965 book "Eesti arhitektuuri ajalugu" (History of Estonian Architecture) edited by Arman, the issue was discussed neutrally, and it seemed more as a matter of protocol (Eesti arhitektuuri ajalugu 1965). In the post-Soviet period, more diverse analytical approaches emerged as a result of regained independence. New circumstances offered an opportunity to treat the topic objectively. In 1991 the historian of architecture Leonid Volkov, who lived through the Stalin era, published the article, "Eesti arhitektuurist aastail 1940–1954" (About Estonian Architecture in 1940–1954) (Volkov 1991: 183–213). That discussion is also framed by protocol, but not by Soviet ideology. Historian of architecture Mart Kalm considered the issue in his book, "Eesti 20. sajandi arhitektuur. Estonian 20th Century Architecture" (Kalm, 2001). In the book, he makes a distinction between the local urban space (towns such as Tallinn, Pärnu, and Tartu) and non-local urban space (such as Kohtla-Järve and Sillamäe). The topic is developed further in Kalm's article "Perfect representations of Soviet planned space. Mono-industrial towns in the Soviet Baltic Republics in the 1950s–1980s" (Cinis; Drėmaitė & Kalm 2008: 226–246). Historian David Vseviov analysed the formation and structure of East-Estonian towns in his doctoral dissertation "Kirde-Eesti urbaanse anaomaalia kujunemine ning struktuur pärast teist maailmasõda" (The Formation and Structure of the Urban Anomaly in Northeast Estonia After the Second World War) (Vseviov 2002). Historian of architecture Henry Kuningas also explores this topic in his article "Hiilgava tuleviku poole. Stalinistlikud utoopialinnad põlevkivibasseinis" (Towards the Bright Future. Stalinist Utopian Towns in the Oil-Shale Basin) (Kuningas 2015: 245–261). Nowadays, Estonian Stalinist urban space research is reduced to a simple narration of the period.

However, Stalinist central gridlines of the masterplans of Kohtla-Järve and Sillamäe have many compositional similarities with the Stalinist central gridlines of Tallinn and Pärnu, designed by Harald Arman, head of the Department of Architecture of the Estonian SSR. The latter issue, in turn, refers to similarities with the practices of the 1930s independent Estonia.

Current analysis of Estonian post-war urban planning and urban space has mostly consisted of juxtaposing graphic material, buildings without penetrating the issue – from where and why everything came, what were the reasons and what was the context. Merely comparing projects and houses is not enough because the buildings trying to embody the ideology are still only the fragments of the broader paradigm.

However, in comparison with the rest of Estonian Stalinist urban planning and urban space practices, urban ensembles of East-Estonian oil-shale mining and industrial towns are under-researched. While Stalinist town planning and urban space of Tallinn and Pärnu are researched and documented quite well, the same issues of East Estonian oil-shale mining and industrial towns have not met consideration in equal amounts. One of the main reasons could be that all the above-mentioned considerations lack a more in-depth, analytical and philosophical approach for establishing a theoretical basis for understanding the urban space of the era.

As a legacy of the Soviet occupation, the existing oil-shale basin towns, on the one hand, are considered as something exotic and exciting and, on the other hand, as a source of something strange and contradictory that lead up to the acute social problems including high unemployment. Nowadays, the East Estonian legacy has underused spatial development potential that faces a decline in the planning of the region.

While in Kohtla-Järve, Ahtme, Sompa, Jõhvi, Kukruse, Kiviõli, Kohtla-Nõmme and Sillamäe, the Stalinist urban ensembles are protected by comprehensive plans and considered as built areas of cultural and environmental value, Viivikonna has neither of those up to date. For instance, in 2017, in Sillamäe, a Stalinist ensemble of nine houses in Sõtke street were demolished since those had been left out of the culturally and environmentally valuable built area. The same situation also threatens Viivikonna. Viivikonna, however, is somewhat broken due to the lack of maintenance. It can be considered positive that central Stalinist urban ensembles of the majority of East Estonian oil-shale mining and industrial towns have been conserved and renovated. However, when the situation is that the population is decreasing in these towns are worthy of preservation – both economically and aesthetically. In order to make well-balanced and well-argued decisions, it is crucial to know the reasons for establishing these towns, what was the background, what were the mechanisms, and what were the principles.

Since urban space research is an architectural issue as well as a social issue (how to use and develop urban legacy) more profound and intricate knowledge of the East-Estonian industrial towns would help to integrate the mostly Russian-speaking East Estonia into the entire state and support the improvement of the area.

#### **About Terms**

The thesis equalises "city space" and "urban space", "town planning" and "urban planning", "town centre" and "city centre", prefers "town" instead of "city", additionally uses "administrative centre", "stately ensemble". The thesis considers "urban space" equal to "city space" as an issue that belongs into "town planning" which is equal to "urban planning"; "urban space" equals ",city space" and is used in the sense of urban space design (city space design). "Settlement" is a general term, marking a place where people come to live. "Town" is a term marking a densely populated area with a population of at least 1,000 people (Asustusüksuse liigi, nime ja ... 2017: 5). "Urban ensemble" or "ensemble" marks a compositional group of buildings, as a part of the urban space, following specific design principles and consists of similar aesthetical features. In this thesis the term "urban ensemble" is equal to the "urban architectural ensemble". The term "urban ensemble" incorporates the term "architectural ensemble" which is widely used as "urban architectural ensemble", e.g. architectural ensemble in urban space, during the Soviet time and above all in Stalin era (for example, in Ivan Zholtovskij's (Zholtovsky's) writings). Terms "Stalinist urban ensemble", "Stalinist urban space", "Stalinist urban planning", "Stalinist architecture" used in this dissertation mark the urban ensemble, urban space, urban planning, architecture which are mostly designed during the Stalin era (in the early-1930s to the mid-1950s) and are equalized to "Stalin-era urban ensemble", "Stalin-era urban space", "Stalin-era urban planning", "Stalin-era architecture".

#### Aim and Tasks

**Aim** of this dissertation is to determine the formation mechanisms and urban space identity of East Estonian oil-shale mining and industrial towns Kohtla-Järve, Sillamäe, Ahtme, Sompa, Kukruse, Kiviõli, Jõhvi, Kohtla-Nõmme and Viivikonna with the focus on Stalinist urban ensembles and urban space of those town centres during the post-war Stalinist period (1944–1955).

As Stalinist urban plans and spaces of those East Estonian towns were established at the same time with Stalinist urban plans and urban spaces of the rest of Estonia and just over five years after the deprivation of Estonian's independence, the dissertation, considers the issue with the Soviet Stalinist town planning principles and practice in the 1930s to the mid-1950s,

Estonian town planning principles and practice during the Soviet Stalinist period from 1944 to 1955, and Estonian town planning practice during the independence period of the 1930s as the background. Since during the independence of Estonia in the 1930s town planning practice did not manage to establish its principles, the only practice during that period will remain in use in this dissertation.

To achieve the above-stated aim, the following three **research tasks** were established:

- Analyse Estonian town planning practice during the independence period of the 1930s and Estonian town planning principles and practice of the Soviet Stalinist period in 1944 to 1955 with the Soviet Stalinist town planning principles and practice as the and also with the re-education of local Estonian architects in the late-1940s to the mid-1950s as the background. The goal of the analysis is to determine the following:
  - shifts and similarities during the two periods as two issues,

- compositional town planning factors that influenced urban space of East Estonian oil-shale mining and industrial towns in 1944–1955;

- 2) Analyse the formation process of East Estonian oil-shale mining and industrial towns in order to expose:
- the role and significance of those towns for the USSR,
- factors that had an impact on establishing the East Estonian oil-shale mining and industrial towns in 1944–1955,
- the role and influence of Harald Arman, head of the Department of Architecture of the Estonian SSR, in the process;
- 3) Analyse Stalinist stately urban ensembles and masterplans of East Estonian oil-shale mining and industrial towns with the Soviet Stalinist urban ensembles and masterplans and Estonian Stalinist urban ensembles and masterplans as the background in order to determine the urban planning principles and the compositional identity of those towns' urban space.

Dissertation analyses reasons, processes and targets of founding those stately ensemble-like towns that had to embody the prosperous Soviet future and support the state's might. Since Stalinist urban ensembles of centres of Kohtla-Järve, Sillamäe, Ahtme, Sompa, Jõhvi, Kukruse, Kiviõli, Kohtla-Nõmme and Viivikonna form the core architectural, urban space and planning perspectives of those East Estonian oil-shale mining and industrial towns, it is essential to expose the formation mechanisms of those towns in order to shed light on the potential of East Estonian Soviet Stalinist town planning and urban space in the field of urban space design.

#### **Research Questions**

Based on the research tasks, four questions were posed:

- 1) Is the urban space design of Estonian post-war Stalinist period (1944–1955) in conflict with the urban space design of the 1930s period of independence in Estonia? How did the Estonian urban planning and architectural paradigm (architectural life and way of thinking) change during the mid-1940s to the mid-1950s in comparison with the 1930s independence period?
- 2) Which compositional town planning factors influenced the urban space of East Estonian oil-shale mining and industrial towns in 1944–1955?

3) Which town planning factors had an impact on the establishment of East Estonian oil-shale mining and industrial towns in 1944–1955?

3a) What was the role and significance of East Estonian oil-shale mining and industrial towns for the USSR?

3b) Which mechanisms determined the formation of Stalinist urban space of East Estonian oil-shale mining and industrial towns?

3c) What was the role and influence of Harald Arman, head of the Department of Architecture of the Estonian SSR, in the formation process of East Estonian oil-shale mining and industrial towns?

4) What are the urban planning principles, patterns and compositional identity of the urban space of East Estonian oil-shale mining and industrial towns?

The research questions posed in this work are answered through published articles in appendices one to six, authored by the researcher, as indicated in the chapter "Publications" and chapter three "Results with Discussion". In addition to the research articles, the researcher supplements the work through chapters one to three of this study outlined in section "The Organisation of This Dissertation".

Applicability and significance of this dissertation. The dissertation focuses on the formation mechanisms and factors that formed the conditions for establishing the urban planning principles and a pattern for the East Estonian oil-shale mining and industrial towns. The results of this dissertation as a study of urban history and architectural history are useful and educational for the state, local authorities, strategical planners, spatial planners, anthropologists, and architects. This dissertation helps all stakeholders as amici curiae to understand the more profound meaning and content of the issue – that becomes a guarantee for a more prosperous and sustainable spatial planning of these East Estonian oil-shale mining and industrial towns and the region in general. As The Venice Charter 1964 states "the conservation, and restoration of monuments must have recourse to all the sciences and techniques which can contribute to the study and safeguarding of the architectural heritage", it must be preceded and be followed by a historical study of the issue (International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter 1964) 13 July 2019). European regional and spatial planning Charter (Torremolinos Charter), which passed on 20 May 1983, states that "the rehabilitation of the architectural heritage, monuments and sites must be an integral part of an overall town, and country planning policy", concerning regions in decline and with structural weaknesses as East Estonian oil-shale mining and industrial towns are nowadays (European Regional and Spatial Planning Charter (Torremolinos Charter) 13 July 2019). Charter for the Conservation of Historic Towns and Urban Areas (Washington Charter 1987) states that "planning for the conservation of historic towns and urban areas should be preceded by multidisciplinary studies" and stresses that before any intervention can happen "existing conditions in the area should be thoroughly documented" as well as it should be considered crucial that "specialised training should be provided for all those professions concerned with conservation" (Charter for the Conservation of Historic Towns and Urban Areas (Washington Charter 1987) 13 July 2019). The issue is internationally topical – for example on 16 to 18 September 2020 the 12th International Conference on Structural Analysis of Historical Constructions will take place in Barcelona: one of the topics is conservation of the 20th century architectural heritage (12th International Conference on Structural Analysis of Historical Constructions 13 July, 2019).

### The Organisation of This Dissertation

This thesis is composed of three main chapters in addition to Introduction and Conclusions.

**Introduction** opens the implication of urban planning and Estonia's political developments in the mid-20th century shortly. In addition, it gives an overview of the topic, its problems, and purpose and clarifies the terms used in this dissertation. Introduction formulates the aim of the thesis, establishes three tasks to achieve and poses four research questions that will be answered in this thesis.

**Chapter One** entails historiography, which firstly, gives an analytical overview of existing literature on Stalin-era Estonian urbanism and East Estonian oil-shale mining and industrial towns. Secondly, this chapter gives an analytical overview of theoretical studies, used for establishing the methodological framework of the dissertation, and sources and publications used for researching the issues of this dissertation.

**Chapter Two** describes the concept and methodology. Firstly, the methodological framework is established as a philosophical analysis, which formulates more profound implications of the issue. The methodological framework is followed by two conceptual reference points – the first concerns identity of the Soviet Union urban space and the second concerns relations between Estonian pre-war and post-war urban spaces. Lastly, this chapter describes the methodology of this dissertation.

**Chapter Three** includes results with the discussion, which analytically gives responses to research questions posed in Introduction, including the redefinition of the Estonian post-war Stalinist period urban space, compositional town planning factors that influenced urban space of East Estonian oil-shale mining and industrial towns, town planning factors as comprehensive mechanisms that had an impact on establishing of East Estonian oil-shale mining and industrial towns, urban planning principles, patterns and the compositional identity of urban spaces od East Estonian oil-shale mining and industrial towns.

**Conclusion** is the summarising section which analytically concludes the thesis based on results with the discussion, presented in the original publications and this volume.

### 1 Historiography

The historiography consists of two parts: a) existing literature on Stalin-era Estonian urbanism and East Estonian oil-shale mining and industrial towns; b) literature and sources, used in this doctoral thesis.

## **1.1** Existing Literature on Stalin-era Estonian Urbanism and East Estonian Oil-Shale Mining and Industrial Towns

Three periods are identified in the existing literature on Stalin-era Estonian urbanism and East Estonian oil-shale mining and industrial towns: the Stalinist period (the mid-1940s to mid-1950s), the post-Stalin Soviet period (the mid-1960s to 1980s), and the modern period (the early-1990s to present).

During the Stalinist period, Soviet town planning and urban space were discussed in the professional periodical publications like "ENSV Arhitektide Almanahh" (Almanac of Estonian SSR Architects). Articles published in "ENSV Arhitektide Almanahh" and other publications provided, on the one hand, insights into ongoing town planning in Estonia and, on the other hand, they reproduced the state's ideology and brought some examples from the rest of the Soviet Union. Topics discussed covered master plans of existing and future towns, urban space, and urban ensembles; authors included the head of the Department of Architecture of the Estonian SSR Harald Arman (Arman 1946a: 2; Arman 1946b: 5-8; Arman 1948: 10-17; Arman 1949: 25-29), as well as architects Ernst Ederberg (Ederberg 1946: 59-63; Ederberg 1948: 60-65), Lorenz Haljak (Haljak 1949: 52–70), Otto Keppe (Keppe 1951: 66–70), Voldemar Meigas (Meigas 1948: 5–9; Meigas 1949a: 20–24; Meigas & Papp 1949b: 7), Mart Port (Port 1951: 44–52), Anton Soans (Soans & Keppe 1946: 9–20; Soans 1949: 30–35), Ivan Starostin (Arman & Starostin 1951: 7–18) and Peeter Tarvas (Tarvas 1948: 44–53). Similar discussions were developed in Harald Arman's book, "Tuleviku-Tallinn. Eesti NSV Poliitiliste ja Teadusalaste Teadmiste Levitamise Ühing 1 (45)" (Future Tallinn. Society for Spreading Knowledge of Politics and Science 1 (45)) (Arman 1950) and in an article titled "Voprosy planirovki i zastrojki centra Tallina" (Questions Concerning Planning and Building-up Tallinn), which was published in the Soviet professional periodical publication "Problemy sovetskogo gradostroitel'stva" (Problems of Soviet Town Planning) (Arman 1955: 49–52). Newspapers were also involved in these debates, as can be seen in publications such as "Sirp ja Vasar", "Sovetskaya Estoniya" (Sovetskaja Estonija), "Rahva Hääl", "Õhtuleht", and "Postimees" (since 1948, "Edasi").

Meanwhile, masterplans and urban space of East Estonian oil-shale mining and industrial towns were discussed in "ENSV Arhitektide Almanahh". Authors of these articles included architect Voldemar Tippel (Tippel 1948a: 54–59), Arman and Starostin (Arman & Starostin 1951: 7–18), Meigas (Meigas 1951: 19–30), and architect Vsevolod Tihomirov (Tippel & Tihomirov 1951: 31–43).

After Stalin's death, the focus on urban space and town planning was lost, and only a few articles about these topics circulated in more general publications. There was merely the occasional generic reference in post-Stalin Soviet period literature. For example, in the book "Eesti arhitektuuri ajalugu" (History of Estonian Architecture), edited by H. Arman and published in 1965, the issue concerning both Estonia and East Estonia is discussed neutrally, more as a matter of protocol (Eesti arhitektuuri ajalugu 1965). The issue is also neutrally discussed as a matter of protocol in the book "Nõukogude Eesti ehitus ja arhitektuur 1940–1965" (Soviet Estonian Construction and architecture 1940–1965) written by Arman, Uno Kammal, Mart Port, and Andres Saar published in 1965 (Arman, Kammal, Port & Saar 1965). In 1980, the historian of architecture and architect Leonid Volkov, who lived during the Stalin era, published a book "Eestimaa asustus" (Estonian Settlement) which for the first time shortly analyses the Stalinist

urban ensembles in Tallinn and Pärnu with the local settlement study as the background (Volkov 1980). Architect Paul Härmson adopts a similar stance – neutral discussion and short analyses – in an article, concerning the Stalinist masterplan and the urban ensemble of Pärnu, he published in 1983 (Härmson 1983: 31–43). In 1983 a historian of architecture and architect Oleg Kochenovski (Oleg Kotšenovski) published an article that gives a neutral overview of the formation of Kohtla-Järve (including Ahtme, Sompa, Kohtla-Nõmme, Kukruse and Jõhvi) in the mid-1940s to early-1980s (Kochenovski 1983: 12–23).

In the modern period, several new and diverse analytical approaches came to light as a result of regained independence and an opportunity rose to treat this topic objectively. In 1991 Volkov published the article "Eesti arhitektuurist aastail 1940–1954" (About Estonian Architecture within 1940–1954) (Volkov 1991: 183–213). Former Chief Architect of Tallinn (1960–1980) Dmitri Bruns discussed the Stalinist town planning of Tallinn in his book "Tallinn: linnaehituslik kujunemine" (Tallinn: Urban Formation) (Bruns 1993). Both discussions are also framed by protocol, but not by Soviet ideology. Nonetheless, the urbanism of their time period is presented as different from the pre-war independence period. In 1994 P. Härmson compiled a story of a residential house in Tallinn through his memoirs in the article "Linnaehituskunst – mängukann juhuse ja võimu käes ehk ühe hoone saamislugu" (Town Planning – Boy Toy of Coincidences and Power – a Story of a Building) (Härmson 1994: 54–59). Historian of architecture Mart Kalm used Estonian Stalinist urbanism as the architectural context in his monograph "Arhitekt Alar Kotli" (Architect Alar Kotli) (Kalm 1994) and his book "Eesti 20. sajandi arhitektuur. Estonian 20th Century Architecture" (Kalm, 2001). In both works, Kalm does not provide a complex structured definition of the Estonian post-war Stalinist urban space. However, he does suggest that there are some similarities between the 1930s architecture of independent Estonia and the architecture of the post-war Stalinist period. Furthermore, in the book "Eesti 20. sajandi arhitektuur. Estonian 20th Century Architecture" he makes a distinction between the local urban space (towns such as Tallinn, Pärnu, and Tartu) and non-local urban space (such as Kohtla-Järve and Sillamäe). Meanwhile, he defines the Estonian post-war urban space as consisting of familiar and unfamiliar components – the first designed by local architects and the latter by non-local architects. However, simultaneously, the familiar architecture and urban space are defined as familiar because of their similarity to the practices developed during the 1930s. This topic is developed further in Kalm's articles "The Sovietization of Baltic Architecture" (Kalm 2003: 42–51) and "Perfect representations of Soviet planned space. Mono-industrial towns in the Soviet Baltic Republics in the 1950s-1980s" (Cinis, Drémaité & Kalm 2008: 226–246). Historian of architecture Krista Kodres also explores this topic, in her article "Sovietization of classical architecture: the case of Estonia" (Kodres 2008: 130–151). Historian David Vseviov analysed the formation and structure of East-Estonian towns in his doctoral dissertation "Kirde-Eesti urbaanse anaomaalia kujunemine ning struktuur pärast teist maailmasõda" (The Formation and Structure of the Urban Anomaly in Northeast Estonia After the Second World War) (Vseviov 2002). Historian Olaf Mertelsmann, following the lead of Vseviov's dissertation, analyses the reasons why people immigrate from other parts of the Soviet Union to East-Estonia (Mertelsmann 2007: 51-74). In 2012 architect Lilian Hansar gave her expert opinion as short descriptions of some of the Stalinist masterplans of Sillamäe concerning the Sillamäe centre as a heritage site (Hansar 2012)<sup>2</sup>. Historian of architecture Henry Kuningas also explores this topic in his article "Hilgava tuleviku poole. Stalinistlikud utoopialinnad

<sup>&</sup>lt;sup>2</sup> One may find a similar, but shorter mention of the masterplans of Sillamäe and a short mention of the masterplan of Kohtla-Järve in Hansar, L. (2013). Linnade planeerimise juhised. Uued tööstuslinnad [Instructions for Town Planning. New Industrial Towns]. *Eesti kunsti ajalugu. 6, I osa. 1940–1991*. Tallinn, pp 221–30. (in Estonian)

põlevkivibasseinis" (To the Bright Future. Stalinist Utopian Towns in the Oil-Shale Basin) (Kuningas 2015: 245–261).

Estonian Stalinist town planning and urban space are analysed in Siim Sultson's master thesis (Sultson 2002), Maria Orlova's master thesis (Orlova 2003), in an article by Epp Lankots (Lankots 2004: 11-41) and also in a number of articles by Siim Sultson (Sultson 2003: 98-109; Sultson 2014a: 368-384; Sultson 2014b: 14-25; Sultson 2015: 1-13; Sultson 2016a: 49-55; Sultson 2016b: 283–294). These texts juxtapose Estonian post-war urban space with East Estonian Stalinist urban space. Meanwhile, in his 2013 article, Sultson sheds light on the ideological background of architectural planning in Estonia and the Soviet regime's attempts to re-educate local architects in the period from 1944 to 1955 (Sultson 2013: 2248-2277). East Estonian Stalinist town planning and urban space are analysed, for instance, in Siim Sultson's 2016 article about the change in the awareness of Estonian city space (Sultson 2016a: 49-55). A more detailed overview and more in-depth information about the present state of research of Estonian post-war urban space can be found in his second article published in 2016, where the author highlights a need to incorporate East-Estonian industrial towns into the research about Estonian post-war Stalinist urban space (Sultson 2016b: 283–294). On the one hand, in those articles, Sultson discusses similarities between the 1930s independent Estonia urban space design and the Estonian post-war Stalinist period design but on the other hand, in his second article published in 2016, the author highlights a need to incorporate East Estonian oil-shale mining and industrial towns into research about Estonian post-war Stalinist urban space. Following this stance, the 2017 article by Sultson analyses similarity and continuity in the urban space design of the post-war Stalinist period and the 1930s period of independence. In order to overcome stagnation in this field of research, the experience and ambitions of the 1930s independent Estonia's urban space design are discussed and compared to practices developed in the post-war Stalinist period. It is argued that urban space practices developed in the period from 1944 to 1955 fused Soviet urban space paradigms with the local urban space design of the 1930s independence period (Sultson 2017: 385–409). In his 2019 article (is being published), Sultson analyses East Estonian Stalinist urban space and its scale through varying the amount of population during the Cold War (Sultson 2019a). In the second 2019 article (is being published) he analyses the formation mechanisms (political, military, economic, architectural) of East Estonian oil-shale mining and industrial towns, masterplans of those towns and special features of the plans (Sultson 2019b).

### 1.2 Literature and Sources, Used in this Doctoral Thesis

Literature and sources, used in this dissertation, are divided into two groups. The first group contains theoretical studies that either philosophically or architecturally-philosophically analyse power, society, architectural and urban space, symbolism and significance of architecture and urban space. The second group contains publications and sources, used for researching the issues of this doctoral thesis.

#### **1.2.1** The First Group – Theoretical Studies

a) The philosophical studies include topics concerning power and its necessity for representation, society, architectural and urban space that form the background for the dissertation. The following list of publications brings out aspects of those necessary for the dissertation. French philosopher Henri Lefebvre's book "La Production de l'espace" (Lefebvre 1974/in English 1991) considers space, its content and meaning in several social circumstances (How to perceive, how to conceive) through its triad: Representational Space – Representation of Space – Spatial Practice. In his essay "Space, Knowledge and Power" French philosopher Michel Foucault writes about the

relationship between architecture and power (Foucault 1982/2000). In his radio-speech "Different spaces" held in 1967 Foucault talked about space and time, cultural, discursive and institutional spaces which are so-called other-spaces, heterotopias (Foucault 1984/1998). German philosopher and sociologist Max Weber considered the relationship between religion and power through terms "power", "domination", "discipline" in his book "Gesammelte Aufsätze zur Religionssoziologie. Band I" (Weber 1920/ *in Estonian* 2002). Bulgarian-German writer Elias Canetti has written about organs of power, aspects of power, ruling and paranoia in his book "Masse und Macht" (Canetti 1960/*in Estonian* 2000). American philosopher Nelson Goodman has written about symbolism in architecture in his article "How Buildings Mean" (Goodman 1985).

b) The architectural-philosophical works. In 1988 English town planner, urbanist and geographer Peter Hall published a book "Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century" that sheds light on City Beautiful movement and its reflections in New Delhi, Canberra and in Berlin, Moscow (Hall 1988/1992). Swedish art historian Anders Åman's study called "Architecture and Ideology in Eastern Europe during the Stalin Era. An Aspect of Cold War History" analyses the relationship between architecture and state in East Europe during the Cold War (Åman 1992). In his book "Representing the State: Capital City Planning in the Early Twentieth Century" German historian and theorist of architecture Wolfgang Sonne analyses mechanisms of representing state and power in architecture and urban space from the turn of the 19th century and the 20th century up to the mid-20th century (Sonne 2003).

## **1.2.2** The Second Group – Sources and Publications, Used for Researching the Issue of the Dissertation

This group consists of archival documents, published collections of original archival documents, books, brochures, magazines, and newspapers.

**Sources.** In this doctoral thesis, the following archival sources and published collections of original archival documents are used:

a) Archival sources with a precision of archival collection number:

Rahvusarhiiv (National Archives of Estonia: ERA):

- EAA 2100. Collection "Eesti Vabariigi Tartu Ülikool" (University of Tartu of the Republic of Estonia).
- EFA 209. Collection "Karl Oras" (Karl Oras).
- EFA 335. Collection "Gunnar Loss" (Gunnar Loss).
- ERA R-1951. Collection R-1951 "ENSV Arhitektide Liit" (Union of Estonian Architects of the Estonian SSR).
- ERA R-1992. Collection R-1992 "Eesti NSV Ministrite Nõukogu juures asuv Riiklik Ehituskomitee" (State(Iy) Committee of Reconstruction (located) at the Estonian SSR's Council of Ministers).
- ERA 2211. Collection 2211 "Trükikäitis "Postimees"" (Printshop "Postimees").
- ERA 3799. Collection 3799 "Pärnu Linnavalitsus" (Municipality of Pärnu).
- ERA 2218. Collection 2218 "Teedeministeeriumi ehitusosakond" (Estonian Ministry of Communications).
- ERA R-1. Collection R-1 "Eesti Vabariigi Ministrite Nõukogu" (Council of Ministers of the Republic of Estonia).
- ERA R-3. Collection R-3 "Eesti Vabariigi Ülemnõukogu Esimehe Kantselei" (Office of the Chairman of the Supreme Soviet of the Republic of Estonia).

- ERA R-1527. Collection R-1527 "Tallinna Oblasti TSN Täitevkomitee" (Tallinn Oblast Executive Committee of the Soviet of Workers' Deputies).
- ERA T-14. Collection T-14 "Riiklik aktsiaselts Eesti Projekt" (Public stock company Eesti Projekt).
- ERAF 1. Collection 1 "Eestimaa Kommunistliku Partei Keskkomitee" (Central Committee of the Communist Party of Estonia).

Eesti Arhitektuurimuuseum (Museum of Estonian Architecture: EAM):

- EAM 10. Collection 10 "ENSV Arhitektide Liit" (Union of Estonian Architects of the Estonian SSR).
- EAM 3. Collection 3 "1940.–1950. aastate arhitektuur" (Architecture of the 1940s the 1950s).
- EAM 2. Collection 2 "1920.–1930. aastate arhitektuur" (Architecture of the 1920s the 1930s).
- EAM 18. Collection 18 "Arhitekt Otto Keppe" (Architect Otto Keppe)
- EAM 16. Collection 18 "Arhitekt Anton Soans" (Architect Anton Soans)
- EAM Fk Collection of photos

Eesti Ajaloomuuseum (Estonian History Museum: EAM AM):

EAM AM N. Collection of photo negatives.

Eesti Vabaõhumuuseum (Estonian Open Air Museum: EVM)

- EVM Collection of photos
- Tallinna Linnamuuseum (Tallinn City Museum: TLM):
  - TLM Collection of art.

Virumaa Muuseumid (Virumaa Museums: RM F):

- RM F Collection of photos.

Sillamäe Muuseum (Sillamäe Museum: SM):

- SM Collection of plans, designs, masterplans and photos.
- Sillamäe Linnavalitsus (Sillamäe Municipality: SLV):
  - SLV Collection of original designs and masterplans.

Rossiiski gosudarstvenny arhiv socialno-politicheskoi istorii (Russian State Archive of Socio-Political History: RGASPI):

- RGASPI 17.163. Series 163 "Protokoli zasedanii Politbyuro CK PKP(b) i CK VKP(b) (podlinniki postanovlenii i materiali, stenogrammy nekotoryh zasedanii Politbyuro) 1926–1952" (Protocols of sessions of the Politburo of the CC of the CP(b)R and CC of the CPSU (originals of the directives and materials, stenographic records of some sessions of the Politburo) 1926–1952).
  - RGASPI 81.3. Series 3 "Kaganovich L. M., 1920–1957".

Centralny gosudarstvenny arhiv nauchno-tehnicheskoi dokumentacii Sankt-Peterburga (Central State Archive of Scientific and Technical Documentation, St Petersburg: CGANTD SPb):

- CGANTD SPb R-338. Collection R-338 "Arhitekturno-planirovochnoe upravlenie ispolnitelnogo komiteta Leningradskogo oblastnogo soveta narodnyh deputatov. Leningrad. 1944–1978" (Architectural-planning Board of the Leningrad Oblast Executive Committee of Deputies' Soviet. Leningrad. 1944–1978).
- b) Published collections of original archival documents from Russian archives:

# Atomny proyekt SSSR – dokumenty i materialy. T. 1. 1938–1945. Ch. 1 [Atom Project of the USSR – Documents and Materials. Vol. 1. 1938–1945. Part 2]. (1998). Moscow: Nauka. Fizmatlit. (Collection of original archival documents).

- Atomny proyekt SSSR dokumenty i materialy. T. 2. Atomnaya bomba. 1945–1954. Kn. 1
   [Atom Project of the USSR Documents and Materials. Vol. 2. Atom Bomb. 1945–1954.
   Book 1]. (1999). Moscow-Sarov: Nauka. Fizmatlit. VNII/VNIIEF. (Collection of original archival documents).
- Atomny proyekt SSSR dokumenty i materialy. T. 2. Atomnaya bomba. 1945–1954. Kn. 2
   [Atom Project of the USSR Documents and Materials. Vol. 2. Atom Bomb. 1945–1954.
   Book 2]. (2000). Moscow-Sarov: Nauka. Fizmatlit. VNII/VNIIEF. (Collection of original archival documents).
- Atomny proyekt SSSR dokumenty i materialy. T. 1. 1938–1945. Ch. 2 [Atom Project of the USSR Documents and Materials. Vol. 1. 1938–1945. Part 2]. (2002). Moscow: Izdatel'stvo "MFTI". (Collection of original archival documents).
- Iz istorii sovetskoi arhitektury 1926–1932 gg.: Dokumenty i materialy. Tvorcheskie obedinenya [From the History of the Soviet Architecture in 1926–1932: Documents and Materials. Creative Unions]. (1979). Moscow: Izdatel'stvo "Nauka". (Collection of original archival documents).
- Iz istorii sovetskoi arhitektury 1941–1945 gg.: Dokumenty i materialy. Hronika voennyh let. Arhitekturnaya pechat [From the History of Soviet Architecture 1941–1945: Documents and Materials. Chronicle of War Years. Architectural Publishing]. (1978) Moscow: Izdatel'stvo "Nauka". (Collection of original archival documents).

The sources and publications of the second group are classified as five sections:

- 1. Directives, decrees, decisions, reports of governments and governmental institutions;
- 2. Correspondence between government, governmental institutions and establishments (for instance the Department of Architecture of the Estonian SSR, the USSR's State Committee of Architecture), planning documents as protocols et cetera;
- 3. Books, professional periodical publications, magazines, newspapers published during the Stalin era or the 1930s period of independence in Estonia;
- 4. Books, periodical publications, magazines published in the post-Stalin era and post-Soviet era;
- 5. Masterplans, plans, views, photos of towns and urban spaces as archival documents, figures that have been published and photos taken by the author.

The first section consists of fundamental and decisive documents that determined the decisive background of urban planning, urban planning policy, urban planning itself *and the final solutions* of those plans.

- The Soviet Stalinist town planning principles between the 1930s and the mid-1940s. That period encompasses both the pre-war and wartime, while the post-war period up to the mid-1950s is considered one with the Estonian Soviet Stalinist period, between 1944 and 1955. The Soviet Stalinist period between the 1930s and the early 1940s contains many vital documents that determined the following Soviet architecture and urban planning. Those documents, concerning the period 1929 to 1944, contain the directive of the USSR's Council of the People's Commissars "Vremennye pravila i normy proektirovania i vozvedenia zdanii i sooruzhenii" (Temporary regulations and norms of design and erection of buildings and facilities) passed on 8 February 1929 (Vremennye pravila i normy ... 1929) and "Pravila i normy zastroiki naselennyh mest, proektirovania i vozvedenia zdanii i sooruzhenii" (Regulations and norms of structural planning of settlements, design and erection of buildings and facilities) passed by the Commission of Reconstruction at the USSR's Council of Economy in 1930 (Pravila i normy zastroiki ... 1930). Both formed the first building and planning regulations in the USSR, the resolution of the plenum of the Central Committee of the Communist Party of the Soviet Union "About town economy of Moscow and development of town economy of the USSR" passed on 15 June 1931 drew first general principles for all towns of the Soviet Union (RGASPI 81.3.21, 3–17, 19–28; Bunin 1945: 290, 291). The secret directive of the Central Committee of the Communist Party of the Soviet Union "About reorganisation of literary and artistic organisations" passed on 23 April 1932 concerning the topic of "socialist realism" that influenced the Soviet culture and life, including urban planning (RGASPI 17.163.938, 37–38). The documents concern the establishment of the Union of Soviet Architects of the USSR (Iz istorii sovetskoi arhitektury 1926–1932 gg. 1970: 163), contain regulations of the USSR's Council of the People's Commissars and the USSR Central Executive Committee "About compilation and approval of planning projects for socialist reconstruction of the Soviet Union towns and other settlements" which passed on 27 June 1933 (Planirovka i zastroika gorodov 1956: 9), materials of the First Soviet Architects Forum held on 4 to 9 November 1934 (Pervoe Vsezovuznoe sovezhanie sovetskih arhitektorov 4-9 nojabrja 1934), materials of the 1st Union-Wide Congress of Soviet Architects held on 16 to 26 June 1937 (Zadachi sovetskoi arhitektury / Doklad K. S. Alabyana 1937) and the 3rd plenum of the Governing Board of the Union of Soviet Architects of the USSR, held on 7–1 July 1938 (Planirovka i stroitelstvo gorodov SSSR 1938), as well as the 7th plenum of the Governing Board of the Union of Soviet Architects of the USSR, held on 8–12 July 1940 (Rekonstrukciya Moskvy. Arhitekturnye voprosy rekonstrukcii Moskvy 1940). The next, the 2nd Union-Wide Congress of Soviet Architects took place in 1955 – meanwhile there were 17 plenums held up to 1955. Documents of the war-period contain materials of the 10th plenum of the Governing Board of the Union of Soviet Architects of the USSR held on 25 April 1942 (Iz istorii sovetskoi arhitektury 1941–1945 gg. 1978: 30–34), the plenary resolution of the 11th plenum of the Governing Board of the Union of Soviet Architects of the USSR, which passed on 18 August 1943 (Iz istorii sovetskoi arhitektury 1941-1945 gg. 1978: 88 – 90), the directive of the USSR's Council of People's Commissars and the Communist Party of the Soviet Union, that passed on 29 September 1943, concerning the establishment of the USSR's State Committee of Architecture (Iz istorii sovetskoi arhitektury 1941–1945 gg. 1978: 95–102, 109), the seven principles of Soviet post-war town planning formulated by the USSR's State Committee of Architecture in July 1945 (Kosenkova 2009: 42). The documents passed in 1943 and were influenced by the state's acute need for uranium ore that had become strategically and military important in 1942 (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 1 1998: 113-114, 168-177, 259-263, 269-276).

 During the 1930s period of independence in Estonia, while town planning was regulated with building acts and municipal building regulations, the attempts to focus on stately urban ensembles as architectural elements increased as Estonia also became more authoritarian in the mid-1930s. Documents and statements of that period contain President Konstantin Päts' mandate "The Liberty Monument Erection Act" that passed on 27 May 1936 (Vabadussõja üleriikliku ... 1936: 1028), contest terms of the Tallinn Liberty Square urban space announced by the Estonian Ministry of Communications on 20 November 1936 (Bölau 1937: 86–87), the results of the contest passed and published in February 1937 (ERA 2218.1.223, 34; Vabadusväljak arhitektide ... 1937; Bölau 1937: 86–87), the contest terms of Pärnu's new business and transport centre, which were announced by the Estonian Ministry of Communications in November 1937, and results of the contest (Bölau 1938: 57–59 ; ERA 3799.1.434, 1–3.) and the decision of the jury in March 1938 (Pärnu esinduslik ... 1938; Bölau 1938: 57–59), the decision of University of Tartu and statements concerning urban space of the new institutional ensemble around University of Tartu in 1937 to 1939 (EAA 2100.6.163; Suurejoonelised kavad ... 1938: 3; Ülikooli ümbruse ... 1938: 3; Ülikooli laiaulatuslik ... 1939: 4).

- Urban planning of the Estonian Soviet Stalinist period (1944 to 1955) was, on the one hand, influenced by the practice of the 1930s independent period and, on the other hand, determined by the directives, decisions, ideology and needs of the Soviet regime. One of the crucial determinants of Estonian urban planning, but, above all, urban planning of East Estonian oil-shale mining and industrial towns, was the Soviet Union's acute need for uranium ore already before the World War II (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 1 1998: 113–114; 168–177) which is one of the reasons why the Republic of Estonia was occupied. However, as stated above, the Soviet post-war architecture and urban planning was determined by the establishment of the USSR's State Committee of Architecture and its local branch – the Department of Architecture of the Estonian SSR, led by Harald Arman. In Estonia, the Department of Architecture of the Estonian SSR played a decisive role in full measure with authority: for instance, the head of the institution Arman formulated principles and suggestions for the local Soviet architecture which became mandatory for all local architects (Arman 1946a: 2; Arman 1948: 10–17). In addition, those documents contained the board's resolution of the USSR's Soviet Architects' Union (the Union of Soviet Architects of the USSR), which passed on 23 October 1946 (Tvorcheskie ... Materialy XII ... 1948: 49–61), the plenary resolution of the Soviet Architect's Union that passed on 2 August 1947 (Meigas 1948: 5–9; Arman 1946b: 5–8), materials of the plenary session of the USSR's Soviet Architects' Union, which was held on 25 to 28 October 1950, (Tvorcheskie ... Materialy XIII ... 1951: 5, 7-32, 108-117), the board resolution of the USSR's Soviet Architects' Union that passed on 2 June 1952, ("Hronika. XIV plenum ... 1952: 31–33).
- Meanwhile, the urban planning of East Estonian oil-shale mining and industrial towns was determined by special directives. Those documents contain the order (directive) of the Headquarters of High Army Command of the USSR, which was passed on 10 November 1944, (ERA R-1.5.95, 48–49, 68–71, 85), the directive of the Presidium of the USSR's Supreme Soviet "About the Incorporation of a Populated Area That Is Situated on the Eastern Bank of Narva River Into Leningrad Oblast", which was passed on 24 November 1944 (ERA R-1.5.95, 78–80), the secret directive of the USSR's Council of the People's Commissars that passed on 5 May 1945 as an order to arrange additional explorations of East Estonian oil-shale-based graptolitic argillite (ERA R-1.5.104, 73–76), the top-secret directive of the USSR's State Defence Committee, which was passed on 20 August 1945, concerning a more detailed and extended geological exploration of the East Estonian oil-shale-based graptolitic argillite (Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 1 1999: 11–13; 18–19), a strongly top-secret report of the the First General Administration

to Stalin, compiled on 17 January 1946, concerning the deposits of uranium ore in the Soviet Union (Atomny provekt SSSR, T. 1. 1938–1945. Ch. 2 2002: 413–424), the top-secret protocol of the Special Committee, compiled on 18 May 1946 (Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 1 1999: 102–108), and the secret directive of the USSR's Council of Ministers, which passed on 27 July 1946 (Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 2 2000: 263–267; ERA R-1.5s.133, 1–2), concerning the launch of Sillamäe experimental factory and the top-secret joint directive of the Central Committee of the Communist Party of Estonia and of the Estonian SSR's Council of Ministers, that passed on 6 August 1946 (ERA R-1.5s.133, 3-8; ERAF 1.5.8, 1-6). The documents contain the governmental command of the USSR's People's Commissariat of Coal Industry, passed on 15 June 1945, concerning reconstruction and rehabilitation of East Estonian oil-shale industry and settlements (ERA R-1.5.104, 80–99), the directive of the Estonian SSR's Council of Ministers "About the Organisation of Project-Planning Works for the Oil-Shale Region", which was passed on 20 July 1947 (ERA R-1992.1.137, 48, 90-4, 114, 115, 122, 130, 138, 158–160), the directive of the USSR's Council of Ministers, which was passed on 21 May 1948 that initiated a sizeable secret project "Planning Task For Industrial and Urban Development of the Estonian SSR's Region of the Occurrence of Oil-Shale", made by the Department of Architecture of the Estonian SSR in 1948-1950 (ERA R-1992.3.11, 1, 27, 45, 58; ERA R-1527.2.44, 5–6). The Soviet architects, including all Estonian architects during the Soviet occupation in 1944–1955, were compelled to follow the Soviet architect's handbooks that were based on "Arhitekturno-planirovochnye pravila po proektirovanyu naselennyh mest gorodskogo tipa" (Architectural and planning regulations for the design of town type settlements), published by the USSR's State Committee of Architecture in 1944 and it was preceded by "Regulations and Norms for Structural Slanning of settlements, Design and Erection of Buildings and Facilities" (Pravila i normy zastroiki ... 1930), published fourteen year earlier. "Architectural and Planning Regulations For the Design of Town Type Settlements", which was published in 1944, was succeeded by the Soviet architect's handbook of 1946 (Kratkii spravochnik arhitektora 1946). The 4th extended edition of the latter was the Soviet architect's handbook of 1952 (Kratkii spravochnik arhitektora 1952) which for example, fixed the population of towns and seized the central squares. Handbooks "SNiP – Stroitelye normy i pravila" (BNaR - Building Norms and Regulations) were published since 1954. The documents contain the resolution of the Central Committee of the Communist Party of the Soviet Union and the USSR's Council of Ministers "Ob ustranenii izlishestv v proektirovanii i stroitel'stve. Postanovlenie Central'nogo Komiteta KPSS i Soveta Ministrov SSSR 4 nojabrja 1955 goda" (About the Abandonment of Exaggerations in Planning and Building. Resolution of the Central Committee of the CPSU and the Council of Ministers of the USSR on 4 November 1955) which was passed on 4 November 1955 (Ob ustranenii izlishesty v proektirovanii i stroitel'stve 1955) and that officially ended the Stalin era in urban planning and architecture of the Soviet Union.

The second section consists of the correspondence between governments, institutions and establishments. The correspondence often initiated the directives, decrees, decisions, protocols of governments and institutions and formed a more profound background with its mechanisms and initiatives for those.

 Due to the topic of this doctoral thesis correspondence concerns only the East Estonian oils-shale mining and industrial towns as the crucial ones. Correspondence concerning the East Estonian uranium ore deposits and uranium oxides production held in 1940 to 1946 and 1948 contains letters of the Soviet academicians and the Academy of Sciences

of the USSR (Atomny provekt SSSR. T. 1, 1938–1945. Ch. 1 1998; 113–114). discussions between the Academy of Sciences of the USSR (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 1 1998: 168–177), the USSR's People's Commissariat for Internal Affairs and its foreign agents and the Red Army General Staff (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 1 1998: 259–263), the Institute of Geological Sciences of the Academy of Sciences of the USSR (Atomny provekt SSSR, T. 1. 1938–1945.Ch. 2 2002: 53–55), the Institute of Geology of the USSR and its scientific director (ERA R-1.5.104, 21, 36), Lengazstroi<sup>3</sup> and the Department of Architecture of the Estonian SSR (ERA R-1992.2.2, 63-67; SM Vypiska iz protokola no 2), Lavrentiy Beria and Joseph Stalin (Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 2, 2000, 262–263), Secretary-General of the Central Committee of the Communist Party of Estonia Nikolai Karotamm and the USSR's Minister of Geology Ilya Malyshev (EARF 1.14a.17, 1-3, 9, 10). The secret project "Planning Task for Industrial and Urban Development of the Estonian SSR's Region of the Occurrence of Oil-Shale" (ERA R-1527.2.44) was tightly in connection with expertises and reports of its staff working documents of 1949 (ERA R-1992.3.11, 27, 45, 58) and of 1954 (ERA R-1992.3.27, 4–8), as well as protocols of the Department of Architecture of the Estonian SSR and correspondence between the institution and government, governmental institutions (such as the USSR's State Committee of Architecture) concerning the planning of oil-shale mining and industrial towns as Kohtla (unbuilt town near Kohtla-Nõmme) (ERA R-1992.1.137; ERA R-1992.2.41; ERA R-1992.3.3, 3, 14), Ahtme (ERA R-1992.1.137; ERA R-1992.3.3, 4, 11, 15, 21, 30), Jõhvi (ERA R-1992.1.137; ERA R-1992.3.3, 5, 17, 18, 29), Sompa (ERA R-1992.1.137; ERA R-1992.3.3, 7, 13, 20), Kukruse (ERA R-1992.3.3,19), Viivikonna (ERA R-1992.2.44, 103-46; ERA R-1992.2.63, 214-48; ERA R-1992.2.76, 100-7; ERA R-1992.3.3, 22), Kiviõli (ERA R-1992.1.137; ERA R-1992.2.41; ERA.R-1992.3.3, 43, 44), and Kohtla-Järve (ERA R-1992.1.137; ERA R-1992.2.1, 6-8; ERA R-1992.2.22, 20-44; ERA R-1992.2.41, 126-51; ERA R-1992.3.3, 16, 17, 27, 28). Protocols and reports of the Department of Architecture of the Estonian SSR also concern the planning of Sillamäe that produces oil-shale based uranium oxides (ERA R-1992.2.12, 44-64; ERA R-1992.1.137, 5, 16; ERA R-1992.3.3, 9, 10, 33, 34).

The third section concerns books, professional periodical publications, magazines, and newspapers published during the Stalin era and the 1930s period of independence in Estonia.

In the Soviet Union during the 1930s to the mid-1940s there were several professional books published (for example, "Planirovka i rekonstrukciya Moskvy" (Planning and reconstruction of Moscow) (Orleansky 1939), David Arkin's book "Obrazy arhitektury" (Samples of Architecture) (Arkin 1941) or "Problemy sovremennogo gradostroitelstva" (Problems of Contemporary Town Planning) (Problemy sovremennogo gradostroitel'stva 1947)) which were intended to support Soviet architects when planning stately urban ensembles. In addition, professional periodical publications, magazines (for instance, "Arhitekturnaya gazeta" (1934–1939), "Stroitelnaya gazeta" (1939–1941), a monthly review "Arhitektura" (1951–1955) and "Problemy sovretskogo gradostroitel'stva" (1947–1963)), and newspapers in the Soviet Union in the 1930s to the early-1940s, but this dissertation only uses the most important of them relating to the thesis' issue. On the one hand, those publications are ideologically biased, but on the other hand, those publications help to form the background for the issue. For instance,

<sup>&</sup>lt;sup>3</sup> Leningrad State Building Enterprise of Synthetic Liquid Fuel and Gas Industry.

"Literaturnava Gazeta", published on 23 May 1932 defines the term "socialist realism" (Gronskii 1932: 1), publications of the Soviet leading architect and theoretician Ivan Zholtovkij (Zholtovsky) concern the urban ensemble as one of the central issues of the Stalinist urban planning and urban space in a professional periodical publications such as "Printzip zodchestva" (Principle of Architecture) in "Arhitektura SSSR" (Zholtovkij (Zholtovsky) 1933), "Ancambl' v arhitekture" (Ensemble in Architecture) in "Stroitel'naya gazeta" (Zholtovkij (Zholtovsky) 1940), "Vospitanye Zodzhego" (Bringing Up Architect) in "Sovetskoye iskusstvo" (Zholtovkij (Zholtovsky) 1945) or in "Pravda" that concerns the 11<sup>th</sup> plenum of the Governing Board of the Union of Soviet Architects of the USSR (Plenum pravleniya Sojuza arhitektrov, 1943). Also the thematical published books such as Andreiy Bunin's, member of the Soviet Academy of Architecture of the USSR and historian of architecture "Gradostroitelstvo SSSR" ("Town Planning of the USSR") (Bunin 1945), "Sovetskava arhitektura za XXX let RSFSR" (Soviet Architecture During XXX years of RSFSR) as an anniversary edition of the Soviet architecture, compiled by a group of architects (Sovetskaya arhitektura za XXX let RSFSR 1950) and Michail Capenko's, member of the Soviet Academy of Architecture of the USSR and historian of architecture, didactic book "O realisticheskih osnovah sovetskoi arhitektury" (About Real Goals of the Soviet Architecture) (Capenko 1952), help form the background for the issue.

- While analysing the town planning of the 1930s independent Estonia, this dissertation, concerning Tallinn Liberty Square urban space architectural content contest, Pärnu's new business and transport centre contest, and planning of the new institutional ensemble in Tartu, uses journals "Tehnika Ajakiri" (Bölau 1937: 86–8; Bölau 1938: 57), "Tänapäev" (Kangro-Pool 1937: 370), and newspapers "Postimees" (Ülikooli laboratooriumihoonele ... 1937: 7; Suurejoonelised kavad ülikooli väljaehitamiseks 1938: 3; Ülikooli ümbruse uus pale 1938: 3; Ülikooli laiaulatuslik ehitamiskava 1939: 4), "Uus Eesti" (Missugune kuju ... 1937), "Päevaleht" (Pärnu esinduslik linnaosa 1938; Tartu Ülikooli peahoone ümbrus muutub 1938: 6), and "Vaba Maa" (Vabadusväljak arhitektide ... 1937).
- In analyses of urban planning of the Estonian Soviet Stalinist period, between 1944 and 1955 (including East Estonian oil-shale mining and industrial towns), the dissertation uses several contemporaneous professional periodical publications, magazines, and newspapers that sometimes give ideologically biased, but mostly professional overviews and information about ongoing discussions of urban planning and architecture, as well as atmosphere in the field. Meanwhile, only one brochure was published concerning the future of Tallinn's planning – H. Arman's "Tuleviku-Tallinn" (Future Tallinn) that after the ideological introduction gives a professional and constructive overview of the forthcoming developments of the local capital: the masterplan, the Cultural Centre, greeneries, and infrastructure (Arman 1950: 9-12). In professional periodical publications such as "ENSV Arhitektide Almanahh" (Almanac of Estonian SSR Architects) articles provided insights into ongoing town planning in Estonia and the Soviet Union: concerning all Estonian towns, including East Estonian oil-shale mining and industrial towns (Arman 1946b: 5-12; Soans and Keppe 1946: 9–20; Arman 1948: 10–17; Tarvas 1948: 44–53; Tippel 1948a: 54–59; Kotli 1949: 5–12; Meigas 1949a: 20-24; Arman 1949: 25-29; Soans 1949: 30-35; Haljak 1949: 52-70; Arman and Starostin 1951: 7–18; Meigas 1951: 19–30; Tippel and Tihomirov 1951: 31-43), and concerning the restoration of wrecked towns (Ederberg 1946: 59-63;

Ederberg 1948: 60–65). The topic of ongoing town planning was covered in local newspapers such as "Sirp ja Vasar" (Sickel and Hammer), "Sovetskaya Estoniya" (Soviet Estonia), "Rahva Hääl" (People's Voice), "Õhtuleht" (Evening Newspaper), and "Postimees" (Postman) (since 1948 called "Edasi" (Forward)) (Gorich 1946; Kotli 1947: 5; Tallinna Kunstihoones avati... 1948: 4; Tippel 1948b: 5; Volkov 1949: 4; Linnakivi 1952: 2, Shumovskij 1953a: 3), in the monthly magazine "Pilt ja Sõna" (Picture and Word) (Viljaranna 1949: 10–11), and in the Soviet Union-wide professional periodical publications, such as "Problemy sovetskogo gradostroitel'stva" (Problems of Town Planning) (Arman 1955: 49–52). While mediating decisions and the ideology of central government and its institutions (architectural ones included) and against the background of those formulating local architectural principles (see first section, hyphen three), the publications had to take care of ideological re-education of local architects, as well as education of young architects. Local architects were compelled to start thinking and planning in a new way, being ideologically aware – such articles were published in the professional periodical publication "ENSV Arhitektide Almanahh" (Arman 1946b: 5–12; Meigas 1948: 5–9; Arman and Starostin 1951: 7–18; Port 1951: 44–52). In the Soviet Union-wide professional publications such as "Arhitektura SSSR" (Architecture of the USSR) (Rech tovarischa I. V. Stalina 1952: 1–2) and local newspapers (Arman 1946a: 2; Meigas 1949b: 7; Laug 1950: 5; Koido 1952: 6-7; Roos and Melder 1953: 3; Shumovskij 1953b: 3; Tihomirov 1954: 2–3). In addition, general ideological boshures "ÜK(b)P Keskkomitee otsused "Ajakirjadest "Zvezda" ja "Leningrad"", "Draamateatrite repertuaarist ja abinõudest selle parandamiseks", "Kinofilmist "Suur elu"" ja "V. Muradeli ooperist "Suur sõprus""" (Decisions of the Central Committee of the Communist Party of the Soviet Union "About Journals "Zvezda" (Star) and "Leningrad", "About the Repertoire of Drama Theatres and Remedies of Improving It", "About the Cinematographic Film "Great Life"" and "About V. Muradeli's opera "Great Friendship"") (ÜK(b)P Keskkomitee otsused "Ajakirjadest "Zvezda" ja "Leningrad", 1953) and articles published in local newspapers formed a background for the architectural life (Semper 1944: 2; Intelligentsi ülesanded majanduslikus ja kultuurilises... 1945: 2–3; Eesti NSV Rahvakomissaride Nõukogu ja ... 1945: 2; Ajakirjadest "Zvezda" ja "Leningrad"... 1946: 1; V. Muradeli ooperist "Suur sõprus"... 1948: 1; Pereimenovanie Centralno'ij ploschadi ... 1949; Veelkord EN Arhitektide Liidu tööst 1950: 7).

The fourth section consists of books, periodical publications, and magazines published in the post-Stalin era and the post-Soviet era.

In this doctoral thesis, the analyses of the Soviet Stalinist town planning in the 1930s to the mid-1940s used the book "Planirovka i zastroika gorodov" (edited by architect Victor Baburov), which is ideologically biased but intended to be used by architectural students and the overview of the topic is given as it were protocol (Planirovka i zastroika gorodov 1956), "Michail Barhhin's books "Arhitektura i gorod. Preoblemy razvitya sovetskogo zodzhestva" (Architecture and Town. Development of Soviet Architecture) (Barhhin 1979) and "Gorod. Struktura i kompozitsija" (Town. Structure and Composition) (Barhhin 1986) both were published in the Soviet Union (in 1979 and 1986) and are analytical and balanced, ideologically still biased, but concern the issue through restrained critique, which on the one hand, is something impressive, and on the other hand, something that should not be repeated anymore. The same concerns the book by Nikolay Bylinkin and Vera Kalmykova "Istorya sovetskoi arhitektury" (History of the Soviet Architecture) that gives an overview of the Soviet architecture up

to 1954 (Bylinkin & Kalmykova 1985), as well as a book published for the 70th anniversary of the USSR "Arhitektura SSSR 1917–1987" (Architecture of the USSR 1917–1987) (Arhitektura SSSR ... 1987). Meanwhile, Vladimir Paperny, who emigrated from the Soviet Union to the USA in the late-1970s, published his dissertation "Kultura Dva" (Architecture in the Age of Stalin: Culture Two) (Paperny 1985/in English 2002) that opens the Stalin era architecture and its background as a phenomenon of two cultures (Culture One, Culture Two) and aesthetic choices of the cultural mechanisms in the 1930s and the 1940s. In parallel with him, a German art critic, theorist and philosopher Boris Groys, who also emigrated from the Soviet Union to West Germany in 1981, published a book "Gesamtkunstwerk Stalin: Die gespaltene Kultur in Sowjetunion" (Total Artwork Stalin: The Split Culture in the Soviet Union) (Groys 1988/in Estonian 1998) that analyses the Stalinist era culture philosophically. Russian historian of architecture and theorist Julia Kosenkova's book "Sovetskij gorod 1940-h – pervoj poloviny 1950-h godov. Ot tvorcheskih poiskov k praktike stroitel'stva" (Soviet Town From the 1940s to the First Half of the 1950s. From the Creative Searches to the Practice of Building) (Kosenkova 2009) critically and thoroughly analyses and rethinks the epoch and mechanisms of the Soviet town planning of the Second World War and the post-war period. Tatiana Prudnikova's article "Sotcrealizm v arhitekture kak fenomen kultury nachala 1950-h gg." (Socialist Realism in Architecture as a Phenomenon of Soviet Culture of the 1950s) (Prudnikova 2014: 115–122) analyses socialist realism, Alla Usanova's article "Sovetskaya arhitektura i gradostroitelstvo 1920–1950-h godov: strategya zhilizhnogo stroitelstva i vidy gorodskogo zhilya" (The Soviet Architecture and Town Planning in the 1920s–1950s: Strategy of Housing Construction and Types of City Housing) (Usanova 2014: 205-210) and Michail Ilchenko's article "Nezavershenny proyekt kak forma vospriyatya sovetskogo gradostroitelstva 1920–1930-h gg.: Opyt socialisticheskih gorodov" (Unfinished Project as a Way to Conceive the Soviet Urban Planning in the 1920s and the 1930s: The Case of Socialist Cities) (Ilchenko 2017: 58–79) open and analyse the gap between official ideas and actual conditions in the field of urban planning.

- While analysing town planning of the 1930s independent Estonia, this dissertation uses the book "Arhitekt Alar Kotli" (Architect Alar Kotli) that unfolds the background of the issue by historian of architecture Mart Kalm (Kalm 1994).
- Urban planning of the Estonian Soviet Stalinist period, from 1944 to 1955 (including East Estonian oil-shale mining and industrial towns) includes books such as art historian Elsbet Parek's "Pärnu sajandeis. Ehituskunstiline ülevaade" (Pärnu Throughout Centuries. Architectural Review) that concerns architectural history of Pärnu (Parek 1971), M. Kalm's "Arhitekt Alar Kotli" (Architect Alar Kotli) that gives a short, though sometimes controversial, overview of the architecture and urban planning of the Estonian Soviet Stalinist period, excluding East Estonian oil-shale mining and industrial towns (Kalm 1994), M. Kalm's "Eesti 20. sajandi arhitektuur. Estonian 20th century architecture" that gives some details about the planning of Pärnu Oblast Centre (Kalm, 2001), historian David Vseviov's "Kirde-Eesti urbaanse anaomaalia kujunemine ning struktuur pärast teist maailmasõda: Doktoritöö" (The Formation and Structure of the Urban Anomaly in Northeast Estonia After the Second World War. Doctoral Dissertation) that sheds light on the formation of population of East Estonian oil-shale mining and industrial towns (Vseviov 2002). The articles used for the issue contains the workd of two authors who lived through the Stalin era: architect Paul Härmson's "Pärnu keskuse planeerimiskava kujunemine" (Development of the Planning Project for Pärnu

Centre) that sheds light on the formation of Pärnu Olbast Centre (Härmson 1983: 32-43), and architect/historian of architecture L. Volkov's "Eesti Arhitektuurist aastail 1940–1954" (About Estonian Architecture During 1940–1954) that helps to describe the mechanisms of local architectural life in the 1940s to the 1950s (Volkov 1991: 183–213). In addition, the issue uses articles such as P. Härmson's "Linnaehituskunst – mängukann juhuse ja võimu käes ehk ühe hoone saamislugu" (Town Planning – Boy Toy of Coincidences and Power – a Story of a Building) that tells a story of a residential house in Tallinn through the author's memoirs (Härmson 1994: 54–59), Epp Lanokts's "Klassid klassideta ühiskonnas: Elitaarne ruumimudel Eesti NSV-s ja nomenklatuursed korterelamud Tallinnas 1945–1955" (Classes in Society Without Classes: Elitist Model of Space in the Estonian SSR and the Apartments of Nomenklatura in Tallinn During 1945–1955) that analyses the living conditions in Tallinn in the mid-1940s to the mid-1950s (Lankots 2004: 11–41). Krista Kodres's "Sovietization of Classical Architecture: the Case of Estonia" which describes some aspects of Sovietisation of Estonian architecture after the Second World War (Kodres 2008: 130-151) and historian Olaf Mertelsmann's "Ida-Virumaale sisserändamise põhjused pärast teist maailmasõda" (The Reasons for Immigrating to Ida-Virumaa Region After the Second World War), following the lead of Vseviov's dissertation, analyses the reasons for immigrating from other parts of the Soviet Union to East-Estonia (Mertelsmann 2007: 51-74).

The fifth section contains images of masterplans, plans, designs, views and photos of towns and urban spaces, used in the dissertation.

The 1930s period of independence in Estonia:

- Pärnu Road apartment buildings nearby the Liberty Square in Tallinn dating back to the late 1930s. (Photograph by Siim Sultson 2014)
- EEKS commercial and apartment building, 1936–1937, by Elmar Lohk; Tallinn Art Hall, 1933–1934, by Edgar Johan Kuusik and Anton Soans; Art Foundation building, 1948–1953, by Alar Kotli. (Photo by Siim Sultson 2017)
- Entry for Liberty Square in Tallinn, 1937, by Harald Arman, Salme Vahter-Liiver. Right: EEKS commercial and apartment building, Tallinn Art Hall. Right centre: Liberty War Memorial. At the bottom left: Harjumägi hill. (Missugune kuju anda Vabadusplatsile? 1937) (What Kind of Shape Should the Liberty Square Have? 1937)
- Winning entry for Liberty Square in Tallinn, 1937 by Alar Kotli. (EAM 2.1.203)
- Winning entry for the new business and transport centre in Pärnu, 1938 by Harald Arman. (Bölau 1938: 57)
- Pärnu branch of the Bank of Estonia, 1938–1940 by Alar Kotli and Anton Soans. (Photograph by Siim Sultson 2013)
- Design for the new institutional ensemble around Tartu University, 1938 by Harald Sultson. (EAA 2100.6.163; Ülikooli ümbruse ... 1938: 3)

- Institutes building of Tartu University, 1939–1942 by Harald Sultson. (Photograph by Siim Sultson 2013)
- Tallinn Officers' Council (completed as the Culture House for the Working People), 1939–1947 by Edgar Johan Kuusik. (Photo by Siim Sultson 2014)

## Estonian Soviet Stalinist period, between 1944 and 1955 (including East Estonian oil-shale mining and industrial towns):

- Architect Harald Arman (sitting in the middle) with architect Anton Soans (on the left) and architect August Volberg at the turn of 1940s and 1950s. (EAM 16.4.56)
- 1945 masterplan of Tallinn by Harald Arman, Otto Keppe, Anton Soans. In the middle: Central Square and the Cultural Centre with the axis directed to Southeast. (EAM 3.1.503)
- Entry for the Central Square in Tallinn, 1945 by Harald Arman, Voldemar Meigas, Otto Keppe. In the middle: the square with the Second World War Victory Monument. (EAM 18.4.8)
- Tallinn Stalin Square, 1953–1954, by Otto Keppe. The square contains green area as an esplanade. On the left: multi-ministry building. On the right: Estonia Theatre. (EAM 18.4.6)
- Entry for the Cultural Centre Square in Tallinn, perspective view, 1946 by H. Arman. (EAM 3.1.31)
- Entry for the Cultural Centre Square in Tallinn, 1946 by H. Arman. (EAM 3.1.13, 32)
- Entry for the Cultural Centre Square in Tallinn, 1947 by Harald Arman. (EAM 3.1.164)
- Design for the Cultural Centre in Tallinn, 1945–1953 by Harald Arman. The 1953 version. At the bottom right: Estonia Theatre near Estonia Boulevard. In the middle: Academy of Sciences of Estonian SSR building near Lenin Boulevard. On the top left: a stadium was planned between the prolongated axes, and it was built in 1955. (EAM 3.1.32)
- Estonia Boulevard administrative buildings in Tallinn from the turn of the 1940s and the 1950s. City space by H. Arman, building in the front by Enn Kaar. (Photograph by Siim Sultson, 2014)
- Estonia Boulevard administrative buildings opposite to Estonia Theatre in Tallinn from the turn of the 1940s and 1950s. City space of the Cultural Centre in Tallinn by Harald Arman, the building in the front, 1948–1953 by Enn Kaar. (Photograph by Siim Sultson 2017)
- Lenin Boulevard residential building (Academics' House), 1954, by Edgar Velbri. Right: Kentmanni Street residential building, 1954, by Arnold Vulp. (Photographs by Siim Sultson)

- The Cultural Centre in Tallinn, the early 1950s. The photo was taken in the early 1950s. (EFA 335.0–70335)
- The Cultural Centre in Tallinn, the early 1950s. The photo was taken in 1961. (EFA 209.1–3509)
- Aerial view of the Central Square and the Cultural Centre of Tallinn in 2001. On the right: Estonia Theatre near the esplanade. In the middle: Viru Hotel (1964–1972) instead of the original plaza. On the right: crossing axis of the Cultural Centre; the Southeast axis from Estonia Theatre to Comsomol (Kalev) Arena (on the top left). (EAM Fk 12503)
- Pärnu Oblast Centre by H. Arman, 1952–1955. On the site of the demolished Old Town and ruins of the Teutonic Castle. (EAM 3.1.323)
- 1953 masterplan of Pärnu by Anton Soans. In the middle: Pärnu Oblast Centre (H. Arman, 1952) with crossing axes, the Oblast Centre building, Central Square and bridge. (EAM 3.1.470)
- Pärnu Oblast centre in the mid-1960s. (EAM AM N 21975:1)
- Pärnu Oblast Centre by Harald Arman, 1952–1955. A view along the Lenin Boulevard (Pikk Street) nowadays. (Photo by Siim Sultson, 2013)
- Pärnu Oblast Centre (Vasa park) nowadays. (Photo by Siim Sultson, 2013)
- Planning task for the industrial and urban development of the Estonian SSR's regions (where oil-shale occurs) by the Department of Architecture of the Estonian SSR and its design institute "Estonproyekt", 1951. Dark brown colour in East Estonia marks oil-shale deposits, which are useful for the industry, light brown colour marks the same in Leningrad Oblast. Blackline and black dashed line mark the whole territory of oil-shale deposits. Redline marks existing oil-shale gas pipe. Red dashed line marks the future oil-shale gas pipes. (ERA R-1527.2.44, sheet 1)
- Planning task for industrial and urban development of the Estonian SSR's region where oil-shale occurs by the Department of Architecture of the Estonian SSR with its design institute "Estonproyekt", 1951. On the top right: Sompa, Kohtla, Kohtla-Järve, Kukruse, Jõhvi, Ahtme. Right: Viivikonna. In the middle: Kiviõli. In the middle, left side: Rakvere. In the middle: new town Koidu. In the middle, right side: new town Illuka. (ERA R-1527.2.44, sheet 7)
- Map of Kohtla-Järve agglomeration and Sillamäe. (Eesti Statistikaamet 27 August 2017)
- Masterplan of Sompa, 1946 by Lengiproshacht (B. Sokolov). On the left quarter: realised part of the town. In the middle and on the right: unbuilt part of the town. (EAM 3.1.248)
- Masterplan of Ahtme, 1946, by Lengiproshacht (V. Kulakov). In the middle: realised part of the town. On the top and left: unbuilt part of the town. (EAM 3.1.50)

- Masterplan of Kohtla, 1946 by Lengiproshacht (M. Volkova). Unbuilt. (EAM 3.1.12)
- Masterplan of Viivikonna, 1949, by Lengiproshacht. On the right: mostly realised part of the town. On the left: mostly unbuilt part of the town. (ERA R-3.3.3148, 18)
- Masterplan of Kiviõli, 1954, by Planning and Design Office, design institute "Estonproyekt" of the Department of Architecture of the Estonian SSR (Anton Soans). At the bottom centre: realised part of the town. In the middle and on the right: unbuilt part of the town. (ERA T-14.4-6.941)
- Masterplan of Jõhvi, 1955, by design institute "Estongiprogorstroi" (Voldemar Tippel), using radial street pattern at one corner of the grid as in previous figures. (ERA T-14.4-6.34553)
- Stalinist centre of Kohtla-Järve crossing main axes, 1951 (Otto Keppe), following the version of Lengorstroyproyekt (Jevseiy Vitenberg, I. Pisareva, F. Kirzideli). In the middle: Victory Boulevard. At the bottom right: stadium between converging axes. (ERA T-14.4-6.34581)
- Centre of Kohtla-Järve crossing the main axes, 1956, by design institute "Estongiprogorstroi" (Voldemar Tippel) following the version of Lengorstroyproyekt. In the middle: Victory Boulevard. At the bottom right: stadium between converging axes. (EAM 3.1.281)
- Stalinist centre of Kohtla-Järve, the early 1950s by Lengorstroyproyekt (Jevseiy Vitenberg, I. Pisareva, F. Kirzideli). Perspective view of the Victory Boulevard. The photo was taken from the crossing of the main axes in the 1950s. (RM F 646.176)
- Stalinist centre of Kohtla-Järve, the early 1950s by Lengorstroyproyekt. Perspective view of the Victory Boulevard. The photo was taken in the 1950s. (RM F 87.70)
- Stalinist centre of Kohtla-Järve, the early 1950s, by Lengorstroyproyekt. The photo was taken in the 1950s. (postcard)
- Lenin Square in Kohtla-Järve, the early 1950s, by Lengorstroyproyekt. The photo was taken in the 1950s. (RM F 207.5)
- The Palace of Culture in Kohtla-Järve centre (Järve), early 1950s by Lengorstroyproyekt. Photo taken in 1952. (Eesti Entsüklopeedia, 2017)
- Sculpture of the discus thrower (discobolus) in the greenery of Victory Boulevard in Kohtla-Järve centre (Järve). The photo was taken in the mid-1950s. (EAM Fk 2844)
- Stalinist centre of Kohtla-Järve, the early 1950s, by Lengorstroyproyekt. Perspective view of the Victory Boulevard. In the middle: one of the main crossing axes (Rahu Square) and the apartment building with a large order. (Photo by Siim Sultson, 2013)

- Lengazstroi's map concerning the establishment of a settlement (territory is between the light brown lines, including the hatched area) for the workers of uranium oxides producing factory (on the top left) in Sillamäe. On the top right: Arman's signified approval, 19 December 1945. (ERA R-1992.2.2, 66)
- Sillamäe centre by Lengorstroyproyekt (Alexandr Nikayev), 1947, without the crossing of converging axes and Mere Boulevard. In the middle: Central Square with the Palace of Culture. On the right: recreation area and park with a stadium. (SM Generalny proekt planirovki, NII-9, 1947)
- Sillamäe centre by Lengorstroyproyket (Alexandr Nikayev), 1948. In the middle: Central Square with the Palace of Culture (right side). On the right: recreation area and park. (SLV Detalny proyekt, Tom I, GSPI-12, 1948)
- Design for Stalinist centre of Sillamäe, the Central Square, 1948, by Lengorstroyproyekt / GSPI-12. (SM Sillamäe keskuse perspektiivvaade)
- Sillamäe centre by Lengorstroyproyket (Alexandr Nikayev and Michail Pospechov), 1949. In the middle: Central Square with Palace of Culture (on the right) and grand staircase (on the top). On the top right: Mere Boulevard crossing with converging axes through the staircase. At the bottom right: stadium near converging axes. (SLV Proyekt planirovki, GSPI-12, 1949)
- Sillamäe centre by Lengorstroyproyket (Alexandr Nikayev and Michail Pospechov), 1950. In the middle: Central Square with Palace of Culture (on the right) and grand staircase (on the top). On the top right: Mere Boulevard crossing with converging axes through the staircase. At the bottom right: stadium between converging axes. (ERA R-1.5s.212, 10–4.)
- Sillamäe centre by Lengorstroyproyket (Alexandr Nikayev and Michail Pospechov), 1958. Centre: Central Square with Palace of Culture (on the right) and grand staircase (on the top). Top right: Mere Boulevard crossing with converging axes through the staircase. At the bottom right: stadium between converging axes. (SLV Generalny plan, zakaza 229, 1958)
- Stalinist centre of Sillamäe, view from the staircase with sculptures along Mere Boulevard towards sea, the early 1950s, by Lengorstroyproyekt / GSPI-12. The photo was taken in the 1950s. (SM 1F 6273)
- Stalinist centre of Sillamäe, view from staircase along Mere Boulevard, early-1950s, by Lengorstroyproyekt / GSPI-12. The photo was taken in the early 1960s. (SM 1F 6057)
- View along Kesk Street and Stalinist Central Square of Sillamäe, the early 1950s, by Lengorstroyproyekt / GSPI-12. The photo was taken in the 1950s. (SM 1F 6079)
- Sculpture of basketball players in Sillamäe recreation area (park). The photo was taken in the late 1950s. (SM Korvpallimängijate skulptuur Sillamäe pargis)

- Sculpture of gymnasts in Sillamäe recreation area (park). Photo taken in late 1950s. (SM Võimlejate skulptuur Sillamäe pargis)
- Stalinist centre of Sillamäe, staircase, the early 1950s by Lengorstroyproyekt. (Photo by Siim Sultson 2013)
- Stalinist centre of Sillamäe, staircase axis, the early 1950s by Lengorstroyproyekt. (Photo by Siim Sultson, 2013)
- Viivikonna of Kohtla-Järve agglomeration, the early 1950s, by Lengiproshacht. The photo was taken in late1950s. (RM F 186.6)
- Viivikonna of Kohtla-Järve agglomeration, the early 1950s, by Lengiproshacht. The photo was taken in 2012. (EVM F 455.205.)
- Viivikonna of Kohtla-Järve agglomeration, the early 1950s, by Lengiproshacht. The photo was taken in 2012. (EVM F 455.210.)
- New Narva plan by Ernst Ederberg, 1945. (EAM 16.1.69.)

# 2 Concept and Methodology

In order to start determining the formation mechanisms and urban identity of the East Estonian oil-shale mining and industrial towns such as Kohtla-Järve, Sillamäe, Ahtme, Sompa, Kukruse, Kiviõli, Jõhvi, Kohtla-Nõmme, and Viivikonna with the focus on Stalinist urban ensembles and urban space of those town centres during the post-war Stalinist period (1944–1955), methodological framework and two conceptual reference points are formed, which in turn determine the methodology of this dissertation.

#### 2.1 Methodological Framework

The methodological framework of the dissertation is formed and determined by the representation of power through urban space, urban ensemble and architecture, as well as the ability of town planning, urban space and urban ensemble to represent power.

The Stalin era East Estonian oil-shale mining and industrial towns as the derivates of the Soviet Stalinist urban planning principles and practice, Estonian Stalinist urban planning principles and practice, and Estonian 1930s independence period practice, were formed by ideological, architectural and urban mechanisms, which were driven by military and economic mechanisms of the Soviet state. The Soviet Union, as a strictly controlled, thoroughly led, and ambitious military state, needed everything to justify and legitimate the system and its existence, to represent the state and its power. The more ambitious and totalitarian a state is, the higher is its need for justification, legitimation, enshrinement and representation of itself on behalf of its persistence and existence. There is a fear of non-existence behind those needs. Urban space and architecture based on urban planning are visible to everybody, and the state and power value and admire the urban space and architecture as the most capable of representing the state.

American philosopher Nelson Goodman states that on the one hand, architecture does not mark and does not mean anything: it does not describe, does not remind, does not depict, and does not portray. On the other hand, unlike other art forms, architecture differs by its scale, which enables architecture to symbolise something in a different way. A building, an urban ensemble, and an urban space is more significant than a human being: it is impossible to grasp them with one glance, but it is possible to move around them and in them. Moreover, a building, an urban ensemble, and an urban space is fixed in its place, within the physical and cultural environment, that change slowly and all three have a specific functional purpose and a task. However, symbolising has its variations, such as expression, exemplifying and representation (Goodman 1985: 642–643, 648). The latter one, due to its dignified manner, is the most the influential and it dominates over the exemplifying and expression or uses those as means for something. The state as the power needs to be represented – the space, public and urban, are the most suitable to do so. The previously stated issue is one of the crucial issues of this dissertation.

French philosopher and sociologist Henri Lefebvre considers the social space to be above all spaces. He studies the content and meaning of space in several social circumstances (how to perceive, how to conceive) through its production triad: Spatial Practice – Representation of Space – Representational Space. While Spatial Practice marks everyday social space produced and reproduced by everyone in several ways every day, then Representation of Space as a conceptual space conceived by scientists, planners, and urbanism engineers is the dominating space in society, consisting of designs and plans of buildings, urban ensembles, urban space et cetera. Representational Space, as lived space, is full of memories, imaginations, symbols. It is dynamic and changes according to circumstances. It contains *genius loci* that may be found in those old urban spaces, urban ensembles, and buildings. (Lefebvre 1974/1991: 33–42)

However, society, state, and power need to represent space as a social space that is controlling, intrusive, reorganising, and restructuring. The more ambitious and totalitarian a state is, the higher is its need to be controlling, intruding, reorganising, and restructuring (in order to justify, legitimate, enshrine and represent itself). Such a state becomes a unified matter that leads up to a unified code.

On the one hand, Stalinist urban ensembles in the centre of Kohtla-Järve, Ahtme, Sompa, Jõhvi, Kukruse, Kiviõli, Kohtla-Nõmme (Kohtla), Viivikonna, and Sillamäe contain several allusions of history of architecture, and above all classicism. On the other hand, those urban ensembles had to follow specific Soviet urban planning and architectural principles officially authorised samples of urban planning and urban ensembles, such as in Moscow, Leningrad, Stalingrad, Minsk, Kiev. Stalinist urban ensembles of East Estonian oil-shale mining and industrial towns were influenced by principles and practice of Estonian Stalinist urban planning and architectural ensembles, as well as by the practice of Estonian 1930s independence period urban planning and urban ensembles.

As Lefebvre states, unification was necessary for controlling and achieving predictable results and increasing the effectiveness of urban space. Unification was executed by the harmonisation of façades, entrances, doors, and gates. Windows were subordinated to facades, facades to perspectives and urban space, which was formed by institutional buildings, palaces of rulers, streets and squares. The forming urban space was subordinated to the urban plan – the masterplan. Every detail, not harmonising the unity, in the ensemble was removed in order to save the unity, or they were rearranged - everything had to be controlled, recognisable and familiar. (Lefebvre 1974/1991: 46–48)

However, it is hard to control urban space due to its ability to reproduce itself. While Representation of Space as means of power tries to control the production of space, both Space Practice and Representational Space reproduce space in their way. The question is in the amount of control. The more ambitious and totalitarian a state is, the higher is its need to control and represent. For instance, urban space of East Estonian oil-shale mining and industrial towns is controlled by almost every detail (up to certain political symbols), which leaves a tiny space for Representational Space – this almost complete control makes the urban space totalitarian. Meanwhile, even a totalitarian urban space keeps the ability to be reproduced by Representational Space.

Thus, the state as the power needs to be represented – space, public and urban, is the most suitable. The state needs space to be recognisable, regular, and well-controlled. History of architecture presents styles that are regular and unifying.

What could power be without space? It could not exist, as Lefebvre states. Power needs space in order to be equipped with suitable vocabulary, connections, interdependency – ideology. On the one hand, ideology of power forms space, and on the other hand, space helps to form, reform and survive the power and its ideology. (Lefebvre 1974/1991: 44–45)

Power intrudes the social space through its ideology. It tries to represent it (Representation of Space), rearranges it, and uses it for the sake of its existence. Power without space ceases. Power needs space, its own space that is formed ideologically and been politicised, in order to survive.

French philosopher Michel Foucault states that urban space and architecture were politicised in the late-18th century (Foucault 1982/2000: 349–351). The previously stated on the conditions of classicism, while the paradigm of European culture changed a lot, established a rigid classical antiquity-based modern culture.

As previously mentioned, Foucault states that architecture became dominantly political during the late-18th century. This concerns the urban planning and urban space. In addition, public hygiene, public space and private space became more important than before.

Architecture as a component of urban planning became a social issue. In the 17th century, the French officials realised that in order to become efficient, the state should take well-organised towns as examples. During the following 150 years, towns were considered as tiny models of the state: the capital city should look the same as the central square, highways should look like streets, and all state laws had to be as simple, unified, and rational as the regulations of the town. The state had to become an efficient, well-regulated, rational machine, or even perptuum mobile (Foucault 1982/2000: 349–351). Foucault considers such a system, which formed in the 18th and 19th century, a characteristic of centralised or even totalitarian states. (Foucault 1982/2000: 351). However, one may find similar tendencies both in more centralised or less centralised states, also in totalitarian, authoritarian and liberal states - even the latter ones need space. In the 19th century due to rapid urbanisation, spontaneous growth of towns and street network (grid), poor sanitary conditions, poor hygiene, diseases, and epidemics caused a need for simple, rational, centrally well-regulated urban planning and state planning, as well. Such an urban space, on the one hand, had to be rational, unified, regular, functional, straightforward (as Ancient-Roman military camps with *cardo* and *tecumanus*), inexpensive (within the conditions of capitalism and sustainable fiscal policy) and, on the other hand, clean, aesthetic, and monumental (in order to express dignity and beauty). The more ambitious and totalitarian a power is, the higher is its need for such qualities in order to control the state and represent both state and power. Regular urban plans, symmetric and axial monumental Stalinist architectural, urban ensembles of East Estonian oil-shale mining and industrial towns follow all those qualities.

Howeer, is the regular, geometric urban plan and urban space something characteristic to modern totalitarian states? In military camps of Ancient Rome *cardo* and *tecumanus* with rectangular, checked pattern grid represented order, hierarchy, functionality, effectiveness and perspective in order to enlarge the settlement. Foucault considered the camp as a reproducer of social hierarchy that, in turn, is embodied in the plan and architecture (Foucault 1982/2000: 363).

The camps followed the examples of Greek agora and Roman forum, which were the junctions of streets. In Renaissance period and especially in Classicist period, following Antique examples, the urban plans emphasised effectiveness, functionality and perspectivity of enlargement through axial, regular, and checked pattern grid. Such an urban plan contained main streets as backbones of the settlement, monumental buildings forming the junctions of crossing streets, and architectural ensembles of those buildings as accents of the urban space. Square blocks had to be built up perimetrically. The hierarchical urban space was formed by the height of buildings, complexity, monumentality and luxury of facades. The more out of the centre, the simpler the urban space became. All that formed a city-like urban space.

Meanwhile, in order to govern such an urban space, it had to be inevitably regular and categorised. At the turn of the 19th century and the 20th century the urban space had to be divided into five groups: on the first side of the centre there had to be buildings related to culture, on the second side buildings related to history, on the third side a building related to government, on the fourth side buildings related to ideology and in the centre a park or greenery. The spacious, well lit, sanitary towns had to contain greeneries as lungs of the settlement – that meant involvement of embankments, waterbodies, use of local natural conditions as an advantage et cetera. At the turn of these centuries, the urban area had to meet zoning. However, one may see all that in Georges Eugène Haussmann's Paris plan (1858–1870) which was caused by anti-sanitary conditions, epidemics, deterioration of living conditions, ineffectiveness of the capital – all that, in turn, harmed the effectiveness and capacity of the French state.

Regular, geometric urban plan and urban space were developed over centuries. It developed according to functional needs and became a characteristic of all kinds of states.

Historian of architecture Wolfgang Sonne states that representation of the state as the power through architecture is usually considered as something characteristic to totalitarian states, but a problem arises when the same tendencies occur in democratic states. On the one hand, the totalitarian systems have discredited traditions of the historical absolutist states. On the other hand, unlike totalitarian states, democratic states have always been compelled to focus on the functionality of urban planning and urban space in order to meet the inhabitants, the electors' needs. Otherwise, the politicians as visionaries would not be re-elected (Sonne 2003: 35). However, such a statement is debatable – the functionality is crucial in totalitarian urban planning as well. For example, one may see it in urban plans of East Estonian oil-shale mining and industrial towns.

Sonne considers architecture as being able to represent and symbolise only general ideas: for example, harmonious forms of ancient Greek temple could symbolize harmonious cosmic principles and patterns, though for the Greeks the temple did not remind the world, or high gothic cathedral could symbolise the universe of God, though for clerics God did not resemble the stained glass windows of the cathedral, or Atomium in Brussels could symbolise an atom, though for physicists the world of atoms does not resemble the Atomium. However, such symbolising is very rare in architecture and especially in urban planning. Buildings and urban plans are just things in the world of things. Nonetheless, the architectural representation may become a part of political representation, e.g. architectural symbol may become a political instrument. Consequently, architecture and urban plan may represent values of the power, instead of the power itself. For instance, in totalitarian states, architecture and plans of mass event complexes (squares, urban ensembles) represent and symbolise everybody's involvement, but actually, it was the other way around in such states.

Nevertheless, the symbolised values were universal political values that were suitable for both totalitarian and democratic states. (Sonne 2003: 36–37)

While symbolising, as Goodman stated, has its variations, such as expression, exemplifying and representation, then in architecture, it is hard to implement clear symbols. For example, when a church represents a sailing boat, the sailing boat depicts freedom from land, the freedom from land illustrates mentality. Hence, the church refers to mentality through a three-linked chain.

Meanwhile, a building may refer to an ancient Greek temple that illustrates harmony by its classical proportions, but the building does not have – however, the building may express those proportions. (Goodman 1985: 642–643, 648–649)

What is the purpose of a symbol in architecture, in urban ensembles, in urban space, or urban plans? Is its purpose of covering the ugly and grim reality with dreams and beautiful illusions? Why do democratic societies also tend to use symbols in architecture, in urban ensembles, in urban space and urban plans?

Sonne proposes that symbolising helps a power to rule with public authority, instead of violence, especially in democratic states (Sonne 2003: 38). However, even totalitarian states may use the same pattern, but that assumes much deeper symbols and skills to implement them.

While work of art may communicate specific messages and values through allegories precisely during certain conditions and period, then architecture and urban plans are not able to that, due to their ability to communicate only principal values and general ideas.

Nevertheless, all those are suitable for both the democratic and totalitarian states. Thus, as Sonne states, urban plans and architecture are not able to manipulate the thoughts of citizens. For example, the Hitler era Nuremburg party rally complex without the party paraphernalia, rhetoric, music, and rituals give one freedom for thoughts, perceptions, and interpretations because the solid, calm neo-classicist and functional forms of the complex communicate centuries-old principle values and general ideas. (Sonne 2003: 39–40)

The same is relevant to neo-classicist urban space and urban ensembles of the Stalin era centres of East Estonian oil-shale mining and industrial towns. Totalitarian systems used the neo-classicist forms, but they do not belong to them.

Goodman states that while a building means or symbolises something, the meaning and symbolising may have nothing in common with architecture of the building. Function and tasks of a building do not define its architecture. The same building with particular architecture may perform several functions independently from the time and political regime. Whatever slaughterhouse, regardless its architecture, may symbolise slaughter or massacre, whatever courthouse, regardless of its architecture, may symbolise extravagance. (Goodman 1985: 649)

Consequently, Sonne ascertains the same, urban plan, urban space and architecture have got such a resource of values that they may represent whatever is necessary for certain conditions, political regime, and period. Unlike words and images, a three-dimensional architecture or urban plan may communicate what is experienced at the moment. For example, an urban plan, an urban space, an urban ensemble established for supporting the propaganda of a totalitarian regime, may be regarded as just a beautiful issue that communicates principal values and general ideas – both during the totalitarian and democratic period. An urban space that is considered beautiful is moving towards better living conditions, a more aesthetic environment, and human values. (Sonne 2003: 40)

While the meaning of the forms of urban plans, urban space, and architecture may become the opposite, those forms still carry meaning. All these forms were established on specific conditions, and they symbolise the values of a specific political regime. When the conditions and circumstances change, the meaning changes as well.

Consequently, the meaning of an urban plan, urban space, urban ensemble and architecture changes following the conditions and circumstances. The same forms of the urban plan, urban space, urban ensemble and architecture that were established and used during one political regime, may also be used in another political regime – their essence and meaning may even become reversed. (Sonne 2003: 43)

Stalinist urban ensembles of the centres of Kohtla-Järve, Sillamäe, Ahtme, Sompa, Jõhvi, Kukruse, Kiviõli, Kohtla-Nõmme (Kohtla) and Viivikonna, which were established for supporting the propaganda of the Soviet Stalinist totalitarian regime, communicate principal values and general ideas. On the one hand, the communication of principal values and general ideas should help change the meaning of those ensembles following the new, current conditions and circumstances. On the other hand, there is something more that contributes to the change in the meaning of those ensembles following local circumstances, even before the new, current conditions.

Foucault states that *idée fixe* (fixed idea) of the 19th century was history: it was characterised by development and stagnation, performance and crisis, accumulation of the past, and a large number of the dead. He called the 20th century a century of space that is characterised by simultaneity (concurrence), juxtaposition, simultaneous as being close and being far, being nearby and being scattered. He considered those two doctrines as conflicting. Foucault also uses the term "heterotopia". Ancient Greek prefix  $\xi \tau \varepsilon \rho \circ \zeta$  (héteros), "other, another, different" and the Greek morpheme  $\tau \circ \pi \circ \zeta$  (topos) "place" put together mean "other place", "different place" or "transition place". He determined the six principles of heterotopia. (Foucault 1984/1998: 175, 178–179)

East Estonian oil-shale mining and industrial towns represent the sixth principle, concerning the establishment of colonies on the conquered territories, e.g. the Soviet colonies in Estonia –

above all, Sillamäe could best represent the principle. According to Foucault, a colonial settlement embodies the heterotopia of the illusion where everything is following regularity both in space and time. He exemplifies that with the principle of colonial settlements, established by Jesuits in Paraguay in the 17th century. In those settlements, a regular rectangular central square as the backbone of the settlement was arranged strictly. At the far end, there was a church, the secondary school on one side and the other side the cemetery, opposite to the church. An avenue started there, and another avenue intersected it at a right angle. Inhabitants had their houses alongside these avenues. Hence, the settlement was strictly arranged according to the shape of a cross, the sign of Christ. Christianity marked the space and geography of the conquered territory with its cardinal signs and life there followed a specific regular schedule and was announced by the rings of the church-bell. This type of colonial settlement represents the illusional and ideologically recharged heterotopia. (Foucault 1984/1998: 184)

What happens when the illusion disappears, the ideology ceases, as happened, for example in East Estonian oil-shale mining and industrial towns after the collapse of the Soviet Union? What does remain and how to deal with those spaces?

Foucault's fourth principle of heterotopia that he calls "heterochronia" (ancient Greek prefix ëτερος (héteros), "other, another, different" and the Greek morpheme χρόνος (khrónos) "time" put together mean "other time" or "transition time". It is the <u>heterotopia</u> of the time. In the Western culture since the end of the 18th century and especially since the 19th-century archives, museums, and libraries have been the places where time never ceases to pile up. Periods, things, fashions, and tastes are being accumulated out of the reach of time and time is being accumulated eternally (Foucault 1984/1998: 182). Time has been accumulated up to nowadays. Should the East Estonian oil-shale mining and industrial towns' exhibits of that time be preserved, disrupted and caught according to Foucault's heterocronia? What to do with the Stalinist urban space and urban ensembles of these colonial towns? Are these towns just heterotopias, representing the fourth principle – heterochronia?

While talking about the colonial towns (Paraguay), Foucault uses the term "heterotopia" as a consideration from the colonising society, whose culture is on a higher level compared to the colonised society. The bigger the gap is between the cultural levels of colonising (higher) society and colonised (lower) society, the more suitable it seems to use term "heterotopia". However, what if both societies have practically equal levels of culture or reversed levels of culture? This kind of situation was the case in Estonia during the Soviet occupation. Even though the Stalinist East Estonian oil-shale mining and industrial towns were mostly designed by architects and design firms residing in the Soviet Union in Russia, they still do have similarities in their composition with the Stalinist urban plans and urban spaces of other Estonian towns, which were designed by local architects. In such cases, Foucault's term "heterotopia" fails. In these situations, the term "ensotopia" – Greek prefix ενσω (enso), "integrated, incorporated" and the Greek morpheme tóxoç (tópos) ", place" put together mean an integrated place, incorporated place. Urban space practice of the Stalin era in East Estonian oil-shale mining and industrial towns shows a powerful reaction of Estonian urban space culture against the Soviet and the Stalinist urban space culture. A reaction that incorporated and melted foreign urban ideology into the local practice in a way that it integrated and became familiar through the unification of foreign and local principles.

In comparison to heterotopias, ensotopias are already integrated into the local culture, accepted as familiar from the moment the issues are established.

Consequently, East Estonian oil-shale mining and industrial towns may have been considered to be heterochronias. Unlike heterotopias, these towns have a higher potential to overcome the status of heterochronia. Ensotopia characterises, for example, the urban space of East European

countries that were compelled to belong into the Eastern Block after World War II, including Lithuania and Latvia.

As stated above, urban plan, urban space and architecture have got a resource of values that may represent anything necessary in certain conditions, political regime, and period. The meaning of the urban plan, urban space, urban ensemble and architecture changes following the conditions and circumstances. May the architect influence the society and the state with one's architecture, urban space, and urban plan? May the architecture, urban space, and urban plan influence the society and the state? To which extent is the architect responsible for the urban plan, urban space, urban ensemble, and architecture? An architect is indeed responsible for the technical quality of these issues. However, who is a visionary?

Foucault does not believe that the architect could influence the society or the state, or that the architect could improve the society or solve social problems. It is a question of power: to what extent the architect and one's production (architecture, urban ensemble, urban space, urban plan) coincide with the vision of power and real circumstances. The architect and architecture may help the society to become liberal, but only when that architecture coincides with the ongoing practice of liberation in that society. The architecture alone is not able to produce liberty (Foucault 1982/2000: 355–356). As Sonne stated above, urban plan, urban space, and architecture are established on certain conditions to symbolise values of a particular political regime. When the conditions and circumstances change, the meaning of those issues changes as well. The same forms of the urban plan, urban space, urban ensemble and architecture that were established and used during one political regime, may also be used in another political regime – the essence and meaning of those may even become reversed (Sonne 2003:43). The urban plan, urban space, urban ensemble, and architecture are merely the means, instruments of power or state. An architect is a tool of power and ideology, which is embodied by officials, governors, customers, and investors as visionaries. Architect implements visionaries' visions. Stalinist urban space and central urban ensembles of East Estonian oil-shale mining and industrial towns are above all the attempts to embody the visions of power, including the foreign and local components. Power needs space – otherwise, it will not survive. As Lefebvre states, a revolution that is not able to establish its own space has failed. While socialism nearly managed to establish its space, communism remained on the level of arguments of proponents and opponents and failed. In the 1920s the Soviet Union tried to establish the socialist space, but due to the rapid breakdown in the late-1920s, the experiment was disrupted. Fertile years were followed by sterile years. As a result, Lefebvre states that it is hard to tell the difference between the socialist space and capitalist space starting from the early-1930s (Lefebvre 1974/1991: 54-55). The Soviet Union declared itself the first socialist state in the world, but due to unrealistic dreams, cruel experiments, disorder, anarchy and poverty, it failed to establish an individual, sustainable socialist space. Consequently, socialist urban plan and socialist urban space remained a myth and mere propaganda of the Soviet Stalinist ideology that tried to show the historical practice and its modern revival City Beautiful movement practice as socialist, which is typical for the Soviet society.

However, both capitalist and socialist societies used classicist space that after the fall in the early-19th century has still survived as a doctrine and, in turn, through showing itself sometimes more, sometimes less, has determined the society up to nowadays. The trend to standardise space as Representation of Space, its need to be controlling, intruding, reorganising, and restructuring in order to justify, legitimate, enshrine and represent itself as state and as power is a classicist legacy. The need for bureaucracy in the space follows the trend in order to unify, standardise, and regulate space with directives, norms, and censorship. In order to make the trend efficient, Representation of Space as a collection of techniques has to become instrumentally total that involves both public and private space, makes them equal, ceases the

privacy and critical thinking, involves all people and technology, makes them equal, impersonal and machine-like, and ceases the difference between democracy and totalitarianism.

How mighty could the bureaucracy be? German philosopher and sociologist Max Weber considered nearly a hundred years ago that, in comparison with capitalism, socialism needs more efficient and professional bureaucracy in order to gain the same results in the economy through total control and unification, e.g. the administrative apparatus of the state and the power have to be more significant. He considers power as being dominating, and that assumes the submission to one's will and orders through discipline. The discipline depicts an acquired, accustomed and uncritical obedience of masses of people to power. (Weber 1920/2002: 78, 93–102)

Bulgarian-German writer Elias Canetti compares power with teeth in one's mouth (*teeth standing in line as soldiers...*). Since ancient times teeth with the smooth and lustrous surface have symbolised power. The smoother and more lustrous, the more powerful. Replacement of stone with metal symbolises the same. The smooth and lustrous surface of shafts and wheels of a machine and its regularity symbolise power. Such smoothness has become a smoothness of functionality. The same concerns architecture and urban space: the trend towards smoothness, unity, regularity and impersonality, featurelessness – a pretext for the trend is functionality, clarity, usefulness, and efficiency.

As similar to the teeth symbol, this kind of a trend in urban planning and architecture embodies both the control and punishment (space behind the teeth as a prison) (Canetti 1960; in English "Crowds and Power" 1962; in Estonian 2000: 274–276). Power needs a well-controlled, unified, and rational space for controlling, intruding, reorganising and restructuring the society and citizens in order to justify, legitimate, enshrine and represent itself as the state. The classicist tradition continues to exist in modernity even nowadays, and it forms the basement and skeleton of contemporary society, aesthetics, and mentality.

However, the **classicist tradition** contains heterotopias and ensotopias that as following Hausmann's École des Beaux-Arts traditions are spacious, well lit, sanitary towns that have greeneries, embankments, and water bodies and use the advantages of local natural conditions et cetera – and are also admirable even nowadays. At the turn of the 19th century and the 20th century the urban plans, that emphasised effectiveness, functionality and perspectivity of enlargement through axial, regular, and checked pattern grid, had to be aesthetical and beautiful as well. The two latter features became crucial for the City Beautiful Movement in the USA in 1901–1902, when senator James McMillan initiated "The Report of the Senate Park Commission. The Improvement of the Park System of the District of Columbia", a comprehensive planning document for the development of the monumental core and the park system of Washington. The document was written by the Senate Park Commission, also known as the McMillan Commission. Architect Daniel Burnham, who visited Europe a year earlier in order to get more acquainted with the École des Beaux-Arts traditions, participated in the Senate Park Commission that initiated Washington Mall planning (replacement of the Victorian landscape with the strictly formed monumental École des Beaux-Arts-like composition of greeneries and neo-classicist administrative buildings and monuments), as well as in the planning of Chicago, Philadelphia, and Denver during the following years. Burnham implemented the European experiences and examples of École des Beaux-Arts traditions in scale that made the USA a model for Europe by the World War I (Sonne 2003: 45, 47–49). Europe gave the experiences and aesthetics, and the USA gave scale.

Aesthetics and beauty in the urban plan and urban space have been considered necessary by a French architect Tony Garnier (a plan for Cité Industrielle, 1903 – 1917), a German architect Bruno Schmitz (a plan for the Greater Berlin, 1908 – 1910), English architects Edwin Landseer Lutyens and Herbert Baker (a plan and realisation of the New Delhi government district,

1911–1931), American architects Walter Burley Griffin and Marion Mahony Griffin (a plan and realisation of Canberra, 1912–1920; 1957 onwards), a Norwegian-American architect Hendrik Christian Andersen and a French architect Ernest Hébrard (a plan of the World Centre of Communication, 1913).

The trend towards the aesthetics was caused by a cultural, sanitary, functional, rational, economical, administrative, financial, and economic reasons in urban planning and urban space. Aesthetics had to be able to solve any problem and any challenge in urban planning. Aesthetics had to be supported by history, culture, and memory that help define and form beauty. Though aesthetics was supposed to be one of the means to solve problems of communal living conditions (overpopulation, poor traffic conditions, anti-sanitary conditions et cetera), the architect had to take into account the local natural conditions, climate, cultural background and conditions, and existing problems. Additionally, the result depended on the architect's taste and philosophy (Sonne 2003: 45–46, 286). Moreover, sometimes the result depended even more on the client's philosophy, taste and aesthetical preferences.

However, aesthetics has also been led by political aspects. Efficient society and the state as the power needs efficient, functional and aesthetically pleasing towns – in order to represent power through its own, suitable space. Regular and geometrical planning of towns is characterised by monumentality, dignity and harmony that through its systemic order, reflect society's commitment to harmony and efficiency. Consequently, a regular space following a specific matrix and functionality is more controllable. Such a space should be symmetrical, axial, and unified – features that one may meet both in urban space of totalitarian states and urban space of liberal, democratic states – following the City Beautiful movement in the traditions of École des Beaux-Arts.

Nevertheless, according to the state's need for complete control, it needs a more regular, more axial, more controlled urban space that, in order to guarantee the state's efficiency, is inevitably supposed to be more functional and unified. Based on history and aesthetics, functional urban plans became a contradictory phenomenon: on the one hand, those were universal and fit anywhere, on the other hand, the same plans contained subjects of locality, culture, nationality, memory, and political motivation. The latter one was one of the reference points for the formation of urban plans in the totalitarian and authoritarian states up to the mid-20th century.

Sonne states that there was a mess in the iconography of urban space by 1910. The same forms, motifs, views, and styles, had to represent different political values and ideals of power. The same motifs and forms were suitable to express republican values and the grandeur of the state or colonial hegemony (Washington Mall planning), cultural superiority of the middle class or the unity of masses' democracy (Greater Berlin), democracy and autonomy (Canberra), world-wide dominance and the leading civilization of the Commonwealth (New Delhi) and liberty, peace, and democracy (World Centre of Communication). The same forms and motifs were suitable for symbolising different values and ideals, depending on the location, time and context: peace, democracy, colonial superiority, and inequality. For instance, monumentality was suitable for symbolising both democratic and authoritarian state and power; urban ensemble or just a cupola was suitable for both the monarch's or the vice chancellors palace and the parliament building.

Consequently, particular political messages were not communicated by a particular urban plan and urban space forms and motifs before World War I. (Sonne 2003: 286, 289)

Nevertheless, the same took place after World War I – the same forms and motifs (whether grand or not) were suitable for symbolising different values and ideals depending on the location, time and context: peace, democracy, colonial superiority, inequality, democratic, authoritarian and totalitarian power.

Sonne proposes five beautiful city types before World War I: The Beaux-Arts City, the Metropolis, the Picturesque City, the Garden City and the Skyscraper City. As he admits, it is hard to tell specific differences between the proposed types, due to the above-stated circumstances. However, there are some trends and features that help determine the aesthetic type of a specific and real city or town. (Sonne 2003: 286–294)

The Beaux-Arts City as the most Corinthian and ensemble-like academic type followed classicism, referred to Antiquity and canonised the cultural traditions. The city type uses geometrical, symmetrical forms and axial compositions, monumental ensembles, buildings and forms, focal points, radial squares, converging streets, staircases, and esplanades. It follows the classical legacy with neo-classicist architecture. Sonne states that Beaux-Arts City type tended to be a mixture of academic traditions and demands of contemporary society. The style uses baroque landscape motifs with monumental classicist architecture in classicist urban space, trying to solve all challenges of the contemporary society in a comprehensive manner. After the Hausmann's Paris planning the Washington Mall planning became the first large-scale sample of the Beaux-Arts City that made the style famous, and the most extreme sample could have been unrealised in the World Centre of Communication.

Meanwhile, the Beaux-Arts City style could be, due to its details and aesthetical impression, both a sizeable geometrical complex with Corinthian architecture (the World Centre of Communication) and a simple geometrical complex with reduced and sober neo-classicist architecture (Washington Mall). (Sonne 2003: 287–289)

While being a mixture of the above-stated types, the Picturesque City and the Garden City as a cosy, compact, and manageable by the scale had features of the Beaux-Arts City with restricted population and social dimensions – both functional and aesthetic. (Sonne 2003: 287–289, 290–293, 310)

East Estonian oil-shale mining and industrial towns Kohtla-Järve, Sillamäe, Jõhvi, Ahtme, Sompa, Kiviõli, Kohtla-Nõmme (Kohtla) and Viivikonna represent above all the Beaux-Arts City type as the most classicist and Corinthian. However, as stated above, it is hard to see a clear difference between the aesthetic types, proposed by Sonne, and even where and when a specific style begins or ends – the same concerns the East Estonian oil-shale mining and industrial towns.

Sonne states that it is important to analyse every case independently and the most evident features could be found in the centre of a town because the centre contains governmental and other administrative buildings with urban ensembles and greeneries and it gives the best evidence (Sonne 2003: 294–295). The Beaux-Arts City style, due to its hierarchical composition, could be the most recognisable.

The style is considered the most suitable to represent the state in the urban space and to symbolise the unity of the state, regardless its political background. If necessary, the local traditional and national motifs were involved in the use of local traditional building techniques and materials that helped to stress unity and involvement (Sonne 2003: 299). The same was rather usual, for example, during the Stalin era in the Soviet Union.

It can be concluded that it is senseless to try to find specific absolutist or democratic architecture, urban ensembles or urban space. Unlike words and images, the three-dimensional architecture or the urban plan may communicate what is experienced currently and independently of the political regime. Meaning of the urban plan, urban space, urban ensembles and architecture changes following the conditions and circumstances. The architecture, urban space and urban plan are the most multifunctional in comparison with other political media (texts, pictures, posters, films et cetera). They are the most autonomous and the least suitable for direct political propaganda. However, urban plan, urban space and urban ensemble are capable of communicating the state's dignity. General, natural and simple features such as the

height of a building, massive forms, the scale and the location, or for example, a relatively massive scale of an urban ensemble, can communicate a sense of importance, dignity, and fluidity without referring to a specific source of those senses. A town is capable of communicating the state's dignity, which could be connected to its political values, but not to specific characteristic political values. (Sonne 2003: 40, 43, 312–313)

Sonne believes that if urban plans of democratic states would have been completed before the World War I, it would have been difficult for the totalitarian states (the Soviet Union, the Mussolini era in Italy, the Hitler era in Germany) to consider the Beaux-Arts-like monumental and axial urban plans with the stately urban ensembles and neo-classicist architecture, following the City Beautiful movement practice, something invented by them only (Sonne 2003: 313–314). English town planner, urbanist and geographer Peter Hall, in turn, considers the use of City Beautiful practice by the totalitarian states as something that was an unfortunate case that desecrated the original ideals (Hall 1988: 196).

However, the plan and the realisation of the New Delhi government district (1911–1931) cannot be forgotten. This completed plan communicated worldwide dominance and the leadership of a civilisation of the Commonwealth, colonial superiority, and inequality. The far distant locality of the complex (New Delhi, India) contributed to the exploitation of the Beaux-Arts-like grand and axial urban plans with the stately urban ensembles and the neo-classicist architecture that followed the practise of the City Beautiful movement. Whilst the Hitler era Germany just began to establish its monumental urban ensembles, urban spaces and urban plans, the Stalin era Soviet Union managed to establish and even complete more similar objects, due to more extensive time resource. Meanwhile, monumental urban ensembles, urban spaces and totalitarian states. After the World War II, the practice of the Stalin era in the Soviet Union as being one of the winners was accepted, while the practice of the Hitler era was not.

Nevertheless, the practice of monumental urban ensembles, urban spaces and urban plans, implemented in the totalitarian states is still considered as something different in comparison with the issue of the democratic states. The totalitarian states used certain emblems, signs, and paraphernalia in urban space and architecture in a way that the visual art communicated the states' political values and propaganda more precisely in comparison with architecture, urban space and urban plans that are in practice more multifunctional. Paradoxically, even those emblems, signs, and paraphernalia composed based on ancient and historical cultural legacy were topical and influential during certain political conditions and circumstances. However, they have lost their totalitarian period meaning and have moved back into their ancient historical background. In some instances, they may be taken as just a natural part of history. As the political conditions and circumstances have changed, the meaning of those emblems, signs, and paraphernalia has also changed. They have become customary or are taken just as ornaments.

Hall considered the Beaux-Arts-like City Beautiful urban plan and urban space, which was used both in democratic and totalitarian states, as a theatre that had to impress and establish an illusion of a better life, but that practically did not pay attention to living conditions (Hall 1988: 202). One should admit that plans of Greater-Berlin (1908–1910), Chicago (1909), Canberra (1912–1920; 1957 onwards), Moscow (1935, 1940s–1950s), Kiev (1940s–1950s), Stalingrad (Volgograd) (1943–1950s), and Leningrad (1935, 1943–1950s) dealt with the improvement of living conditions functionally. As Sonne stated, an urban space that is considered beautiful is a place moving towards better living conditions, more aesthetic environment and human values (Sonne 2003: 40). Every state, regardless its regime (from democratic to totalitarian), needs monumental, axial, and stately urban plan, urban space, and urban ensemble – without those symbolic objects a state will not survive.

In 1929, town planner Martin Wagner stated, "A state, which does not build and does not do so in an outstanding fashion, is not alive. At least, it does not live in people. It lacks the heightened respect and awe, which emanates from architecture." Nine years later, in 1938, Swiss architecture critic Peter Meyer noted, "But there is no reason for the state and society to deprive themselves of monumentality simply because architects can no longer stomach it. Monumental tasks are set, and demand solutions and modern architects face this task with empty hands. We note how all states, be they democratic, fascist or communist, demand the kind of elevated tone for buildings imbued with the pathos of the state, which is expressed in monumental." Sonne, stating that monumental urban space and urban ensemble have their particular position in the democratic society, notes, "A chancellor's bungalow and shallow parliamentary buildings hidden among the winding streets of a villa district have already demonstrated their aesthetic and semantic unsuitability. May the urban planner succeed with his true task of creating urban spaces that are above all beautiful and impressive. For at their best, capital cities can be grand and beautiful – everything else is the task of politics." (Sonne 2003: 314)

Regularity, monumentality, axiality, symmetry, and grand manner is not anything typical for totalitarian states. One can find such features in every state, may it be democratic, monarchist, authoritarian, or totalitarian. For instance, was the task of the Stalin era Soviet town planning to symbolise totalitarianism? No, it was not. The word "totalitarianism" was not used in the rhetoric of that time. Officially the Soviet rhetoric, considering the state and its urban planning, talked about socialism, democracy, equality, and humanism.

For instance, the Soviet state, who worried about the differences between towns and rural areas, encouraged architects to replace the semirural settlements with towns and to build more well-equipped and sophisticated industrial towns. The Soviet urban planning, urban space, and architecture, as the most progressive, democratic and care-taking of people had to become all-encompassing, comprehensive, and socialist. According to the newly invented method – the "socialist realism", the architects had to take into account the best samples both from history and contemporary worldwide practice, the uses of the advantages of local natural conditions, local traditions and national folklore.

Swedish art historian Anders Åman refers to the failure of constructivism in the Soviet Union. Constructivists proposed solutions that were too radical, both in architecture and urban planning. Their solutions required materials, technology and constructions that were considered expensive, too innovative and too complicated. Aesthetics, even though trying to express the progress of the modern Soviet state, were considered brutal, strange, and incomprehensible. Constructivism was considered as the entertainment of a group of intellectuals. Regularity, monumentality, axiality, symmetry, and historic appearance of architecture and urban planning instead of constructivism was paradoxically considered both familiar and progressive, and comprehensible for the masses (e.g. suitable basis for communicating the political values). The method was not considered as copying the past, but as cherry-picking the best samples from both, the past and modernity. (Åman 1992: 53–55)

Urban planning and architecture are political issues. Power needs urban planning and urban space in order to demonstrate and exemplify its political values, purposes and, if possible, its agenda and messages. Architecture, urban space and urban plans that can communicate only principal values and general ideas, and are the most multifunctional in comparison with other political media, are still admired by the power.

In some cases, in order to domesticate, to subordinate, and to appropriate the issue, the power may use a more specific media – a political iconography consisting of certain emblems, signs, and paraphernalia. Such an urban plan, urban space, and urban ensemble should help to justify and legitimate the system and its existence and to represent the state and its power. The more ambitious and totalitarian a state is, the higher is its need to control, intrude,

reorganise, and restructure in order to justify, legitimate, enshrine and represent itself. Paradoxically, as the political conditions and circumstances change, those emblems, signs, and paraphernalia that have been composed based on ancient and historical cultural legacy, reduce to mere signs of history, lose their meaning and become only ornaments that communicate principal values and general ideas.

### 2.2 The First Conceptual Reference Point

The first conceptual reference point of the dissertation is the English town planner, urbanist and geographer Peter Hall's (Hall 1988) and the German historian and theorist of architecture Wolfgang Sonne's (Sonne 2003) concept that in the 1930s, during the World War II and after the war (from the 1930s to the mid-1940s and up to early-1950s) in the Soviet Union, there were urban planning principles and practice formed that regardless of the political rhetoric with its functionality and aesthetics follow the functionality and aesthetics of the Beaux-Arts-based City Beautiful movement.

Due to ideological reasons, private property was forbidden in the Soviet Union. In comparison with other states, it was easier to operate with a town structure and to control society through urban space – the latter which is tightly in connection with representing the state, is considered in the above stated methodological framework. The lack of private property became an especially crucial advantage after World War II. The necessity to restore wrecked towns gave a rare opportunity to celebrate the victory of the regime and its ideology, as well as represent the state.

As stated above, the more ambitious and totalitarian a state is, the higher is its need to control, intrude, reorganise, and restructure in order to justify, legitimate, enshrine and represent itself. Thus, the state and the power need to be represented – it needs space, public space and urban space are the most suitable. It has to be recognisable, regular, and well-controlled space.

As Lefebvre states, a revolution that is not able to establish its own space has failed. While socialism nearly managed to establish its space, communism remained on the level of arguments of proponents and opponents, and failed. In the 1920s, the Soviet Union tried to establish a socialist space, but due to the rapid breakdown in the late-1920s, the experiment was disrupted (Lefebvre 1974/1991: 54–55). The Soviet Union that had declared itself as the first socialist state in the world in the 1920s failed to establish a specific, sustainable Soviet socialist space, its own urban space, or the urban planning principles or practice due to unrealistic dreams, cruel experiments, disorder, anarchy and poverty.

In the 1920s urban planning was relatively experimental in the Soviet Union. Sometimes even more radical than in the Western countries. The urbanists and the disurbanists had discussions about the concept that would be suitable to represent the Soviet state, the first socialist state in the world. However, no specific concept was drawn up.

The discussion ended with a directive of the Central Committee of the Communist Party of the Soviet Union "On Works Concerning the Reconstruction of the Living Environment" published in "Pravda" on 29 May 1930. The directive demanded the termination of discrediting the socialist urban planning idea. The directive was preceded by the directive of the USSR's Council of the People's Commissars "Vremennye pravila i normy proektirovania i vozvedenia zdanii i sooruzhenii" (Temporary Regulations and Norms of Design and Erection of Buildings and Facilities) which was passed on 8 February 1929 (Vremennye pravila i normy ... 1929). That directive formed the basis for the first building and planning regulations in the USSR – "Pravila i normy zastroiki naselennyh mest, proektirovania i vozvedenia zdanii i sooruzhenii" (Regulations and Norms of Settlements, Design and Erection of Buildings and Facilities) that was passed by the Commission of Reconstruction at the USSR's Council of Economy in 1930. (Pravila i normy zastroiki ... 1930)

It means that up to the turn of the 1920s and the 1930s urban planning in the Soviet Union took place practically without any unified contemporary standards. The building of "socialist towns" (*sotzgorod; couzopod - couuanucmuчecku zopod*) had to embody something unpreceded, unique and characteristic only to the first socialist state, the Soviet Union. Socialist towns, sotzgorods were intended to be established near new industrial plants, following an elaborate urban plan and completed within the shortest time according to all social and ideological standards. The socialist towns had to be built in a mechanised way, disclaim the past, and any existing tradition – cultural, social, architectural. However, the reality had practically nothing in common with such official ideas. Even the "urban plan" in the sense of a socialist town remained a conditional and vague idea for architects in the 1920s. Town building followed above all the local actual possibilities, circumstances, and conditions instead of the urban plan. On the one hand, such a building encouraged architects to be brave and inventive in extreme conditions, and on the other hand, results of this kind of practice were disorder, anarchy and unfinished urban construction. (Ilchenko 2017: 57–61)

In 1929, following the directive of the USSR's Council of the People's Commissars "Temporary Regulations and Norms of Design and Erection of Buildings and Facilities", the Commission of Reconstruction at the USSR's Council of Economy published an album "Tipovye proekty i konstrukcii zhilizhnogo stroitelstva, rekomenduemye na 1930 g." (Standardized Designs and Constructions of Residential Buildings, Recommended for 1930). The album was intended to overcome the shortcomings of urban planning and above all of the residential buildings. At the same time, such an album with new regulations as the background was caused by the state's need to intensify the industrialisation of the Soviet Union – the unification of urban planning for a cheaper, more efficient and quicker result was a mean for that. (Usanova 2014: 207–208)

In the 1920s, due to disclaiming the past, any existing tradition (cultural, social, or architectural) or constructivists' experiments in the architecture, urban space or in urban planning, and those experiments' inability to communicate the state's dignity in a way that it could be connected to its political values, could embody the power or a harmonious society in a way that it could monumentalise the latter one or communicate the society's commitment towards harmony and efficiency. However, it failed to establish a particular, sustainable Soviet socialist space, its own urban space, urban planning principles and practice. The power needs space in order to survive.

Meanwhile, architect Nikolay Milyutin proposed a research "Problems of Constructing Socialist Towns – Crucial Questions of Rational Planning and Building of Settlements in the Soviet Union" that represented a zonal idea. He considered a skyscraper to be a symbol of the "capitalist anarchism" and a disurbanisation characteristic to the socialist society. He proposed an ideal town that is divided into five zones according to their function: the first zone is for the railway, industry, department stores, and schools, the second zone is a so-called green zone, the third is a residential and tertiary zone, the fourth a green zone with sporting facilities, and the fifth zone is an agricultural zone. The proposal was an attempt to unify both urbanists' and disurbanists' ideas into one functional and aesthetical town. (Bylinkin & Kalmykova 1985: 24; Kruft 1994: 422)

However, already in the early-1930s, the state started to reorganise urban planning and architectural principles systematically. On 15 June 1931 the plenum of the Central Committee of the Communist Party of the Soviet Union condemned urbanism and des-urbanism as being irrelevant, and their ideas were considered too extreme when discussing the urban economy of Moscow as the state capital and then the first general principles for all the towns of the Soviet Union were compiled. Since then the towns had to take Moscow as an urban etalon: the socialist towns had to be functional, sanitary, equipped with the water supply, sewage, electricity, street lighting, a well-functioning public transport, communal services, wide paved streets and

prospects, greeneries, and recreational areas. For instance, contrary to the capitalist practice the socialist planning of both Moscow and other towns had to avoid "overloading small sites with enterprises, schools, hospitals, theatres, clubs, shops, canteens et cetera. Building on the urban territory ought to be distributed equally. It is forbidden to erect new enterprises in the urban centre." It became mandatory to make the differences between towns and rural area disappear, to replace semirural settlements with towns, to build more well-equipped and complex industrial towns (for example, Magnitogorsk, Kuznetsk, Dneprostroy, Dzherzinsk). Local Executive Committees as the municipalities had to be responsible for the implementation of urban planning, urban space, architecture et cetera. Since then the urban planning had to become all-encompassing, comprehensive, and socialist and "fight against the right-wing opportunists ... and left-wing opportunist windbags". (RGASPI 81.3.21, 3–17, 19–28; Bunin 1945: 290, 291)

The 27th Congress of the Communist Party of the Soviet Union, which was held on 30 January to 4 February 1932 firstly mentioned the "socialist realism". Meanwhile, the former USSR's People's Commissar for Education Anatoly Lunacharskiy stated that the task of architecture is to integrate the functionality and utility into an ideological idea in a harmonised manner (Kosenkova 2009: 19–20). The term was specified two months later on 23 April 1932 when a secret directive of the Central Committee of the Communist Party of the Soviet Union "About the Reorganisation of Literary and Artistic Organisations" was passed. The Central Committee, which was led by J. Stalin, decided that all the literates supporting the Soviet policy are supposed to be united by one union and the same should be the case for artists, musicians, and architects. (RGASPI 17.163.938, 37–38)

A month later, on 23 May 1932, a literary critic Ivan Gronskii used the term "socialist realism" publicly in "Literaturnaya Gazeta". He demanded the writers to "...write truth, reflect our reality rightly – that is dialectic. That is why the principal method of the Soviet literature will be a method of socialist realism." (Gronskii 1932: 1) The method was supposed to "embody an absolute apocalyptical future where the difference between the past and future abolishes significance." (Groys 1988/1998: 859). The method had to embrace literature, music, art, and architecture – literature as the most precise mean to communicate state's ideology became a sample that exemplified the new trend. However, due to that exactness of communication, literature has always been beloved by totalitarian and authoritarian systems.

What was the more profound implication of socialist realism? Stalin established the principles of socialist realism as a method: the unity of theory-practice, practical feasibility, bringing up and educating the masses in the spirit of a revolutionary fight. Those principles formed an arrangement with architecture and architectural activity, their manner and content. The method as a system of standards and regulations and forms of human activity was used to achieve the main goal (socialism) and to establish regulations, directives, and principles consistently. Reproductive features of the method (orientation to tradition) determined the continuity of different historical methods, for instance, the cultural connections, and the study and integration of the experience. Productive features (orientation to innovation) were intended to produce a new product. Socialist realism tried to unify both normative, but it did not give any unequivocal recipe for the field of architecture. While in the late-1930s, the primary value of classical architecture was considered to be the involvement of worldwide practice and legacy, an innovative reflection of the issue, then in the early-1950s the endeavours for change were replaced with the process of reproduction and reflection. (Prudnikova 2014: 116–120)

Meanwhile, over a week later, on 4 June 1932, the USSR's Soviet Architects' Union was established. (Iz istorii sovetskoi arhitektury 1926–1932 gg. 1970: 163)

On 27 June 1933, following the above-stated resolutions of 1931 and 1932, the USSR's Council of the People's Commissars and the USSR Central Executive Committee issued a regulation "About the Compilation and Approval of Planning Projects for Socialist Reconstruction of the

Soviet Union Towns and Other Settlements". The regulation established that all the construction and building in regions that had or had been planned to have sole or grouped enterprises, towns and settlements serving those enterprises, and that had standard transport, energetics, and mineral resources, were supposed to be organised based on a regional development plan (Planirovka i zastroika gorodov 1956: 9; ERA R-1527.2.44, 5). This regulation became one of the crucial documents of urban planning and stately urban ensembles in the Soviet Union for the next few decades.

The following year, on 4 to 9 November, the First Soviet Architects Forum was a preparation for the 1st Union-Wide Congress of Soviet Architects, and then the doctrine of the Soviet Union's urban planning and architecture was established. The doctrine that remained in force for more than two decades set principles and tasks: a functional, sanitary, well-equipped socialist urban planning that took into account the best samples from both history (antiquity, renaissance, classicism) and contemporary world-wide practice, it uses the advantages of local natural conditions, local traditions and national folklore, implements those means creatively and eloquently in the high quality maintenance of urban space, composition, and architecture. All towns, including industrial towns, had to be well maintained, equipped with recreational areas, parks, cultural institutions and buildings. They had to be both functional with all modern infrastructures and aesthetical (urban space, architecture, living standard) – "The Soviet factory is, first of all, a labour organisation of people who build up their socialist life through creative and happy work." Member of the Politburo of the Central Committee of the Communist Party of the Soviet Union Lazar Kaganovich stated that "socialist architecture stands for high technical and artistic quality, expresses high principles and honesty, moral intelligence, social ambition, noble simplicity, compositional unity, aspiration to reach heights, courage - that is the special nature of the Soviet architecture." (Pervoe Vsezoyuznoe sovezhanie sovetskih arhitektorov 4-9 nojabrja 1934: 5-10, 11-14, 21, 23 26, 27, 40, 41)

Meanwhile, as an indication of the state's increasing role as an entrepreneur was the decision of the Palace of the Soviets Construction Council made under the guidance of the Chairman of the USSR's Council of the People's Commissars Vyacheslav Molotov on 28 February 1932. According to the Palace of the Soviets (Boris Iofan, Vladimir Shchuko and Vladimir Gelfreikh) prescribed competitions compel all architects to follow the requirements of simplicity, unity and elegance in architecture, and to follow the best examples of Classicist architecture in one's creation (Capenko, 1952: 73). The Moscow Saviour Church was blown up in December 1931 in order to construct the Palace. The Palace of the Soviets became one of the crucial points in the 1935 masterplan of Moscow that in the late-1930s, including Leningrad became mandatory models for all the Soviet architects. The masterplan, equipped with recreational areas, parks, great cultural institutions and buildings along stately boulevards, following the Haussmann's plan of Paris with concentric boulevards crossing the radial ones. One of the most impressive compositional accents of the Moscow masterplan was intended to be 10-kilometer long converging axes heading south-west that run along the slope from the Lenin Hills (1935–1999; nowadays as before the Soviet era called the Sparrow Hills) with the Moscow State University building, which is followed a bit lower by a stadium (the Luzhniky Arena) and two prospects surrounded by recreational greenery and a park area all the way down to the Place of the Soviets, nearby Kremlin. However, those axes follow an aesthetic logic, principles and practice of the Beaux-Arts-based City Beautiful movement and between the loop of Moscow River they were partially realised during the following two decades. In Moscow the converging axes heading south-west between The Lenin Hills and the Kremlin were orientated to move towards the ideological focal point, the neo-classicist 350-meter high Palace of the Soviets with a 100-meter high statue of Lenin at the top. The Palace of the Soviets as both ideological and urban space dominant, which was intended to symbolize and represent the new power, was

designed instead of the Saviour Church nearby Kremlin, as the historical core of the capital and an old power centre that according to the socialist realism principles was supposed to be incorporated as the legacy. The Palace of the Soviets as the etalon building with the Moscow State University building (Lev Rudnev, 1949–1953) inspired an idea to surround the centre of Moscow with eight similar high-rises in 1947 (Barhhin 1979: 113). However, the seven of the high-rises were realised in Moscow, and the eighth one was erected in Warsaw. Meanwhile, the high-rises had to be different from the Western high-rises and skyscrapers and compositionally fit with the ancient Moscow (Capenko 1952: 353). As Åman states the architectural composition of Stalinist seven high-rises of Moscow and the Moscow State University building follow the composition of the Byzant-rooted Moscow Saint Basil's Cathedral and the classicist St Petersburg Admiralty building (Åman 1992: 130, 131). On the one hand, there may be some compositional similarities with the old orthodox Russian architecture, but, on the other hand, the neo-classicist features and composition of those high-rises follow, for example, the composition of the New York Manhattan Municipal Building (arch. William M. Kendall, 1914) or the Chicago Wrigley Building (arch. firm Graham, Anderson, Probst & White, 1924), that in turn follow the academic Beaux-Arts-based City Beautiful movement ideals. The Moscow south-west converging axes had to follow the relief of the landscape, to use its amphitheatre-like effect between the Lenin Hills and the Kremlin, forming a comprehensive composition that was enriched with the Moscow River: the Moscow State University the Luzhniky Arena – the recreational greenery flanked by converging boulevards – the Palace of the Soviets nearby Kremlin as on a stage. Such a use of vertical scale and natural conditions in urban space, which has been known since the late-renaissance (Piazza del Campidoglio, Rome) and the baroque (Piazza del Spagna, Rome), got its modern quintessence in the academic Beaux-Arts-based City Beautiful movement urban plans and urban spaces - the Washington Mall, the New Delhi government district, and the Canberra centre.

The 1st Union-Wide Congress of the Soviet Architects, which was held on 16 to 26 June 1937, stated the resolution that "socialist realism remains the principal method of the Soviet architecture" (Capenko 1952: 74, 75). The secretary in charge of the USSR's Soviet Architects' Union Karo Alabyan described in his presentation "Tasks of the Soviet architecture" the principles of socialist realism in the Soviet architecture and emphasised the necessity to implement the best samples from both history (antiquity, renaissance, classicism) and contemporary worldwide practice, the advantages of local natural conditions, local traditions and national folklore in the architectural construction of squares, roads, embankments, parks et cetera – and the architect's responsibilities in urban planning and urban space. (Zadachi sovetskoi arhitektury / Doklad K. S. Alabyana 1937: 6–8, 11–28 29–32)

The next, the 2nd Union-Wide Congress of Soviet Architects took place in 1955 – meanwhile, there were seventeen plenums held up to 1955.

On 7 to 11 July 1938, the 3rd plenum of the Governing Board of the USSR's Soviet Architects' Union analysed urban planning and urban space practice in the Soviet Union during the last years. Architect Victor Baburov formulated seven principles of the socialist urban planning that were based on strict urban planning regulations:

- systematic urban planning;
- restriction of urban growth (area for a quarter in great towns/cities 9–12 hectares, medium towns 6–8 hectares, small towns 4–6 hectares; area for a square in great towns/cities 4–5 hectares, 1.5–2 hectares in small towns; width of boulevards 60–100 meters depending on their length and natural conditions; width of roads 35–45 meters and of streets 25–30 meters in larger towns);

- prohibition against erecting industrial enterprises in the town centre;
- careful selection of the territory for a new town and the enlargement of an existing town in combination with production, residential-social and sanitary demands;
- zoning of the town area (industrial area, residential area, greeneries et cetera);
- social equality through modern infrastructural equipment, architecture and services both in the outskirts and in the centre;
- aesthetics in the composition of urban plans, urban space, and urban ensembles.

Baburov stated that "the fight for urban architectural ensemble – that is the architect's main task during urban planning and building" and added that "the most important condition of the fully-valued ensemble-like architectural solution of the town is the sole architect as the author of the idea for the whole complex" (Planirovka i stroitelstvo gorodov SSSR 1938: 6–20). Two years later, on 8 to 12 July 1940, the 7th plenum of the Governing Board of the USSR's Soviet Architects' Union was dedicated to the 1935 masterplan of Moscow as the mandatory model for urban planning of the other towns of Soviet Union (Rekonstrukciya Moskvy. Arhitekturnye voprosy rekonstrukcii Moskvy 1940).

The increasing demand for aesthetics in urban planning and urban space reminds much of what was formulated in the City Beautiful Movement ideas before and during the World War I. However, Soviet architect and theoretician Ivan Zholtovkij (Zholtovsky), who started his architectural career already at the turn of the century, leaning on the European and Russian academic traditions and the City Beautiful Movement ideas, formulated the contemporary principles for the Soviet urban ensemble. Baburov and later on the official Soviet urban planning ideology leaned on those principles. Zholtovkij emphasised the importance of the composition in an urban ensemble. For instance, in 1933, he defined five principles of the Soviet urban ensemble: a unity of different forms, tectonic accuracy of architectural forms, dynamics and organic growth of architectural forms, natural architectural organism, and unexpected compatibility of different elements of architectural forms (Zholtovkij 1933). Seven years later, Zholtovkij stated that every architect should take the ensemble as a unity into account. According to socialist realism, architecture in a city space was supposed to be ensemble-like: every house had to be ruled by an ensemble. That meant organising cities according to a specific hierarchy, in which every component of the urban landscape had to abide by the principle of unity. In Zholtovkij's own words 'There is no architecture outside the urban ensemble. The architect is responsible for one's/people's architecture, the town's architecture, and street architecture while designing a house.' (Zholtovkij 1940) In 1945 he encouraged architects to use "eternal laws of beauty and classical forms" and principles of dynamics and growth in their creation (Zholtovkij 1945).

Before the World War II, there were ideals concerning both functional and aesthetic features of the urban space. The state promised urban planning prosperous perspectives of urban ensembles, modern infrastructures and residential conditions. High living standards came true and materialised mostly in more significant towns such as Moscow, Leningrad, Kiev, and Stalingrad, partially. Other towns were trying to take more significant towns as examples, but were not able to realise their megalomaniac plans. However, the 3rd plenum of the Governing Board of the USSR's Soviet Architects' Union in its resolution criticised architects for having failed to take into account the instructions of USSR's Council of the People's Commissars and the USSR Central Executive Committee concerning squares, roads, streets, parks, embankments, and living conditions and warned them about ignoring the technical modernisation, economic planning and megalomania (Planirovka i stroitelstvo gorodov SSSR 1938: 57–67; 130–135). Calls for "criticism and self-criticism" and exposure of enemies of the people among the architects increased (Zadachi sovetskoi arhitektury / Doklad K. S. Alabyana 1937: 29–32 Planirovka i stroitelstvo gorodov SSSR 1938: 6–8; 20–22). However, the calls and resolutions seemed to have no severe impact on reality.

Due to the shock of the war that had begun, activity in the field of urban planning and architecture practically ceased at the beginning of World War II.

Three months after the siege of Moscow, during the siege of Leningrad and before the battle of Stalingrad (on 23 August 1942 to 2 February 1943), on 25 April 1942 the 10th plenum of the Governing Board of the USSR's Soviet Architects' Union issued a resolution stating that the Soviet architects have started the urban planning projects for the recaptured western regions of the Soviet Union. According to the resolution the architects were supposed to follow the Soviet troops, estimate the war destructions of towns, architectural monuments and industrial complexes, to seek for opportunities to start building simple massive buildings with simple maintenance and reconstruction and to start the rehabilitation of industrial complexes, to use local mineral resources and materials, to help local authorities in urban planning, and compile building norms. Additionally, the architects were supposed to popularise architectural monuments in order to evoke and support patriotism among people, to deal with war commemoration monuments, local traditions of nationalist folklore motifs in the appearance of towns and built-up areas. (Iz istorii sovetskoi arhitektury 1941–1945 gg. 1978: 30–34)

Over a year later, on 24 July 1943, architect Alabyan published an article "Contours of Future Stalingrad" that set new compositional principles for the post-war urban planning, urban space and urban ensembles. The described new design represented the most significant transformation of the Stalinist urban space and ensemble during and after World War II (Iz istorii sovetskoi arhitektury 1941–1945 gg. 1978: 78, 142, 172). Stalingrad, as it associated with Stalin and was one of the most symbolic battlefields during the war, was rebuilt as a polygon for new ideas: other cities were being designed to have a similar shape, composition and principles. In order to express order, harmony, dignity, efficiency, and inevitable prosperous future through pomposity the gridline of the new Soviet towns had to be more classical with axes, squares, forums, junctions, and the composition of urban ensembles had to be more symmetrical, hierarchical, and dynamic. While cities like Rome and Paris were still regarded as inevitable examples, then Leningrad, Moscow and Stalingrad became mandatory models for all other Soviet towns after World War II. The squares and streets needed to be much larger in order to enable mass processions and parades during ideological events and stately anniversaries (Barhhin 1986: 127–128). A victory theme complemented these principles.

On 16 to 18 August 1943 the 11th plenum of the Governing Board of the USSR's Soviet Architects' Union analysed both pre-war pompous samples of urban planning (Moscow, Leningrad/St Petersburg) and war-time urban planning practice for evacuees' functional settlements in eastern regions of the state, and attempts to reconstruct and rehabilitate the wrecked towns and industrial centres in the recaptured central regions, and necessities for the post-war mass-building in urban space. Those unified experiences were considered mandatory for all architects and they had to use them in recaptured western regions of the Soviet Union: the architects were supposed to use classification of settlements – grid and measures of the streets, measures of quarters, number of stories, building materials and construction had to follow the function of the settlement. It was considered inevitable to use local building materials, follow the building traditions and innovations, use traditional and national motifs et cetera. Meanwhile, all those settlements and towns had to be built in an accurate and organised way and with high quality, and they had to be functional and prosperous, stately and

representative. The Soviet architects were supposed to be ready for the gigantic restoration works after the war – all of that had to reflect the victory of the Soviet Union. However, all that was an ideal, a wish for the future. The central issue of the plenum was the unfortunate reality that was full of serious shortcomings. All that practice was full of shortcomings, concerning the low-quality projects, plans, reconstruction, building within the poverty, misery and indifference.

There was an acute lack of professional architects, urban planners, order and discipline amongst the survived architects and builders, disorder, chaos and thefts among officials of the towns and settlements, and local authorities. The reconstruction and rehabilitation of towns, industrial centres, and built-up areas had stopped. Meanwhile, the state had put pressure on the USSR's Soviet Architects' Union to guarantee quick, thorough and efficient results in the field of reconstruction and rehabilitation of industrial centres, towns, and settlements in the recaptured western areas. According to the full resolution, the Presidium of the Governing Board of the USSR's Soviet Architects' Union had to ask the USSR's Council of People's Commissars to establish an all-encompassing governing and controlling architectural institution with strong administrative power. (Plenum pravleniya Sojuza arhitektrov 1943; Iz istorii sovetskoi arhitektury 1941–1945 gg. 1978: 88–90; Kosenkova 2009: 41, 42)

In the 11th plenum, reflection of these compositional novelties practically did not get any attention. Even the victory theme was considered formal. The central issues of the plenum were the concern about the situation and the perspectives in the field of urban planning and the need for an all-encompassing governing and controlling architectural institution.

Why did the Union of Soviet Architects of the USSR focus on those urban planning shortcomings precisely in the middle of wartime, when, for example, the siege of Leningrad<sup>4</sup> was still actual? On the one hand, the pre-war 1930s ideals, principles of urban planning, driven by official ideology, were disrupted by the shortcomings mentioned above as the reality of the Soviet Union's town planning. The reality that had become extremely highlighted in the conditions of the war. That reality caused fear about failing to establish a particular, sustainable Soviet socialist space, its own urban space. That fear of failure, in turn, leaned on the fear of non-existence.

While the 10th plenum was focused on estimating the war destructions, seeking the reconstruction and rehabilitation opportunities, popularisation of architectural monuments, and aesthetics, then the 11th plenum had shifted the focus on the shortcomings of real practice of the reconstruction and rehabilitation, on the need for quick and efficient solutions. What caused the shift? Due to the ongoing war, the shift was caused by militant reasons, connected with both the results of the war and the post-war situation in Europe and in the World.

The state had put pressure on the USSR's Soviet Architects' Union to guarantee quick, thorough and efficient results in the field of reconstruction and rehabilitation of industrial centres, towns, and settlements in the recaptured western areas. The Soviet Union was in a race against time. Urban planning became both a political and military issue. The state needed the architects, the specialists to embody the visions of the power as the state.

The wish of the 11th plenum of the Governing Board of the USSR's Soviet Architects' Union was taken into account in four days. According to the resolution of the USSR's Council of People's Commissars "About Immediate Means For Economy Reconstruction On the Territories Liberated From German Occupation" that was passed on 22 August 1943, in order to reconstruct and rehabilitate the settlement of the state, all architectural and building workshops, organisations and institutions were supposed to be united under one all-encompassing institution. (Arhitektura SSSR 1917–1987 1987: 109)

Nearly a month later, on 29 September 1943 the USSR's Council of People's Commissars and the Communist Party of the Soviet Union established the USSR's State Committee of

<sup>&</sup>lt;sup>4</sup> Up to January 1944.

Architecture at the USSR's Council of People's Commissars (as the USSR's Stately Defence Committee at the USSR's Council of People's Commissars). The USSR's State Committee of Architecture was under the direct authority of the USSR's Council of People's Commissars, and it became the highest executive power of the Soviet urban planning and architecture. The institution's head was administrated, but it controlled all questions concerning urban planning and architecture (including building). Tasks of the USSR's State Committee of Architecture were:

- approval and certification of planning and building projects for towns, settlements, industrial complexes, objects, important administrative and public buildings, urban ensembles, and residential buildings;
- stately architectural and building quality control of towns, settlements, industrial complexes, urban ensembles, public buildings, administrative buildings, and residential buildings;
- development and approval of the design, construction, building norms and regulations;
- supervision, monitoring and control of architectural, design and building organisations;
- curating architectural research and experimental institutions, architectural education in colleges and universities;
- protection of architectural monuments and curating restoration works.

The USSR's State Committee of Architecture had to develop and submit for the USSR's Council of People's Commissars to approve the following:

- draft regulations of planning and building projects for towns, settlements, industrial complexes, objects, important administrative and public buildings, urban ensembles, and residential buildings;
- draft regulations concerning the production of new building and finishing materials, experimental buildings, innovation proposals et cetera.

The USSR's State Committee of Architecture had to establish local branches under the direct authorities of the local Councils of People's Commissars (Iz istorii sovetskoi arhitektury 1941–1945 gg. 1978: 95–102, 109). The head of the USSR's State Committee of Architecture was Arkadi Mordvinov. On 9 May 1950, The USSR's State Committee of Architecture was reorganised to be the USSR's State Committee of Reconstruction at the USSR's Council of Ministers.

In July 1945, the head of the USSR's State Committee of Architecture Mordvinov formulated seven principles of the Soviet post-war town planning that were compulsory for all architects: town planning was supposed to be interrelated with the natural environment in order to expose its beauty. Town plans needed a balanced compositional centre (for instance, the centre – the main street – the railway station square), monumental public buildings had to be erected in the intersections, house quarters had to be planned in complex ways and designed as a one ensemble, all buildings had to be painted only in light colours (to echo the dream of a positive future), functionality and high quality of structures and infrastructures (electricity, water supply et cetera) were a priority, and thorough quality controls both of architects' projects and the

building process was necessary (Kosenkova 2009: 42). Thus, due to the demand for stately ensembles to set aside functionality and strict discipline and paradoxically the 3rd plenum of the Governing Board of the USSR's Soviet Architects' Union that warned against megalomania was discarded step by step for the sake of the victory theme.

After establishing the USSR's State Committee of Architecture, the regulation of the Soviet Stalinist urban planning became stricter. In 1944 the USSR's State Committee of Architecture published "Arhitekturno-planirovochnye pravila po proektirovanyu naselennyh mest gorodskogo tipa" (Architectural and Planning Regulations For the Design of Town Type Settlements) that was preceded by the "Pravila i normy zastroiki naselennyh mest, proektirovania i vozvedenia zdanii i sooruzhenii" (Regulations and Norms for the Structural Planning of Settlements, Design and Erection of Buildings and Facilities), published fourteen years earlier. "Architectural and Planning Regulations For the Design of Town Type Settlements", which as published in 1944, formed the basis for the Soviet architect's handbooks. The first was published in 1946 (Kratkii spravochnik arhitektora 1946) and the extended editions followed it (for instance, in 1952). The Soviet architects were compelled to follow those Soviet architect's handbooks that for example, fixed the population of towns and seized the central squares. Handbooks "SNIP – Stroitelye normy i pravila" (BNaR - Building Norms and Regulations) were published since 1954.

The regulations, norms, and handbooks had to guarantee both functionally and aesthetically a state-controlled, standardised, and unified urban space and urban plans. As stated above, concerning the urban space, the trend was towards smoothness, unity, regularity and impersonality, featurelessness – a pretext for such a trend is functionality, clarity, usefulness, and efficiency. All of the above-mentioned are characteristic to the classicist legacy. The Soviet Union needed a well-controlled, unified, rational space for controlling, intruding, reorganising, and restructuring the society and its citizens in order to justify, legitimate, enshrine and represent itself as the state – that was crucial in the conditions of the Cold War. The trend is followed by a need for bureaucracy in the space in order to unify, standardise, and regulate space with directives, norms, standards, handbooks et cetera. Additionally, both the establishment of the USSR's State Committee of Architecture and the strict control through regulations, norms, and handbooks had roots in the Soviet state's fear of failing to establish a particular, sustainable Soviet socialist space – its own urban space.

As stated above, the German philosopher and sociologist Max Weber considered that in comparison with capitalism, socialism needs more efficient and professional bureaucracy in order to gain the same results in the economy (that is one of the mechanisms to drive the urban planning and urban space) through complete control and unification, for example, the administrative apparatus of the state as the power has to be more significant. Power needs bureaucracy in order to support discipline, to keep it alive, well-regulated and efficient. The discipline, in turn, depicts an acquired, accustomed and uncritical obedience of the masses of people to the power, the leader, and the dictator (Weber 1920; in Estonian 2002: 78, 93–102). All of this can one see in the Stalin era of the Soviet Union. Once more, the aesthetics had been led by political aspects. The Soviet Union trying to be a productive society, state and power needed efficient, functional and aesthetical towns, in order to represent the power through its own, suitable space. Regular and geometrical town plans had to be characterised by monumentality, dignity and harmony that through a systematic and orderly manner had to reflect the society's commitment to harmony and efficiency.

The documents contain the resolution of the Central Committee of the Communist Party of the Soviet Union and the USSR's Council of Ministers "Ob ustranenii izlishestv v proektirovanii i stroitel'stve. Postanovlenie Central'nogo Komiteta KPSS i Soveta Ministrov SSSR 4 nojabrja 1955 goda" (About the Abandonment of the Exaggerations in Planning and Building. Resolution of the

Central Committee of the CPSU and the Council of Ministers of USSR on 4 November 1955), that was passed on 4 November 1955 and itdemanded the replacement of the Corinthian and large-scale practise with simplicity and economy, both in architecture and urban planning. It ended the Stalinist architectural doctrine two and a half years after J. Stalin's death (1953). (Ob ustranenii izlishestv v proektirovanii i stroitel'stve 1955: 8, 11, 13, 15)

Did it stand for the end of following the classicist legacy? At first visual glance it did – the use of all antique-based neo-classicist elements (columns, porticos, stately ensembles et cetera) started to cease step by step. However, it did not mark the end. As stated above, the urban space and architecture were politicised in the late-18th century (Foucault 1982, 2000: 349–351) and it happened on the conditions of classicism by establishing a rigid classical antiquity-based modern culture. It means that the state as the power started to need space more than before. As stated by Lefebvre, power needs space in order to be equipped with suitable vocabulary, connections, and interdependences – ideology.

On the one hand, the ideology of the power forms the space and, on the other hand, the space helps the power and its ideology to form, reform and survive. (Lefebvre 1974/1991: 44–45) Thus, urban planning and architecture are a political issue, especially inside the rigid classical antiquity, and a classicism-based modern culture, a paradigm based on classicism. The more ambitious and totalitarian a state is, the higher is its need for justification, legitimation, enshrinement and representation of itself on behalf of its persistence and existence. There is a fear of non-existence behind those needs. As urban space and architecture based on urban planning are visible to everybody, the state and power value and admire the urban space and architecture as the most capable of representing the state. After Stalin's death, the Soviet Union was step by step reformed to be less totalitarian.

Consequently, the opposite is true: the less ambitious and totalitarian a state is, the lower is its need for justification, legitimation, enshrinement and representation of itself on behalf of its persistence and existence. Due to the continuity of rigid classical antiquity-based and classicism-based modern culture, a paradigm based on classicism, the need for the representation, even the legitimation and enshrinement and even justification may decrease. Nevertheless, those needs do not cease. They remain, and so does the fear of non-existence. Following the classicist legacy was virtually inevitable. After Stalin's death, the Soviet Union became less totalitarian, but not a democratic state – consequently, in that state, the need for justification, legitimation, enshrinement and representation of itself remained higher, in comparison with the democratic states.

In comparison with the 1920s, by the mid-1950s, the Soviet Union managed to establish an urban space - a space that communicated the state's dignity, harmonious humanist society, society's commitment to harmony and efficiency, and monumentalisation of the society the principal values and general ideas that could be connected to political values. The Soviet Union managed to establish principles and practice of that urban space. However, all those principles and practice, which were established and thoroughly discussed by the Soviet Union, followed the principles and practices of the Beaux-Arts-based City Beautiful movement. The latter one established an urban space, a space that communicated the state's dignity, harmonious humanist society, society's commitment to harmony and efficiency, monumentalisation of the society – principal multipurpose values and general ideas that could be connected to whatever political values. As any other power, the Soviet power admired the architecture, urban space, and urban plans, even though it was only able to communicate principal values and general ideas due to its visibility to everybody. As several times stated, the more ambitious and totalitarian a state is, the higher is its need for the justification, legitimation, enshrinement and representation of itself on behalf of its persistence and existence and also the higher is its fear of non-existence. In order to domesticate,

to subordinate, to appropriate architecture, urban space, and the urban plan the Soviet Union started to use a more specific media – a political iconography consisting of certain emblems, signs, and paraphernalia (pentagrams, hammer and sickle, books, sun et cetera). Such an urban space and urban ensemble were supposed to help justify and legitimate the system and its existence, to represent the Soviet state and its power. However, as a result, regardless of the emblems, signs, and paraphernalia the urban planning and urban space practiced in the Soviet Union from the early-1930s to the mid-1950s remained the same academic Beaux-Arts-based City Beautiful urban planning and urban space – a space that belonged to rigid classical antiquity-based and classicism-based modern culture, a paradigm based on classicism. As by the late 1920s, the Soviet Union that had declared itself the first socialist state in the world failed again to establish a particular sustainable Soviet socialist space, its own urban space by the mid-1950s, neither with urban planning principles nor practice.

Emblems, signs, and paraphernalia remained superficial with the multifunctional architecture, urban space and urban plan as the background as they can communicate only principal values and a general idea. Those emblems, signs, and paraphernalia put together based on ancient and historical cultural legacy, were topical and influential in certain political conditions and circumstances, but they have lost their totalitarian period meaning. Above all, it could be possible to discuss the local Soviet version of the academic Beaux-Arts-based City Beautiful urban planning and urban space. Historian of architecture Vladimir Paperny stated "… once Stalinist architecture becomes the centre of attention, however, the researcher no longer has the right to limit him- or herself to noting, this or that borrowed element or echo of a European style; rather attention should be paid to how they are combined". It means that the process of borrowing has always been necessary to Russians, as well as to the Soviet culture, including the urban space (Paperny 2002: xxi).

Additionally, the Soviet Union with its "socialist realism" method that taught to cherry-pick the best samples from both history and contemporary world-wide practice encoded the failure in establishing its particular, sustainable Soviet socialist space, its own urban space already in the early-1930s.

The socialist urban plan and the socialist urban space remained myths and mere propaganda of the Soviet Stalinist ideology trying to show the historical practice and its modern revival of the City Beautiful movement practice as socialist, typical and characteristic for the Soviet society.

In the 1930s during the World War II and after the war (from the 1930s to the mid-1940s and up to early-1950s) in the Soviet Union, there were principles and practice of urban planning formed that, regardless of the political rhetoric, with its functionality and aesthetics follow the functionality and aesthetics of the Beaux-Arts-based City Beautiful movement. Thus, the Soviet state and the Soviet power was facing its disappearance.

#### 2.3 The Second Conceptual Reference Point

The second conceptual reference point of the dissertation is the concept, explored in current Estonian urban space research that the Estonian post-war Stalinist period (1944 – 1955) urban space design is in conflict with the 1930s independence period urban space design.

In line with the official Stalinist ideology, the Soviet town-planning needed to stand in opposition to that of the West, in order to lift the socialist principles higher than the capitalist principles. Current Estonian Stalinist urban space research tends to consider the trends of the period to be unfamiliar, typically Socialist opposed to the practices of both the West and the Estonian period of independence, or it presents a cursory narrative of it. After the Soviet occupation, in the early-1990s, historian of architecture Leonid Volkov in his article "Eesti arhitektuurist aastail 1940–1954" (About Estonian Architecture During 1940–1954) (Volkov

1991) and former Chief Architect of Tallinn (1960–1980) Dmitri Bruns in his book "Tallinn: linnaehituslik kujunemine" (Tallinn: Urban Formation) (Bruns 1993) presented the urbanism of their time (both men lived through the Stalin era) period as different from the pre-war independence period.

Historian of architecture Mart Kalm considered the issue in his monograph "Architect Alar Kotli" (as an architectural context) (Kalm 1994) and his book "Eesti 20. sajandi arhitektuur. 20<sup>th</sup> Century Estonian Architecture" (Kalm 2001). He does not provide a complex structured definition of the Estonian post-war urban space, but he does suggest that there are some similarities between the 1930s architecture of independent Estonia and the architecture of the post-war Stalinist period. Meanwhile, he makes a distinction between the local urban space (towns such as Tallinn, Pärnu, and Tartu) and non-local urban space (such as Kohtla-Järve, Ahtme, Sillamäe in East Estonia). He defines the Estonian post-war urban space as consisting of familiar and unfamiliar components – the first designed by local architects, the latter, such as East Estonian oil-shale mining and industrial towns, by non-local architects. Nevertheless, simultaneously, the familiar architecture and urban space are defined as familiar because of their similarities to the practices developed during the 1930s. This topic is further developed in Kalm's articles "The Sovietization of the Baltic Architecture" (Kalm 2003: 42-51) and "Perfect representations of Soviet planned space. Mono-industrial towns in the Soviet Baltic Republics in the 1950s–1980s" (Cinis, Drémaité & Kalm 2008: 226–246). Historian of architecture Krista Kodres also explores this topic in her article "Sovietisation of Classical Architecture: The Case of Estonia" (Kodres 2008: 130–151).

That concept of disruption, in turn, produces contradictory segregation during the Estonian post-war Stalinist period: local, familiar urban space (for example Tallinn, Pärnu and Tartu) and non-local urban space (such as East Estonian oil-shale mining and industrial towns Kohtla-Järve, Sillamäe, and Ahtme).

However, Estonian architecture, town planning, and urban space design were already similar to the late-Stalinist period by 1940. It caused a smooth transition from the 1930s independence period to Stalinist urban space design practice, both in the appearance and composition of buildings and urban planning and urban space ambitions. While the Estonian 1930s architecture and urban space practice became increasingly Corinthian and stately by the 1940s, the Estonian architecture and urban space practice and principles in the mid-1940s to early 1950s are somewhat similar to that of the late 1930s. During the Stalinist period, Tallinn, Pärnu, and Tartu were designed by the same architects that worked during the period of independence in Estonia. Estonian urban space practices developed in the period from 1944 to 1955, fusing the Soviet urban space paradigms with the local urban space design of the 1930s independence period – that argument influences the position of East Estonian oil-shale mining and industrial towns.

Moreover, Estonian town planning practices during the independence period of the 1930s, using the Tallinn Liberty Square, the new business and transport centre in Pärnu and the new institutional ensemble in Tartu as case studies, indicate that they follow the functionality and aesthetics of the Beaux-Arts-based City Beautiful movement. The same goes for the Estonian town planning principles and practices of the Soviet Stalinist period, between 1944 and 1955 using the Tallinn Central Square, the Tallinn Cultural Centre and the Pärnu Oblast Centre as case studies.

Consequently, following this and the above-stated aspects with the concept of Hall (Hall 1988) and Sonne (Sonne 2003), which was stated above in the first conceptual reference point, as the background it is evident that between 1944 and 1955 the ostensible replacement of Estonian 1930s independence period urban space took place as a shift through the alterations and continuities which formed a similar, but shifted urban space – an urban space which was

formed by similarities and continuities, as well as by shifts instead of disruptions. Such an urban space had the potential to influence urban space of the East Estonian oil-shale mining and industrial towns. This conceptual reference point needs more in-depth clarification, which is available as a response to the first research question number.

### 2.4 Methodology

In terms of the research methodology, this doctoral thesis generally uses the qualitative method as the process in order to gain an understanding of the underlying reasons and motivations of the formation of urban space of East Estonian oil-shale mining and industrial towns. The aim is also to provide insight into the problems of this issue and to uncover trends that existed during the formation period of those towns (1944–1955) and to dive deeper into the problem of the issue that has broader context in both the Soviet Union and the Eastern Block at the beginning of the Cold War era.

The dissertation is a case study – formation of the East Estonian oil-shale mining and industrial towns depicts, illustrates, reflects and reveals the urban planning mechanisms that were used in the Soviet Union and Estonia in the mid-1940s to the mid-1950s and in the Eastern Block at the beginning of the Cold War era.

This dissertation uses an analytical method with a purpose. The dissertation analyses, on the one hand, Estonian town planning practice during the independence period of the 1930s and, on the other hand, the Estonian town planning principles and practice of the Soviet Stalinist period between 1944 and 1955 with the Soviet Stalinist town planning principles and practice, between the 1930s and the early-1950s and the re-education of local Estonian architects in the late-1940s and the early-1950s as the background. At the same time, the dissertation analyses the determined formation mechanisms of East Estonian oil-shale mining and industrial towns. It analyses the Stalinist stately urban ensembles and masterplans and the Estonian Stalinist urban ensembles and masterplans of these towns with the Soviet Stalinist urban ensembles and masterplans as the background. The dissertation analyses reasons, processes, impacts, mechanisms and targets for founding those stately ensemble-like towns that had to embody the prosperous Soviet future and support the state's might.

The sources of the dissertation are approached using the hermeneutic analyses method (interpretation) and taking into consideration the circumstances and political context of the Stalin era, in order to uncover the background and the trends that existed during the formation period of East Estonian oil-shale mining and industrial towns (1944-1955). It is essential, in addition to reading, to understand, to decode, to open the motifs of fundamental and decisive documents (regulations, directives, decisions et cetera) that determined the background of urban planning, urban planning policy, urban planning itself and the final solutions of those plans. In order to determine and control the credibility of these documents and plans, source criticism is used. The documents are juxtaposed with the research of correspondence between governments, institutions and establishments. The correspondence often initiated directives, decrees, decisions, protocols of governments and institutions and formed a more profound background with its mechanisms and initiatives. At the same time, one should know the hierarchy of organisations in the formal and informal sense – which organisation and who made the order, passed the command and what were the causes or who initiated it. Additionally, the interpretation of such sources assumes knowledge and understanding of the Stalinist era circumstances, political system, regime and values, the paradigm with all its layers. All that helps to open and decode the graphic materials (masterplans, plans, designs of towns et cetera), from where and why everything has come, what were the reasons, and what was the context. Publications – both official brochures and books, periodical publications, newspapers – formed a public background, where, in the shade of official rhetoric, the significance and importance of any issue could be evolving and variable. In addition to reading documents, it is crucial to know how to read these documents, what is hidden behind the text, between the lines. Standard and stereotypical language, official rhetoric, specific terms and notions, euphemisms are characteristic to the documents of the Soviet (Stalinist) period. In addition, it is crucial to know how to read the publications of the period, as well.

Time frames of the doctoral thesis. Time frame of the central issue – formation of the East Estonian oil-shale mining and industrial towns Kohtla-Järve, Sillamäe, Ahtme, Sompa, Kukruse, Kiviõli, Jõhvi, Kohtla-Nõmme and Viivikonna with the focus on the Stalinist urban ensembles and urban space of those town centres. It encompasses the period from 1944 to 1955, which was a period when on the conditions of the Soviet occupation Estonian Stalinist urban planning principles and practice were established. Although, independent Estonia was occupied by the Soviet Union in the summer of 1940, due to the ongoing World War II and the relatively short duration of the occupations, neither the first Soviet takeover (1940–1941) nor the German occupation (1941–1944) had an impact on the Estonian and East Estonian urban planning. The post-war Stalinist principles influenced the urban landscape from November 1944 until November 1955, when the Central Committee of the Communist Party of the Soviet Union decided to distance itself from the characteristic exaggerated architectural style (Ob ustranenii 1955: 8, 11, 13, 15). However, the formation of East Estonian oil-shale mining and industrial towns happened according to the Soviet Stalinist political, military and economic mechanisms and urban planning principles and practice, that encompassed the period of the 1930s and the early/mid-1950s. In parallel, the thesis takes into consideration the Estonian 1930s independence period, when the Estonian town planning practice formed and in turn, influenced the Estonian post-war Stalinist urban planning principles and practice as a whole.

Terms: see Introduction, subsection "About terms".

## **3** Results with Discussion

This chapter addresses the research questions raised in the introduction of this dissertation. Based on the research tasks, four questions were posed:

1) Is the Estonian post-war Stalinist period (1944–1955) urban space design in conflict with the Estonian 1930s independence period urban space design? How did the Estonian urban planning and architectural paradigm (architectural life and way of thinking) change in the mid-1940s to the mid-1950s in comparison with the 1930s independence period? *Publications 3, 4, 5, 6* 

No, it is not. As the research shows the Estonian post-war Stalinist period urban space design and urban planning had much in common with the Estonian 1930s independence period urban design and planning. This question, with its answer, forms a fundamental background for the reveal of the formation of urban space in East Estonian oil-shale mining and industrial towns.

On the one hand, Estonian post-war urban space was as a replacement of the 1930s independence period legacy and the establishment of the new urban design according to the Soviet ideology in force. On the other hand, Estonian town planning principles and practice of the Soviet Stalinist period, between 1944 and 1955, and the 1930s independence period practice have similarities and continuities, as well as shifts instead of disruptions. Although the Soviet occupation caused severe damage in several Estonian cities (for example, after the bombing of Tallinn, Tartu, Narva, and Pärnu in 1944) and is remembered as a period of terror (marked by deportations and massacres), Estonian architects did not perceive Stalinist town planning negatively, and it generally matched their visions. As is revealed by comparing Estonian town planning from the 1930s with the Soviet period, the Stalinist principles were similar to local ones with some differences in the use of building scale and construction materials. Town planning ideas during the Soviet period are often characterised as being megalomaniac. However, similarly to trends in other countries, architecture in the independent Republic of Estonia during the 1930s started to focus on stately urban ensembles as an architectural element, enabling the young country to develop its stately veneer. This tendency increased as Estonia became more authoritarian in the mid-1930s.

President Konstantin Päts, who similarly to authoritarian trends in Europe tended to centralise Estonia, took the initiative to improve and unify the image of the young independent state through stately urban space. The Beaux-Arts-based City Beautiful, general principles, as academic and well-proven in history, seemed the best to embody the success of Estonia and to improve the state's development. That was a question of representing the state. The ambition to develop stately-looking urban environments depended on the town planning that could transform the city spaces. In order to achieve this vision, the town centres of Tallinn, Tartu, Pärnu, among others, needed to be redesigned.

On 27 May 1936, the president introduced this aim with a mandate that characterises the new authoritarian trend. The decree "The Liberty Monument Erection Act" states that all façades in Tallinn Liberty Square district could be designed or redesigned with the permission of the president only and all buildings near the Liberty Square could be expropriated or demolished by government order only (Vabadussõja üleriikliku 1936: 1028) (Publication 5: Fig.1). The Tallinn Liberty Square was an important symbol of independence: from this square, the Estonian soldiers departed to fight in the War of Independence (1918-1920) (Publication 3: Figure 1). Until the mid-1930s several contests for the Liberty Monument were announced. The monument would be situated west of the square, on Harjumägi hill; nonetheless, due to poorly designed entrances to the square and its irregular shape, the contests failed. Sixteen years after the War of Independence the young republic had not managed to establish a central

ensemble to commemorate the crucial war, whilst there were several monuments erected in other Estonian towns and two smaller ones in Tallinn (near Tallinn School of Science (1927) and in the Estonian Defence Forces Cemetery (1928–1933)). The Estonian Ministry of Communications announced the architectural contest for the urban space of Tallinn Liberty Square in late-1936.

As case studies of the Tallinn Liberty Square (urban space and architectural contest in 1936–1937), the new business and transport centre in Pärnu (urban space and architectural contest in 1937–1938) and the new institutional ensemble in Tartu (1937–1939) show, due to the need for a stately façade for the young independent state, the trend towards a more neo-classicist architecture and the Beaux-Arts-based City Beautiful-like urban space was evident and inevitable. In the urban space and architectural content of Tallinn Liberty Square, the contenders – appointed architects – had to put forth proposals that were as stately and realistic as possible (Bölau 1937: 86–87). Although the first prize was given to Alar Kotli's and Ernst Kesa's entry, the jury was fascinated by Harald Arman's and Salme Vahter Liiver's entry that proposed to double the area of the square by demolishing St John's Church and a school building nearby (Figure I; Publication 5: Fig. 2; Publication 4: Fig. 1). The jury considered Arman and Vahter-Liiver's entry too enormous and expensive (Bölau 1937: 86-87; ERA 2218.1.223, 34; Vabadusväljak arhitektide ... 1937: 8), but the jury's decision to purchase the entry, that was similar to the Nazi-period Königsplatz in Munich, refers to the trend in Estonia. The purchased entry appealed to both the jury and the Chief Architect of Tallinn Edgar Johan Kuusik (Missugune kuju ... 1937). Modernist art critic Rasmus Kangro-Pool admitted that Liberty Square as a symbol of independence should look imposing and dignified (Kangro-Pool 1937: 370). The Tallinn Liberty Square city space architectural contest defined the new architectural and urban planning aesthetics, the urban space ideals that followed the neo-classicist tendencies in the late-1930s.

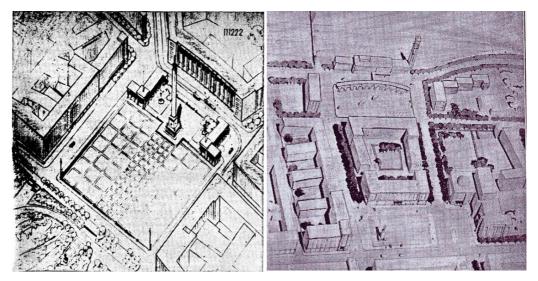


Figure I. On the left: Entry for the Liberty Square in Tallinn, 1937, by Harald Arman, Salme Vahter-Liiver (Missugune kuju ... 1937). On the right: Winning entry for the new business and transport centre in Pärnu, 1938, by Harald Arman. (Bölau 1938: 57)

The trend was accentuated during the urban space and architectural contest of the new business and transport centre in Pärnu in 1937 – 1938 (Publication 3: Figure 3). The first prize was given to Arman's entry because of its stable, representative appearance and functionality (Figure I; Publication 5: Fig. 3). Compared to other entries, the jury favoured its well-proportioned forms, which would give the area a stately appearance by erecting even a

couple of houses (Pärnu esinduslik 1938: Bölau 1938: 57–59). One the one hand. Arman's proposal was similar to the one he submitted for the Tallinn Liberty Square contest and comparable to Tony Garnier's Cité Industrielle and Albert Speer's town planning design in Berlin. On the other hand, the proportions, forms, and city-space accents of this entry were later on replicated in Arman's 1940s – 1950s proposals and construction projects for the Tallinn Cultural Centre and the Pärnu Oblast Centre. However, the new institutional ensemble in Tartu's city centre, adjacent to the University of Tartu was designed by one appointed architect, Harald Sultson. (Publication 5: Fig. 4; Publication 3: Figure 4). The new institutional ensemble intended to extend the University of Tartu. It had to contain six groups of University institutes and institutions (Suurejoonelised kavad ... 1938: 3). The first group was to be erected around the University's main building as an ensemble-like complex. It had to look stately and functional, with a strict gridline and had to be oriented towards the main building (EAA 2100.6.163). The existing houses were expropriated and demolished since, as Sultson stated, erecting the institutes "near the University building, instead of old and ugly houses, makes the surrounding of the University and appearance of the central city more stately and monumental" and to create a panoramic view of the University (EAA 2100.6.163, 47; EAA 2100.6.163, plan; EAA 2100.6.163, 46, 47; Tartu Ülikooli ... 1938: 6). The state became more centralised than before: centrally commissioned urban ensembles enabled the young country to develop its stately facade. Megalomaniac town planning and city space dreams, though expensive and unrealistic, still appealed to both the state and the architects. According to global tendencies of the 1930s, local architects were interested in monumental and representative architecture. The Beaux-Arts-based City Beautiful movement principles and practice in Washington and New Delhi, entries for the Greater Berlin, Canberra, and World Centre of Communication inspired the European Estonian architects and enriched them with new ideas on how to represent the state by means of an urban plan, urban space, and architecture that communicate ancient principal values and general ideals. Paradoxically, for instance, Edgar Johan Kuusik's monumental administrative buildings (for example, Tallinn Officers' Council (completed as the Culture House for the Working People), 1939–1947) matched the futuristic Soviet ideals (Publication 3: Figure 5).

After the World War II, in 1944, while the Soviet Union occupied Estonia for the second time, local architecture and urban space experienced contradictory developments. Many Estonian architects had escaped to the West, such as Kesa, Elmar Lohk, Eugen Sacharias, Herbert Johanson, and Sultson. Others, for example, Kuusik and Anton Soans, stayed. Russian-born Estonian architects, such as Otto Keppe and Voldemar Meigas, came to Estonia in 1944. Arman was compelled to leave for the Soviet Union with the Red Army in 1941, but he returned to Estonia in 1944. Local architectural organisations (such as The Union of Estonian Architects) were unified with their Soviet counterparts: the new executive architectural organisation that had administrative power was the Department of Architecture of the Estonian SSR. It was a local branch of the USSR's State Committee of Architecture. On the one hand, the urban space design of the Estonian post-war Stalinist period followed the Soviet doctrine in concept, forms and building materials (such as in Tallinn, Pärnu, Kohtla-Järve, Sillamäe) and the most radical solutions involved the replacement of cities and its inhabitants (for example Narva). One the other hand, there were some similarities and continuities inherited from the urban space design practices that had developed during the 1930s (such as in Tallinn, Pärnu, Kohtla-Järve).

The architects were increasingly forced to abandon former city space centres (Tallinn, Pärnu) and their projects to restore Narva's and Pärnu's wrecked city centres. They also had to stop using traditional materials on walls and façades. Paradoxically, Stalinist stately urban ensembles in Estonia provided architects with an opportunity to put some of their architectural ideas from the period of independence into practice. Compared to small independent Estonia, the Soviet Union, which encompassed one-sixth of the planet, had much more extensive resources to

finance urban planning projects. The war had left large demolished areas which turned out to be practical playgrounds for the architects in Tallinn, Pärnu, Tartu, Narva, and elsewhere in Estonia. In parallel with the change in the treatment of urban space, the Soviet occupation began to change its architectural paradigm (architectural life and way of thinking). They started to "adjust" it in the mid-1940s to the mid-1950s in comparison with the 1930s independence period. Architecture, urban space, and public space as the most suitable to represent the state and power received much attention from the occupying Soviet Union, and consequently, the treatment of urban space in Estonia needed to be changed. Estonian architecture and urban space, both in practice and as unrealised ideas, had to be "corrected, adjusted" according to Lefebrian Representational Space. The means of Representation of Space – architecture and urban space, as the carriers of public memory, needed to retreat and the memory purified.

Leaning on the Soviet Stalinist Urban planning and urban space practice and principles, which are stated and considered in the section "The First Conceptual Reference Point", the Estonian urban planning, urban space and architecture were facing different circumstances and challenges. They had to match the official Soviet ideology but at the same time keep the legacy of its previous practice, which is a case of ensotopia – more suitable to describe the situation, in comparison with Foucault's heterotopia. Such a phenomenon can be seen in the case studies of the Tallinn Central Square, the Tallinn Cultural Centre and the Pärnu Oblast Centre, but also in East Estonian oil-shale mining and industrial towns (considered in answer to the second research question).

On the one hand, Estonian town planning in the mid-1940s was quite similar to the pre-war independence period, which disregarded the rest of the Soviet Union's architecture. However, on the other hand, some architects, such as Meigas and Keppe, proposed to restore the Tallinn's city centre following the Stalinist practice of Leningrad. While Arman tried to find a balance between the two schools of practice, as the executive of the Department of Architecture of the Estonian SSR, he dominated the local architectural life, and managed to protect the local architecture and urban space practice from the orthodox Stalinism.

However, in the 1940s, local Estonian architects designed administrative, and apartment buildings following the 1930s style: granite wall coatings, with modest or scarce ornaments and sometimes the ground floors were ornamented (Figure II; Publication 5: Fig. 6; Publication 4: Fig. 3; Publication 3: Figure 7). Only the roofs became more pitched, and some Soviet symbols were added. Besides these additions, the rest of the design reminded the pre-war independence period neo-classicist architecture and the Beaux-Arts-based City Beautiful type urban space. The new city centre in Tallinn consisted of the Tallinn Cultural Centre in front of Estonia Theatre, and the Central Square (now Viru Square). They were designed under the guidance of Arman, following similar principles. The centre's design relied greatly on the 1945 masterplan of Tallinn (Arman, Keppe, Soans) (Figure III). (EAM 10.1.46; EAM 18.5.14; Soans & Keppe 1946: 9–20).



Figure II. On the left: residential building on Lenin Boulevard (Academics' House), 1954, by Edgar Velbri. On the right: residential building on Kentmanni Street, 1954, by Arnold Vulp. (Photographs by Siim Sultson)



Figure III. 1945 masterplan of Tallinn by Harald Arman, Otto Keppe, Anton Soans. In the middle: The Central Square and the Cultural Centre with the axis directed to south-east. (EAM 3.1.503)

In 1945, the USSR's State Committee of Architecture organised a design contest for the urban space of Tallinn Central Square (EAM 18.5.2). The Central Square consisted of a plaza and esplanade. The contenders – appointed architects – had to propose representative solutions for the future large-scale administrative, regular plaza and regular esplanade. According to the masterplan, the plaza of the Central Square was supposed to be designed with the junction of Pärnu Road, Tartu Road, Narva Road and Mere Boulevard, and be flanked by the World War II victory monument and esplanade. The latter would be built on the axis of Mere Boulevard,

leading directly to the Gulf of Tallinn. The plaza would be surrounded from three sides by administrative buildings and a monumental multi-ministry building. Opposite to converging streets, there would be space for a green area on the esplanade between the plaza and national opera (Estonia Theatre). There are a number of similarities between the Tallinn Central Square contest and the Liberty Square architectural contest for the urban space cofrom 1936–1937: an administrative regular square (plaza), green area (esplanade included) with an adjacent monument, converging streets, buildings on three sides of the square, and a monumental administrative building.

In comparison with the Liberty Square architectural contest, the Central Square contest was more strictly regulated by the masterplan (the gridline and the composition of the square). Now the contenders – appointed architects – had to propose their ideas within strict limits of the masterplan. As a result, one may see differences between entries above all in just the plastics of façades. The winning entry by Keppe and Meigas proposed to build the square in a calm, functionalist manner, with modest, scarce ornaments and moderately pitched roofs. The architects designed a simple six-storey multi-ministry building on the opposite of the column-like victory monument. The rest of the office buildings were intended to be five-storey houses.

Keppe's and Meigas' urban space design for the Central Square abided by the 1930s local urban space practice, both in composition and appearance (Publication 4: Fig. 2; Publication 3: Figure 6) (EAM 18.4.8). Voldemar Tippel's and Peeter Tarvas' entry was somewhat similar to the winning entry in its composition: the buildings had a more classicist appearance, and the additional office buildings, which flanked the multi-ministry house, enclosed the regular square (TLM 12041 G 1468). Alekseij Dmitrijev, who was working in Leningrad at the time, proposed to design the area in the style of St Petersburg's Art Nouveau. The central six-storey multi-ministry building, which looked similar to some of the Tallinn's medieval churches, would be surrounded by several light-coated and pitched roofed four- or five-storey office buildings (EAM 3.1.389). In December 1949, following Stalin's 70th birthday, the Central Square received a new name the Stalin Square (Pereimenovanie Central'noj ... 1949). After the renaming the green area as an esplanade between the plaza and national opera (Estonia Theatre) and between Estonia Boulevard and Pärnu Road was incorporated into the central square (Figure IV). The Stalin Square as a central square of Tallinn was intended to be surrounded from the east side by a monumental multi-ministry building (since 1954, the House of the Soviets), from the south side by administrative buildings near Estonia Boulevard, from the west side by Estonia Theatre, and from the north side by greenery of the upland with Pärnu Road and administrative buildings including the entrance from Mere Boulevard.



Figure IV. The Stalin Square of Tallinn, 1953 – 1954, by Otto Keppe. The square contains green area as an esplanade. On the left: multi-ministry building. On the right: Estonia Theatre. (EAM 18.4.6)

Between 1945 and 1946, following the 1945 masterplan of Tallinn, Arman designed the Cultural Centre, that was intended to bring universities, libraries and other academic and cultural institutions together around the boulevard-like crossing axes in front of the Estonia Theatre: Estonian Red Riflemen Square (Theatre Square), the Lenin Boulevard (Rävala Boulevard), and the Academy of Sciences of the Estonian SSR building, which came together at the junction and on the axis of the theatre (Publication 5: Fig.-s 5, 7; Publication 4: Fig.-s 4, 5, 12, 14; Publication 3: Figure 8; Publication 1: Figure 7). The centre of the junction was marked by Lenin's statue (in 1950 to 1991). The academy building had to be flanked by apartment buildings (for instance, the Academics' House). The east side of Lenin Boulevard had to join the Central Square and Tartu Road. The west side would include a stately building on the axis of the boulevard. The longitudinal axes were prolonged towards Livalaia Street. The whole complex was supposed to be as stately as possible (Soans & Keppe 1946: 11; ERA R-1992.2.25). Similarly, to the Central Square, the architectural style of the Cultural Centre followed the 1930s tradition. The composition of the core longitudinal axes was similar to Pärnu's new business and transport centre, which was designed by Arman (1938).

However, Arman also tried to match the official Soviet ideology. On the one hand, when Arman was in the USSR in 1941 to 1944, he had an opportunity to get acquainted with the Soviet urban planning and urban space principles and practice, including the sample complexes, such as the 1935 masterplan for Moscow that including Leningrad and Stalingrad became mandatory models for all Soviet architects, already by 1943–1944. One of the most impressive compositional accents of the Moscow masterplan was intended to be the 10-kilometer long converging axes directed south-west and running along the slope of the Lenin Hills with the University of Moscow building, followed by a stadium (the Luzhniky Arena) a bit lower and two prospects surrounded by recreational greenery and park area all the way down to the Place of the Soviets nearby Kremlin. In Tallinn, if the longitudinal axes of the Cultural Centre had been very similar to Moscow's south-west axes. However, a stadium (formerly the Komsomol Arena, now the Kalev arena) was designed precisely between those to be prolongated axes in 1949

(Erika Nõva; built in 1955). As the south-west axes of Moscow, the 2-kilometer long converging axes of Tallinn Cultural Centre follow the relief of the landscape and use its amphitheatre-like effect between Ülemiste Lake and the old town, forming a comprehensive composition that is enriched by the lake: Ülemiste Lake – the Komsomol (Kalev) Arena – the recreational greenery, and flanked by converging boulevards - Estonia Theatre nearby the old town (historical core of Tallinn) as it was on a stage (Figure V). Estonia Theatre, as one of the Estonian core national symbols and built in the Art Nouveau style (Armas Lindgren, Wivi Lönn, 1908–1913) was heavily damaged in the Soviet air raid on Tallinn on the 9th of March 1944. As to demonstrate the "Stalinist care" of the citizens, the Soviet regime reconstructed the theatre (Kotli, Kuusik, 1945, 1946–1951) partially in neo-classicist style with some Soviet emblems.

On the one hand, it is as a socialist realist act to combine the local legacy (both historical and national) with the new aesthetics. And on the other hand, such an act also shares similarities with the Beaux-Arts-based City Beautiful movement aesthetics. For instance, in the case of the New Delhi administrative district and Viceroy's house, they involved Indian local and national motifs. However, Estonia Theatre, in the case of the Cultural Centre axis had to serve as an ideological focal point – officially, for the occupying regime, in the sense of socialist realism, but unofficially, for Estonians, in the sense of their national ideals and dreams. Such a tricky and contradictory case is characteristic to Arman's attempts to find a balance between the official doctrine and the unofficial latent local, national mentality. While the Moscow south-west axes were built in one-third of the size of the design, then the Tallinn Cultural Centre axes were built in half of the planned size. Paradoxically, as the Moscow south-west axes, the Tallinn Cultural Centre axes follow an aesthetical logic, principles and practice of the Beaux-Arts-based City Beautiful movement – both through the Moscow sample and the Estonian 1930s independence practice. Thus, the latter one, as a personal and local matter, became reinforced in the mid-1940s to the mid-1950s.



Figure V. Aerial view of Central Square and the Cultural Centre in Tallinn in 2001. On the right: Estonia Theatre near the esplanade. In the middle: Viru Hotel (1964-1972) instead of the original plaza. On the right: crossing axis of the Cultural Centre; the south-east axis from Estonia Theatre to Comsomol (Kalev) Arena (on the top left) (EAM Fk 12503)

The Pärnu Oblast Centre, as one of the most ambitious Estonian town planning projects (Arman, 1952) by its scale, has compositional similarities with both the pre-war business and transport centre and the Tallinn Cultural Centre. However, the business and transport centre, which served as the central square in the 1930s, was abandoned, and then the town seemed to get a disproportionately large new axial centre (Publication 5: Fig. 8; Publication 4: Fig. 6, Fig. 7, Fig 13; Publication 3: Figure 9, Figure 10). In parallel, architect Soans designed a grand masterplan for the town (EAM 3.1.470) (Figure VI). The project design for the oblast centre complex had to concentrate the Oblast Centre building, the Palace of Culture, and the apartment buildings around the crossing axes of Central Square and Lenin Boulevard. The Pärnu Central Square included an esplanade, Vasa Park, was flanked by three-storey apartment buildings, and a plaza between the Oblast Centre building and the esplanade. The construction of Lenin Boulevard (now Pikk Street), which was meant to cross the plaza, would come to an end together with the construction of the Palace of Culture, near the Oblast Centre building. The other side of the boulevard joined the former pre-war business and transport centre. This centre was connected with a bridge to the main entrance road to Tallinn. On the one hand, the composition of the Oblast Centre complex is similar to the one in St Petersburg, which contains St Isaac's Cathedral – Senate Square – a demolished bridge on the axis of the cathedral, and Admiralteiskij Prospekt – the Palace Square: a composition that was one of the models for

the Soviet Stalinist urban planning and urban space. Simultaneously, the composition of Pärnu complex also recalls the Cultural Centre in Tallinn. While the Oblast Centre building (not erected) was designed in St Petersburg following the classicist style (by architect Dmitri Bruns and architect Olga Bruns), the other buildings followed the style of the independence period and the Tallinn Cultural Centre. These large-scale plans were the result of the 1952 decision to declare Pärnu as the future oblast capital. Similarly, to Tallinn and Tartu, Pärnu became an important urban space. (ERA R-1992.2.70, 47; ERA R-1992.2.33, 42–44; Parek 1971: 42–43; Shumovskij 1953a: 3; Härmson 1983: 35–43)



Figure VI. 1953 masterplan of Pärnu by Anton Soans. In the middle: the Pärnu Oblast Centre (H. Arman, 1952) with crossing axes, the Oblast Centre building, Central Square and bridge. (EAM 3.1.470)

Both centres designed under the guidance of Arman have compositional similarities with the Moscow southwest axis (Tallinn: if the axis of the Cultural Centre to south was prolonged), St. Petersburg Moscow Prospect (Tallinn, Pärnu), Kiev Kreshchatyk (Tallinn, Pärnu) – that, once more, in turn follow the aesthetic logic, principles and practice of the Beaux-Arts-based City Beautiful movement.

Meanwhile, the Estonian urban planning and architectural paradigm (architectural life and way of thinking), and architects and urban planners experienced the Soviet ideological indoctrination in the mid-1940s to the mid-1950s. Local architectural organisations and the treatment of form and material by Estonian architecture and urban planning were subjugated to the norms of the Soviet Union – for instance, as stated above, local architectural organisations (such as The Union of Estonian Architects) were unified with their Soviet counterparts. The new executive architectural organisation that had administrative power was the Department of

Architecture of the Estonian SSR, which was a local branch of the USSR's State Committee of Architecture. Architects (such as Keppe, Meigas) who had arrived from elsewhere in the Soviet Union were considered more trustworthy by the occupying regime. The totalitarian Soviet regime required ideological awareness from urban planners. Paradoxically, the historically tried-out means in combination with the ideological symbols had to create the impression of innovations. As the Soviet Union attempted to create a society of the future, everything old had to be abandoned and, if possible, new history had to be planned from scratch. The "correct" urban planning needed ideological guidance: plenary meetings, congresses, directives, and propaganda in order to educate and re-educate local architects. The training of young architects also had to be ideologically controlled. Estonian architecture and urban space had to be "corrected, adjusted" – architecture and urban space, as the carriers of public memory, needed to retreat and the memory needed to be purified.

On the one hand, in professional periodical publications such as "ENSV Arhitektide Almanahh" (Almanac of Estonian SSR Architects) the articles provided insights into ongoing town planning in Estonia and the Soviet Union: concerning all Estonian towns, including East Estonian oil-shale mining and industrial towns, the restoration of wrecked towns, and ongoing town planning. On the other hand, the local publications were compelled to mediate decisions and ideology of the central government and its institutions (architectural ones included) and formulate local architectural principles. In his early 1946 article "Problems of Architecture in Estonia", Arman declared that to "...[invent] genuine principles of Soviet Estonian town planning, local architects still need to study town planning as a discipline, to solve all engineering challenges concerning water supply" in order "...to fulfil Stalin's five-year plan and to make towns in Soviet Estonia better and more beautiful..." (Arman 1946a: 2). Meanwhile, Arman gave local architects specific instructions for town planning in the Estonian SSR. The instructions followed the board resolution of the Soviet Architect's Union of the USSR made on 24 October 1946, and the full resolution of the Soviet Architect's Union of the USSR made on 2 August 1947 (Meigas 1948: 5, 7; Arman, 1946b: 5-8; Tvorcheskie ... Materialy XII ... 1948: 49-61). The resolutions followed the decisions of the Central Committee of the Communist Party of the Soviet Union "About Magazines "Zvezda" (Star) and "Leningrad", "About the Repertoire of Drama Theatres and Remedies of Improving It", "About the Cinematographic Film "Great Life"", which passed respectively on 14 August 1946, on 26 August 1946, and on 14 September 1946. All those decisions marked the state's severe reaction against the liberal trends in cultural life after the war. Arman in turn, following the new ideological atmosphere and resolutions of the Soviet Architect's Union of the USSR, declared three principles concerning the planning of a town centre: a proper building plan, strict regulation regarding the order in which the buildings are constructed, and a 'right' policy for town planning. Those principles leaned on A. Mordvinov's seven principles that were established in July 1945, and both of the principles were mandatory to be followed by local urban planners and architects (see section 2.2. The First Conceptual Reference Point). On 10 February 1948, the Central Committee of the Communist Party of the Soviet Union passed a decision "About V. Muradeli's opera "Great Friendship"" that marked the deepening of orthodox and conservative trends in the Stalinist cultural life (ÜK(b)P Keskkomitee otsused "Ajakirjadest "Zvezda" ja "Leningrad"" ... 1953).

The so-called liberal Stalinism ended in 1949 when over 20,000 inhabitants of Estonia were deported to Siberia during just one night on 25 March 1949. Political pressure radiating from Moscow compelled local Estonian architects to design the city space more similarly to the capital of USSR, Leningrad (St. Petersburg), and Stalingrad (Volgograd). On 25 to 28 October 1950, the plenary session of the Soviet Architect's Union of the USSR was dedicated to architects' creative tasks during "the grandiose fifth Stalin five-year plan". According to the plenary session resolution the Soviet architects were supposed to be more active, creative and ideologically aware,

dedicated to socialist realism, innovative and to use more classicist heritage (Tvorcheskie ... Materialy XIII ... 1951: 5, 7–32, 108–117). As a result, Arman who tried to form the Tallinn Cultural Centre that embodies the Stalinist town planning principles received heavy criticism for the centre. It was considered to be too modest, Western-like, capitalist, modernist, and weak in its composition (Shumovskij 1953b: 3).

While mediating decisions and ideology of the central government and its institutions (architectural ones included) and the formulated local architectural principles as the background, the publications had to take care of the ideological re-education of local architects, as well as the education of young architects. Local architects were compelled to start thinking and planning in a new way and to be ideologically aware. Such articles were published in professional periodical publication "ENSV Arhitektide Almanahh" (Arman 1946b: 5–12; Meigas 1948: 5-9; Arman & Starostin 1951: 7-18), in the Soviet Union-wide professional publications such as "Arhitektura SSSR" (Architecture of the USSR) (Rech tovaricha I. V. Stalina ... 1952: 1–2) and local newspapers (Arman 1946a: 2; Meigas 1949b: 7; Laug 1950: 5; Veelkord EN Arhitektide Liidu tööst 1950: 7; Koido 1952: 6–7; Roos & Melder 1953: 3; Shumovskij 1953b: 3; Tihomirov 1954: 2–3). In addition, the orthodox Stalinist atmosphere was framed by general ideological brochures, for example "ÜK(b)P Keskkomitee otsused "Ajakirjadest "Zvezda" ja "Leningrad"", "Draamateatrite repertuaarist ja abinõudest selle parandamiseks", "Kinofilmist "Suur elu"" ja "V. Muradeli ooperist "Suur sõprus""" (Decisions of the Central Committee of the Communist Party of the Soviet Union "About Magazines "Zvezda" (Star) and "Leningrad", "About the Repertoire of Drama Theatres and Remedies of Improving It", "About the Cinematographic Film "Great Life"" and "About V. Muradeli's opera "Great Friendship"") (ÜK(b)P Keskkomitee otsused "Ajakirjadest "Zvezda" ja "Leningrad"" ... 1953), which were the official statements of the decisions of the Central Committee of the Communist Party of the Soviet Union, that were passed respectively on 14 August 1946, on 26 August 1946, on 14 September 1946 and on 10 February 1948 (Ajakirjadest "Zvezda" ja "Leningrad" ... 1946: 1; V. Muradeli ooperist "Suur sõprus"... 1948: 1; ÜK(b)P Keskkomitee otsused "Ajakirjadest "Zvezda" ja "Leningrad"" ... 1953).

On the conditions of the Soviet ideological indoctrination architecture and urban space, as the carriers of public memory, needed to retreat and the memory needed to be purified. For instance, in the mid-1940s architect Ernst Ederberg tried to restore the old baroque style in Narva, and Harald Arman's brother architect Endel Arman, together with Soans, designed a restoration project for Pärnu (ERA R-1992.2.33, 88–92; Ederberg 1948: 60–65; Volkov 1991: 192; Parek 1971: 72). Both of the towns were generally in good condition after the World War II. However, in 1952, the USSR's Soviet Architects' Union gave specific instructions to Soviet architects with regards to ensemble-like town planning. The board resolution of the Union framed the town planning practice of Moscow, Leningrad, Stalingrad, Kiev, and Minsk as mandatory models for the future Soviet cities (Hronika. XIV plenum ... 1952: 31-33.). As a result, both projects (for Narva and Pärnu) were rejected. In the case of Pärnu, in order to get the necessary space for the Oblast Centre, a third of the burnt, yet largely preserved, medieval old town guarters, and the ruins of the Teutonic Castle were demolished. The 14th-century St Nicholas Church was demolished with explosives. The old baroque town met a similar fate. That part of the town was burnt, but the relatively well-preserved ruins were almost completely demolished, and subsequently substituted with a new gridline and houses.

How to treat legacy and memory? It was a complicated and contradictory issue, especially in the mid-1940s to the mid-1950s. In order to describe the "correcting" treatments (Narva, Pärnu) or the interpretations (Estonia Theatre) it is suitable to use the terms "memory shift" or "memory restart".

Both Tallinn and Pärnu are examples of the so-called memory shift or memory restart. Tallinn Liberty Square as a symbol of lost independence was a problem for the Soviet regime. In the 1920s and 1930s, during the architectural contests for the city square, a monument commemorating the War of Independence had always been one of the crucial details. While in 1944 the Second World War monument contest for the Liberty Square (renamed 'Victory Square' during the Soviet occupation) failed, the Department of Architecture of the Estonian SSR decided to organise the next monument contest for the Central Square which was at the time under construction (Tarvas 1948: 44–53). The previous Liberty Square was considered too small to host Soviet celebrations and meetings (Volkov 1949: 4). In 1950, Arman stated that the Liberty Square was not large enough for the Second World War monument, and ultimately considered it weak by its structural composition. Five years later, Arman believed that thorough reconstruction of the previous Liberty Square was inevitable in order to give landscape to the square and to turn it into a park, among other things (Arman 1955: 49).

Pärnu's pre-war business and transport centre also needed to be landscaped (Linnakivi 1952: 2). On the one hand, it seemed to be characteristic of those times to erase the memories of lost independence through landscaping. On the other hand, landscaping may also be considered to be an act led by local architects to save the memory icons from being rebuilt or destroyed by the occupying regime.

Similarly, renaming the Tallinn's Central Square to the Stalin Square in 1949, and the 1952 administrative reform are examples of how local identity was being erased and the memory shifted (Pereimenovanie Central'noj ... 1949). Compared to the rest of the Estonian towns, Narva experienced the most drastic redesign. After the 1949 deportations and the end of so-called liberal Stalinism, the relatively well-preserved ruins were almost completely demolished and subsequently substituted with a new gridline and houses. Both the town and its population were replaced. The Stalinist architectural policy, which can be described as town planning as a doctrine and paradigm, was productive, and efficiently framed by several resolutions and instructions. Town planning allowed the totalitarian system to "correct" the memory, any structure that was reminiscent of old traditions was replaced by another to embody a new ideology and to establish a heritage for the future. Town planning, especially the design of a stately city centre and architectural system, was one of the most straightforward ways for the state to "correct" the memory.

However, despite the attempts to shift the local memory, to "re-educate" local architects and compel them to start thinking and planning in a new way and be ideologically aware, the local urban space practice, during the Soviet Stalinist period stubbornly remained similar to the 1930s independence period. Between 1944 and 1955 the ostensible replacement of Estonian urban space took place as a shift through alterations and continuities that form a similar but shifted urban space – an urban space that is formed by similarities and continuities, as well as shifts instead of disruptions. Urban space practices developed from 1944 to 1955 and they fused the Soviet urban space paradigms with the local urban space design of the 1930s independence period.

Such an urban space influenced the urban space of East Estonian oil-shale mining and industrial towns.

### 2) Which compositional town planning factors influenced the urban space of East Estonian oil-shale mining and industrial towns in 1944–1955? *Publications 1, 2, 3, 4*

Following the answer to the first research question, compositional town planning factors that had an impact on East Estonian oil-shale mining and industrial towns may be drawn.

As the study shows, the background and foundation for the formation of East Estonian oil-shale mining and industrial towns leans, on the one hand, on Estonian town planning principles and practices of the Soviet Stalinist period in 1944 to 1955 and, on the other hand, on the Soviet Stalinist town planning principles and practices in the 1930s to the early-1950s. It means that, following the Soviet doctrine in concept, in the forms and building materials in urban space design of East Estonian oil-shale mining and industrial towns there were some similarities and continuities with both Estonian post-war Stalinist period (1944–1955) urban space design and through the latter one with the urban space design practices developed during the 1930s. For instance, Tallinn and Pärnu, Kohtla-Järve and Sillamäe that have the most complex Stalinist urban centres, contain compositional similarities.

While Ahtme, Sompa, Kukruse, Kohtla, Jõhvi and Viivikonna were designed mainly by Lengiproshacht<sup>5</sup> (architects B. Sokolov, A. Volkova, G. Ivanov, V. Kulakov) in the late-1940s, then Kohtla-Järve and Sillamäe were erected according to the projects designed by Lengorstroyproyekt<sup>6</sup>. The masterplan and urban space of Kohtla-Järve were designed by architects J. Vitenberg, I. Pisareva and F. Kirzideli. The closed town Sillamäe was designed by architects J. Vitenberg, I. Pisareva, A. Nikayev and M. Pospechov. Since Sillamäe was a closed town producing uranium-oxide, then the Soviet nuclear industry (Leningrad filial of NII-9<sup>7</sup> in 1946–1947; Leningrad filial of GSPI-12<sup>8</sup> in 1949–1950, 1958) designed the town in collaboration with Lengorstroyproyekt. The Planning and Design Office's design institute "Estonproyekt" of the Department of Architecture of the Estonian SSR (architects Soans and Keppe) compiled the masterplan for Kiviõli. However, the 1951 masterplan of Kohtla-Järve, following the previous versions of Lengorstroyproyekt, was also compiled by the Planning and Design Office and design institute "Estonproyekt" of the Department of Architecture of the Estonian SSR (architecture of the Estonian SSR (architect Keppe). Subsequent versions (1955, following Lengiproshacht design) of Jõhvi and Ahtme were compiled by "Estongiprogorstroi"<sup>9</sup>.

Lengiprosacht laid out Jõhvi, Ahtme, Sompa, Kukruse, Kohtla-Nõmme and Viivikonna using regular and straightforward grids. The same design was used for Kohtla, that was never built, located near Kohtla-Nõmme, which was built later (Figures VII, VIII, X; Publication 1: Figure 3). However, the masterplans of Sompa and Ahtme were not organised using orthogonal geometry and contained radial street patterns at one corner of the grid, such as in Kohtla-Järve, designed by Lengorstroyproyekt (Publication 1: Figure 4; Figure XI). Masterplan of Kiviõli, designed by the Planning and Design Office of the Department of Architecture of the Estonian SSR, exploits the same radial street pattern (Figure IX). Lengiproshacht also designed the Stalin era masterplan of Kukruse and probably of Kohtla-Nõmme. Due to the absence of copies of the masterplans in archives, it is hard to estimate the extent to which the masterplans in these two towns were implemented. In Ahtme 1/3 of the masterplan, in Sompa and Kiviõli 1/4 of the masterplan and in Viivikonna half of the masterplan was implemented (EAM 3.1.50; EAM 3.1.46, EAM 3.1.248; ERA T-14.4-6.941, 1; ERA R-3.3.3148, 18).

Use of similar radial street pattern at one corner of the grid, on the one hand, in 1947–1954 masterplan of Kiviõli and, on the other hand, in 1946 masterplans of Ahtme, Sompa and Kohtla indicates to the influence of Lengiprosacht on the Department of Architecture of the Estonian

<sup>&</sup>lt;sup>5</sup> Leningrad filial of all-Soviet Union Giproshacht (State Institute for Planning Mines under the USSR's People's Commissariat of Coal Industry)

<sup>&</sup>lt;sup>6</sup> Leningrad filial of all-Soviet Union Gorstroyproyekt (Planning Institute for Town Building under the USSR's Ministry of Heavy Industry)

<sup>&</sup>lt;sup>7</sup> Scientific Research Institute No 9

<sup>&</sup>lt;sup>8</sup> State Specialised Planning Institute No 12

<sup>&</sup>lt;sup>9</sup> Successor of Estonproyekt. Estongiprogorstroi (Estonian SSR's State Institute for Town Planning and Building), established as a distinct institution in 1955. In 1957 renamed to Estonproyekt.

SSR. Even Lengorstroyproyekt used the same pattern in 1947 masterplan of Kohtla-Järve, but not in the 1946–1950 and 1958 masterplans of Sillamäe (Figure XII; Publication 1: Figures 5, 8–10). The Department of Architecture of the Estonian SSR, while processing the masterplans of East Estonian oil-shale mining and industrial towns, in turn, influenced Lengorstroyproyekt. However, the more complex and challenging masterplans that were designed by Lengorstroyproyekt received more attention in comparison with the regular and straightforward grid-based masterplans, designed by Lengiproshacht.



Figure VII. Masterplan of Ahtme, 1946, by Lengiproshacht (V. Kulakov). In the middle: the established part of the town. On top and left: the unbuilt part of the town (EAM 3.1.50)

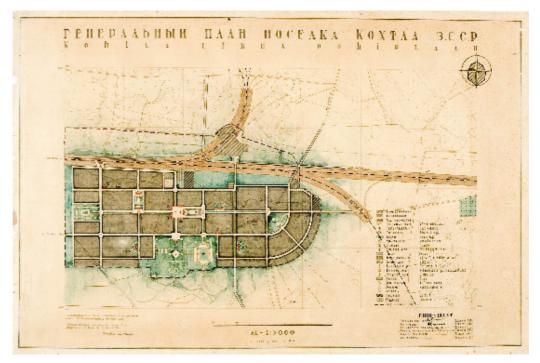


Figure VIII. Masterplan of Kohtla, 1946, by Lengiproshacht (M. Volkova). Unbuilt. (EAM 3.1.12)



Figure IX. Masterplan of Kiviõli, 1954, by Planning and Design Office, design institute "Estonproyekt" of the Department of Architecture of the Estonian SSR (Anton Soans). At the bottom middle: the established part of the town. In the middle and on the right: The unbuilt part of the town. (ERA T-14.4-6.941)

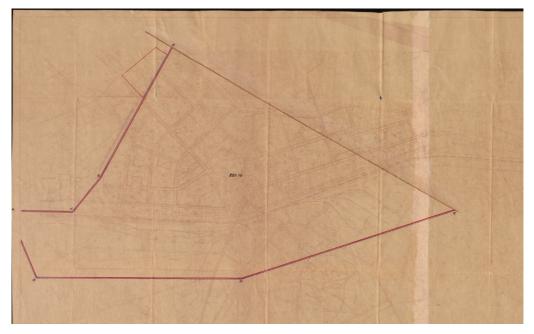


Figure X. Masterplan of Jõhvi, 1955, by design institute "Estongiprogorstroi" (Voldemar Tippel), using radial street pattern at one corner of the grid as in previous figures (ERA T-14.4-6.34553)

Stately urban ensembles of Sillamäe and Kohtla-Järve as the quintessence and backbones of those masterplans, designed by Lengorstroyproyekt, followed the orthodox Stalinist principles more than the stately urban ensembles in masterplans, designed by Lengiproshacht. As a response to the leading Soviet architects and theoreticians Ivan Zholtovskij´s and architect Mordvinov´s principles of urban design (see section 2.2. The First Conceptual Reference Point), the Stalin-era architects and designers of Sillamäe and Kohtla-Järve tried to embody an approach that implied a prosperous future – a type of socialist paradise. These towns had to demonstrate the advantages of the Socialist system over its capitalist competitor using compositional unity and the illusion of luxurious facades, courtyards, parks, and inspiring sculptures.

A stately urban ensemble as the centre of Kohtla-Järve was built about one kilometre to the east of the pre-war settlement. The latter one with the distance of one kilometre had to form a two-kilometre sanitary zone between the oil shale mine, including the industry and the new town "sotzgorod" (socialist town) (see section 2.2. The First Conceptual Reference Point) (Tippel 1948a: 55). A Stalinist stately ensemble as an urban space of the town consists of two main axes crossing (Publication 1: Figure 4; Figure XI). The southwest-northeast ensemble is called Victory Boulevard (now Kesk Boulevard), and it is over 50 metres wide and 700 meters long. It connects the Palace of Culture with a park and a cinema (Pobeda, "Victory") (on the axis of the boulevard) (Publication 5: Fig 10; Publication 4: Fig. 11; Publication 3: Figure 11; Publication 2: Figures 9–12, 14; Publication 1: Figure 6). The southeast-northwest axis of Rahu crosses the Victory Boulevard (Peace) Square (200 meters long, 125 meters wide), which was intended to concentrate the local government building and four-storey apartment buildings with colossal orders and avantcorpses (Publication 4: Fig. 15; Publication 3: Figure 12; Publication 2: Figure 13). The rest of the houses on the crossing axes are two- to three-storey apartment buildings with pitched roofs. (ERA R-1992.2.57; ERA R-1992.2.41) In 1956, local architect V. Tippel from "Estongiprogorstroi" made a supplementary masterplan for Kohtla-Järve that follows the previous versions of Lengorstroyproyekt. Nearly 3/4 of the masterplan was implemented. (EAM 3.1.281)

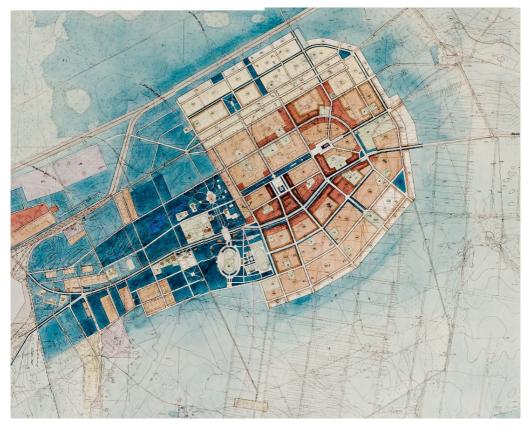


Figure XI. The main axes were crossing the centre of Kohtla-Järve, 1956, by design institute "Estongiprogorstroi" (Voldemar Tippel) following the version of Lengorstroyproyekt. In the middle: Victory Boulevard. At the bottom middle: stadium in the park. The park with pre-war settlement (on the left) formed the 2-kilometre sanitary zone (EAM 3.1.281)

Sillamäe's centre as a stately urban ensemble of the town consists of three main streets and a boulevard crossing the central square and the recreational area (Publication 1: Figures 9, 10). Southeast–northwest oriented 30-meter wide converging Kalda, and Kesk Streets are situated on two coastal levels and surround the park. The two streets converge at the Central Square of 140 x 120 metres that consists of a junction and greenery, are flanked with the Corinthian Palace of Culture, towered town hall and a grand staircase that leads to 40 metres wide and 250 meters long Mere Boulevard that connects with the sea (Publication 5: Fig. 9; Publication 4: Fig.-s 8–10; Publication 2: Figures 3–8). The boulevard is flanked with monumental four-storey apartment houses. The composition of the boulevard and the staircase is similar to the Stalingrad staircase axes (monumental staircase between Volga River and the Alley of Heros (Alleya Geroyev)). The rest of the stately urban ensemble is housed with neo-classicist apartment houses, public buildings ornamented with bas-reliefs, balustrades, pediments, columns et cetera.

The almost complete implementation of the Stalinist masterplan in Sillamäe is a unique occurrence in both Estonia and the former Soviet Union. Processing of uranium oxides for the nuclear industry gave Sillamäe a unique position and promoted rapid and planned development. For instance, the same development concerned the nuclear towns such as Ozersk (Ural), Zheleznogorsk (Siber), Seversk (Siber), Ozyorsk (Chelyabinsk-65; Siber) et cetera.

The current grid of the town was developed during the years of 1946 to 1950 and 1958.

The Department of Architecture of the Estonian SSR processed the masterplans of 1946–1948 by the least. Stalinist central gridlines of the masterplans for Kohtla-Järve and Sillamäe have many compositional similarities with the Stalinist central gridlines of Tallinn and Pärnu, designed by Arman. He designed the masterplans for Tallinn and Pärnu in the mid-1940s and the early-1950s. It would be logical that the Stalinist central gridlines of Tallinn and Pärnu were inspired by the compositions designed by Lengorstroyproyekt. However, it seems to be the opposite. Already in the 1945 composition of the masterplan of Tallinn and the Cultural Centre, Arman designed the converging axis to cross with the boulevard.



Figure XII. Sillamäe centre by Lengorstroyproyekt (Alexandr Nikayev), 1947, without the crossing of converging axes and Mere Boulevard. In the middle: Central Square with the Palace of Culture. On the right: recreation area and park with a stadium (SM Generalny proekt planirovki, NII-9, 1947)

He reused the solution in the 1952 Pärnu Oblast Centre composition. Neither the Sillamäe 1947 masterplan nor the 1948 masterplan used the crossing of converging axes and boulevard – but those are visible on the masterplans of 1949, 1950 and 1958 (Figure XII; Publication 1: Figures 5, 8–10). Even more, location of the stadium in those three masterplans resembles his mid-1940s and early-1950s Tallinn masterplans. However, in the 1947 masterplan, the stadium is visible in the park, while in the 1948 and 1949 masterplans, it is not there. According to protocols and correspondence, Arman processed the town's masterplan from 1946 to February 1947 (SM Generalny proekt, NII-9, 1947; ERA R-1992.2.12, 44–64; ERA R-1992.1.137, 5, 16). In 1946, the protocols mentioned that the architects of the 1946 masterplan (copies of the masterplan are absent in the archives) were J. Vitenberg and I. Pisareva (both from Lengorstroyproyekt) (ERA R-1992.2.12, 45, 51, 53, 59). Arman actively processed the masterplans, at least up to the summer of 1949, and was in touch with the following masterplan versions through correspondence with Lengorstroyproyekt. For example, the 1948 masterplan (SLV Detalny proyekt, Tom I, GSPI-12, 1948) had an additional version (SLV Proyekt planirovki, NII-9,

1947; SLV Detalny proekt, Tom I, GSPI-12, 1948; SM Detalny proekt, Albom-foto, GSPI-12, 1948; SLV Proekt planirovki, GSPI-12 1949). The same is visible in the 1950 masterplan that was regulated by top-secret regulations of the Estonian SSR's Council of Ministers (ERA R-1.5s.212, 10–14). The 1958 masterplan of Sillamäe reflects the established situation and ideas of enlarging the town. (SLV Generalny plan, zakaza 229 1958)

3) Which town planning factors had an impact on establishing the East Estonian oil-shale mining and industrial towns in 1944–1955?
3a) What was the role and significance of East Estonian oil-shale mining and industrial towns for the USSR? *Publications 1, 2, 3, 4, 5*

For the Soviet Union, East Estonia became a territory of strategic significance, which in turn, formed the Stalinist urban space of the oil-shale mining and industrial towns through certain mechanisms. At the beginning of the Cold War, East Estonian oil-shale mining and the industrial region became one of the most strategically important western territories in the Soviet Union. For instance, neither Lithuania nor Latvia had been equipped with such a vast and complex industrial area. In North Lithuania, there was an industrial cement town Naujoji Akmenė (nearby ancient Akmenė) established in 1947–1953, and in South Lithuania, an industrial paper town Grigiškės remodelled in 1948. In North Latvia, there was an industrial peat town Seda established in 1953–1959.

During the seizure of Estonia by the Soviet Union the new regime considered East Estonia as a resource for oil-shale that, for instance, could supply Leningrad (St Petersburg) and north-west Russia with electricity, gas, and liquid fuels. For the Soviet Union, on the one hand, East Estonia was well-known for its oil-shale deposits that were suitable for heating, producing electricity, oil-shale gas, shale oil, and oil-shale gasoline. On the other hand, the Soviet Union was above all interested in graptolitic argillite (also known as dictyonema argillite) – a marinite-type black shale, which is a blackish to greyish lithified claystone. The graptolitic argillite was suitable for producing uranium oxides, molybdenum and vanadium. Thus, already in 1940, East Estonian gained strategic importance for the Soviet Union.

In the late-1930s Soviet Union was facing a shortage of uranium ore: in the interests of research, the ore was purchased from abroad and, at the same time, the state tried to find ore reserves in the eastern and southern parts of the Soviet Union. In mid-June 1940, while the Soviet Union was occupying Estonia, Soviet academicians, Vladimir Vernadsky and Vitaly Hlopin, wrote a letter to academician-secretary of the Department of Geology and Geography of the Academy of Sciences of the USSR, Pavel Stepanov, stating that the Soviet Union was an acute shortage of uranium ore. The academicians insisted Stepanov to immediately prepare a plan for searching new uranium ore mining areas for the Soviet Government. The outbreak of the Second World War eliminated the purchases of uranium ore from abroad (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 1 1998: 113–114). On 1 October 1940 during a session discussing the uranium ore reserves in the Soviet Union, the Academy of Sciences of the USSR admitted that according to the 1934, 1938 and 1939 explorations the West Leningrad Oblast oil-shale deposits contained vanadium and uranium ore. Based on the samples that were taken no later than in September 1940 by the Academy of Sciences of the USSR, the East Estonian oil-shale had a higher concentration of uranium ore compared to the Leningrad Oblast samples. The academicians considered the East Estonian oil-shale very interesting and perspective for the Soviet Union (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 1 1998: 168–177).

Consequently, one of the reasons to occupy Estonia was the Soviet Union's acute need for uranium ore.

The topic of uranium ore became highly strategic and of military importance in 1942, while the Soviet Union realised that Germany, Great Britain and the USA were trying to produce both

a uranium reactor and a uranium-based atomic bomb. On 15 March and 27 March 1942. the First General Administration of the USSR's People's Commissariat for Internal Affairs asked its British and USA agents to control the suspicions and to get more information. In early-May, the Second General Administration of the Main Intelligence Directorate of the Red Army General Staff wondered whether it was possible to use nuclear energy for military purposes (Atomny provekt SSSR, T. 1. 1938–1945. Ch. 1 1998: 259–263). For instance, in 1942 the estimated amount of world's uranium ore (as pure metal uranium) deposits were 12,000–15,000 tons: 1,000 tons in Europe, 9,000 tons in North America and only 500 tons in the Soviet Union. The top-secret directive of the USSR's State Defence Committee (established on 30 June 1941 due to the war) at the USSR's Council of People's Commissars<sup>10</sup>, which was passed on 28 September 1942, ordered the Academy of Sciences of the USSR to prepare a report concerning the production of a uranium-based atom bomb and uranium-based fuel. Two months later, the committee ordered the USSR's People's Commissariat of Non-Ferrous Metals to increase the mining of uranium ore in the eastern regions of the state (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 1, 1998, 269–276). On 27 March 1944, the Institute of Geological Sciences of the Academy of Sciences of the USSR stated that East Estonian oil-shale-based graptolitic argillite contained an unprecedented amount of uranium ore that could be suitable for producing uranium oxides and the deposits needed to be explored thoroughly (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 2002, 53–55). East Estonian oil-shale had become highly strategic and of military significance for the Soviet Union. As the Committee for Geology stated on 14 August 1945, East Estonian oil-shale-based graptolitic argillite containing uranium ore had a good outlook for producing uranium oxides (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 2002, 349–351). The Soviet Union's need for uranium ore became urgent after the American nuclear attacks on Hiroshima and Nagasaki, respectively on 6 August 1945 and 8 August 1945. In autumn 1945 the geological exploration of the East Estonian oil-shale-based graptolitic argillite was more detailed and extended (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 2002, 385–390). According to a secret directive, which was passed on 27 July 1946, the USSR's Council of Ministers, led by Stalin, decided to launch the Sillamäe experimental factory in order to produce uranium oxides, vanadium, molybdenum, and nickel (Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 2, 2000, 263–7; ERA R-1.5s.133, 1–2).<sup>11</sup>

Meanwhile, the Soviet Union was interested in the East Estonian oil-shale deposits that were suitable for heating and producing electricity, oil-shale gas, shale oil, oil-shale gasoline et cetera. Olaf Mertelsmann states, before the Second World War, in spring 1941, the Soviet Union intended to increase the annual total of mining of East-Estonian oil-shale up to 8 million tons by the year 1945, which would have increased the previous amount over four times within five years, and it would have been nearly 80% of the whole state's capacity (Mertelsmann 2007: 53–4). On 15 June 1945, the USSR's People's Commissar of Coal Industry Vassiliy Vachrushev passed a governmental command concerning the reconstruction and rehabilitation of East Estonian oil-shale industry and settlements. The governmental command ordered central and local state institutions to reconstruct and build 14 mining shafts in order to raise total annual of oil-shale mining from 1.9 million tons to 7.8 million tons in the period from 1945 to 1948.

<sup>&</sup>lt;sup>10</sup> In March 1946, all the Councils of People's Commissars were renamed the Councils of Ministries (for example: the USSR's Council of Ministers, the Estonian SSR's Council of Ministers) and all the People's Commissariats were renamed Ministries (for example: the USSR's Ministry for Internal Affairs; the Estonian Ministry for Internal Affairs.)

<sup>&</sup>lt;sup>11</sup> One may find additional information on uranium production process in Sillamäe in 1946 – 1989 in: Maremäe, E.; Tankler, H.; Putnik, H.; Maalmann, I. (2003). Historical Survey of Nuclear Non-Proliferation in Estonia, 1946–1995. Tallinn: Estonian Radiation Protection Centre

The governmental command ordered Lengiproshacht to do the projects for the oil-shale mining and industrial settlements, and establish the living conditions for 20,000 convicts, 1,000 workers, technical design schools, hospitals, clinics et cetera (ERA R-1.5.104, 80–99). Nearly a month later, on 10 July 1945 the USSR's Stately Defence Committee compiled a five-year plan (1945–1950). According to the five-year plan, the annual total of oil-shale mining had to rise from 1.9 million tons up to 8.4 million tons by 1950. However, both plans (7.8 million tons by 1948 and 8.4 million tons by 1950) were too ambitious – for example, in 1948 the actual annual total mining was 3 million tons and, in 1950, – 3.54 million tons (ERA R-1992.3.11, 27, 45; ERA R-1527.2.44, 24). Both the order to increase the annual total of mining over four times within four-five years, especially taking into consideration the current situation, and the order to use 20,000 convicts reflect the Soviet Union's utter need for the oil-shale deposits.

All those facts and activities show how strategically important East Estonia was for the Soviet Union, which was a solid foundation for urban space planning in that area. Firstly, the uranium ore deposits and then the oil-shale deposits supported its importance. While strategy and tasks of the oil-shale-based uranium oxides production were apparent by 1946, and the attempts to organise a proper strategy for the rest of the oil-shale territory took place in 1947. Scale and capacity of the strategy, considered in response to the research question 3b of this dissertation, confirms and demonstrates the importance of that mineral resource for the Soviet Union.

### **3b)** Which mechanisms determined the formation of the Stalinist urban space of East Estonian oil-shale mining and industrial towns? *Publications 1, 2*

There are ideological, architectural and urban mechanisms that are driven by military and economic mechanisms. These mechanisms determined the ideological and architectural mechanisms that were used in the formation of East Estonian oil-shale mining and industry during the Soviet Stalinist period in the mid-1940s to the mid -1950s. Stalinist masterplans, urban space, the large scale, aesthetics and Corinthian style were formulated and realised by the functional needs of the occupying regime. Local officials and architects served those needs in order to realise their ambitions, adapt those needs to the local conditions, and build a prosperous future. Architects implemented the visionaries', the Soviet governors' visions.

<u>Military and economic mechanisms</u>. Those mechanisms, in turn, were determined by the role and strategic significance of East Estonia for the Soviet Union, considered in response to the research question 3a of this dissertation.

*Concerning the oil-shale-based uranium ore.* The Soviet Union's acute need for uranium ore by 1939–1940 (see the previous response) was becoming highly strategic and of military importance by 1942 and it determined the states' activity in East Estonia. On 10 November 1944, while the Soviet Union had seized Estonia, the Headquarters of High Army Command of the USSR imposed a closed two-kilometre long zone and seven-kilometre long zone on the coast of Gulf of Finland in order to guarantee the secrecy of sensitive military sites. The closed two-kilometre long zone set up restrictions for natives returning to their homes and partial deportations of inhabitants within the twenty days starting 6 December. The seven-kilometre long zone was under strict surveillance (ERA R-1.5.95, 48–9, 68–71, 85). Meanwhile, following the directive of the Presidium of the USSR's Supreme Soviet "About the Incorporation of a Populated Area Being Situated on the Eastern Bank of Narva River Into the Leningrad Oblast", that was passed on 24 November 1944, the Soviet authorities separated 29,230 hectares of the East Estonian territory including Ivangorod and made it a part of the Leningrad Oblast on 6 December 1944 (ERA R-1.5.95, 78–80).

At the same time, in November 1944, the scientific director of the Institute of Geology of the USSR Michail Altgausen visited East Estonia in order to explore the local graptolitic argillite for uranium ore (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 2002, 208–216; Vseviov, Kirde-Eesti

urbaanse, 26–27). The top-secret directive of the USSR's State Defence Committee, which was passed on 8 March 1945, dispatched Altgausen to estimate the consistency of East Estonian graptolitic argillite and the amount of its components, firstly of uranium ore (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 2002, 239–242). In March 1945, Altgausen explored the East Estonian graptolitic argillite again and submitted the detailed results concerning uranium ore, molybdenum, and glauconitic sands to Moscow twice (ERA R-1.5.104, 21, 36). According to Altgausen's memoirs, a final decision was reached at a secret meeting in the Kremlin concerning the raw materials for the nuclear industry. The oil-shale in Sillamäe seemed to contain uranium ore suitable for producing uranium oxides (Vseviov, Kirde-Eesti urbaanse, 26-27). That was vital for the Soviet Union at the beginning of the Cold War. The secret directive of the USSR's Council of the People's Commissars, which was passed on 5 May 1945, ordered both the Committee for Geology (Since 1946: the USSR's Ministry of Geology) at the USSR's Council of People's Commissars and the Estonian SSR's Council of the People's Commissars to arrange an additional, detailed and complex geological exploration of East Estonian oil-shale-based graptolitic argillite in order to use the consistency of the mineral resource as efficiently as possible in the near future (ERA R-1.5.104, 73–6). As the Committee for Geology stated, the East Estonian oil-shalebased graptolitic argillite containing uranium ore had a good outlook for producing uranium oxides (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 2002, 349–51).

The Soviet Union's need for uranium ore became urgent after the USA's nuclear attacks on Hiroshima and Nagasaki. On 20 August 1945, the USSR's State Defence Committee, which was led by Stalin, passed a secret directive. According to the directive, the Special Committee at the USSR's State Defence Committee was established. The new committee, led by the USSR's People's Commissar for Internal Affairs Lavrentiy Beria, had to supervise everything concerning the nuclear energy: the research, explorations, technical questions, technical projects for the erection of buildings, settlements et cetera. The committee, in turn, led the First General Administration at the USSR's Council of People's Commissars. The First General Administration as an executive organ was responsible for exploratory geological works, construction works (e.g. architectural works, urban planning) of industrial plants in order to use uranium nuclear energy (mining of uranium ore, producing uranium oxides et cetera) and producing atomic bombs. The First General Administration was accountable only for the Special Committee and legally distinct and functionally independent from any of other organisations or institutions (Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 1, 1999, 11–13; 18–19). Stalin led both the USSR's Council of People's Commissars as the government and the USSR's State Defence Committee at the USSR's Council of People's Commissars.

In autumn 1945 the geological exploration of the East Estonian oil-shale-based graptolitic argillite became more detailed and extended (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 2002, 385–390). The exploratory works were taken very seriously as the state was in a hurry. For example, in the conditions of the post-war acute shortage of fuels and strict limitations on fuels, even the officials had limited access to them. However, the scientific director of the Institute of Geology of the USSR Altgausen, who was appointed as the leader of the Estonian expedition by the Committee for Geology, received an unlimited amount of gasoline for his official car "...to work on special metals" (ERA R-1.5.104, 189). Meanwhile, on 22 November 1945, a state firm Lengazstroi<sup>12</sup> that belonged to Glavgaztopprom<sup>13</sup> sent the department of Architecture of the Estonian SSR a plan and an explanatory report for selecting the 78-hectare plot of land to establish a settlement for the workers of Viktor Kingissepp oil-shale processing

<sup>&</sup>lt;sup>12</sup> Leningrad State Building Enterprise of Synthetic Liquid Fuel and Gas Industry

<sup>&</sup>lt;sup>13</sup> The USSR's General Directorate of Synthetic Liquid Fuel and Gas at the USSR's Council of People's Commissars

and distillation (e.g. producing uranium oxides) factory in Sillamäe. The department approved the request (ERA R-1992.2.2, 63–67; SM Vypiska iz protokola no 2).

On 17 January 1946, the First General Administration presented a highly confidential report to Stalin. According to the report, there was no particular exploration of uranium ore in the Soviet Union up to 1944. As the report stated, by the beginning of 1946, there were 285 tons of uranium ore (as pure metal uranium) deposits ascertained in the Soviet Union. Meanwhile, the report estimated the amount of unexplored uranium ore (as pure metal uranium) deposits to be 18,390 tons in the Soviet Union, including 17,500 tons in East Estonia. The report mentioned that mineshaft building works had been launched in East Estonia and Leningrad Oblast and planning of East Estonian experimental uranium oxide factory had been started (Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 2002, 413–424). The experimental uranium oxide factory was intended to produce 100 tons of uranium oxides per year (Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 2, 2000, 313–316). According to the secret directive of the USSR's Council of Ministers, that was passed on 9 April 1946, the project for the experimental uranium oxide factory had to be finished by 1 May 1946 and the factory launched by the fourth quarter of the same year. The factory was planned to produce 200 tons of uranium oxide per year by 1950. Meanwhile, the new uranium oxide factories of East Europe, which were ruled by the Soviet Union, were intended to produce fewer uranium oxides per year: Bulgaria 50 tons, Czechoslovakia 30 tons, Eastern-Germany (Saxony) 5 tons (Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 2, 2000, 189–191). A highly secret protocol of the Special Committee that was compiled on 18 May 1946 shows that its leader Beria<sup>14</sup> ordered the First General Administration to develop a plan in ten days to launch the East Estonian oil-shale-based heating, gas, molybdenum, vanadium, and uranium oxides production. The production process had to be as efficient as possible, and the arrested German nuclear engineers had to be involved (Atomny provekt SSSR, T. 2, Atomnava bomba, 1945–1954, Kn, 1, 1999, 102–8).

On 27 July 1946, Beria mentioned in his top-secret letter to Stalin that the Sillamäe experimental uranium oxide factory would produce uranium oxides annually as follows: 15 tons in 1947, 80 tons in 1948, 150 tons in 1949, and 200 tons in 1950. In order to build the factory with a settlement, Beria proposed to use the 10,000 war prisoners that included Estonians, Latvians, Lithuanians that had served in the German army and the 16,000 other criminal prisoners (Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 2, 2000, 262–263). Those 26,000 prisoners became the first inhabitants of Sillamäe. Due to post-war reconstruction and rehabilitation, there was an acute shortage of labour and even of forced labour in the Soviet Union. For example, on 30 November 1944, Secretary General of the Central Committee of the Communist Party of Estonia Nikolai Karotamm and Chairman of the Estonian SSR's Council of People's Commissars Arnold Veimer asked Stalin to send 9,000 convicts to East Estonian oil-shale area in order to reconstruct and rehabilitate the area (ERA R-1.5.92, 23), but there were no remarkable results (ERA R-1.5.95). However, in 1946, due to the new circumstances and the strategic importance of the object, 26,000 convicts were intended to be used in the building of the factory and its settlement.

According to a secret directive, passed on 27 July 1946, the USSR's Council of Ministers, which was led by Stalin, decided to launch the Sillamäe experimental factory in order to produce uranium oxides, vanadium, molybdenum, and nickel. The factory's official name became Refinery No 7 of the First General Administration at the USSR's Council of Ministers. The directive, based on the previous documents from 1946, fixed activities for the next half of the year: details and dates for the building of the factory and settlement nearby it, the launch of the factory, assignments, and additional explorations of the East Estonian graptolitic argillite and the amount of its components, firstly of uranium ore. All uranium ores that were found both

<sup>&</sup>lt;sup>14</sup> Since 1946: the USSR's Minister for Security Affairs

from East Estonia and Leningrad Oblast had to be sent to the new factory (Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 2, 2000, 263–267; ERA R-1.5s.133, 1–2). This directive was an official launch for building both the closed factory and its settlement in Sillamäe. On 6 August 1946, following the secret directive of the USSR's Council of Ministers, that was passed on 27 July 1946, the Secretary General of the Central Committee of the Communist Party of Estonia Karotamm and the Chairman of the Estonian SSR's Council of Ministers Veimer passed a top-secret joint directive No. 039. The directive concerns the exploration of East Estonian graptolitic argillite, the experimental uranium oxide Refinery No. 7 and the territories for developing the closed settlement in Sillamäe. Although the joint directive does not mention Sillamäe, it refers to both Narva as an existing town and a coastal mining territory for the factory in East Estonia – that corresponds to the above-stated documents (ERA R-1.5s.133, 3–8; ERAF 1.5.8, 1–6).

Concerning oil-shale. The Soviet Union's need for oil-shale and oil-shale-based electricity, oil-shale gas, shale oil, oil-shale gasoline et cetera formulated the state government's command and plan concerning the annual total of mining the deposits in 1945. Though, considered in the response of the research question 3a, the command and plan are samples of stiff imperial mechanisms. Thus, on 15 June 1945, the USSR's People's Commissar of Coal Industry Vassiliy Vachrushev passed a governmental command (a thorough and detailed document with orders, each addressed to a specific all-Union official) concerning the reconstruction and rehabilitation of East Estonian oil-shale industry and settlements. The governmental command ordered both central and local state institutions to reconstruct and build 14 mining shafts in order to raise the total annual mining of oil-shale from 1.9 million tons to 7.8 million tons in the period from 1945 to 1948. The governmental command ordered Lengiproshacht to do a project for the oil-shale mining and industrial settlements and establish the living conditions for the 20,000 convicts, 1,000 workers, technical design schools, hospitals, clinics et cetera (ERA R-1.5.104, 80-99). That governmental order was followed by a five-year plan (1945 – 1950), which was passed by the USSR's Stately Defence Committee nearly a month later, on 10 July 1945. According to the five-year plan, the annual total mining of oil-shale had to rise from 1.9 million tons up to 8.4 million tons by 1950. However, both plans (7.8 million tons by 1948 and 8.4 million tons by 1950) were too ambitious – for instance, in 1948 the actual annual total of mining was 3 million tons, and in 1950 it was only 3.54 million tons (ERA R-1992.3.11, 27, 45; ERA R-1527.2.44, 24). Both the order to increase the annual total mining over four times in just four or five years and the order to use 20,000 convicts (ERA R-1.5.104, 80-99) and the decision of late-1944 concerning the seven-kilometre exclusive zone on the coast of Gulf of Finland (ERA R-1.5.95, 48-9, 68-71, 85) reflect the Soviet Union's utter need for the oil-shale deposits.

Although the works for the first masterplan of East Estonian oil-shale area started in early 1946, the first attempts to organise the territory took place in mid-1947. On 20 July 1947, the Estonian SSR's Council of Ministers passed a directive "About the Organisation of Project-Planning Works for the Oil-Shale Region". According to the directive the Department of Architecture of the Estonian SSR compiled another document "Technical-Economic Principles for the Development of the Estonian SSR's Region Where Oil-Shale Occurs" that does not concern Sillamäe. The technical-economic principles were submitted to Moscow in November 1947 (ERA R-1992.1.137, 48, 90–4, 114, 115, 122, 130, 138, 158–60).

In 1948–1950 the Department of Architecture of the Estonian SSR compiled with its Planning and Design Office, the design institute "Estonproyekt" a large-scale secret project "Planning Task for Industrial and Urban Development of the Estonian SSR's Region Where Oil-Shale Occurs" which was printed in 1951 (Figure XIII; Publication 1: Figure 2). The secret project followed the directive of the USSR's Council of Ministers, and it was passed on 21 May 1948. That directive, in turn, followed the directive of the USSR's Council of the People's Commissars and the USSR Central Executive Committee "About the Compilation and Approval of Planning Projects for the Socialist Reconstruction of the Soviet Union Towns and Other Settlements" that was passed on 22 July 1933. The directive established that all the construction and building in the regions that were or had been planned to have sole or grouped enterprises, towns and settlements serving those enterprises, and that had shared transport, energetics, and mineral resources, had to be organised based on the regional development plan. The secret project was the successor of the document "Technical-Economic Principles for the Development of the Estonian SSR's Region Where Oil-Shale Occurs" and does not concern Sillamäe or uranium oxides production (ERA R-1992.3.11, 1, 27, 45, 58; ERA R-1527.2.44, 5–6).

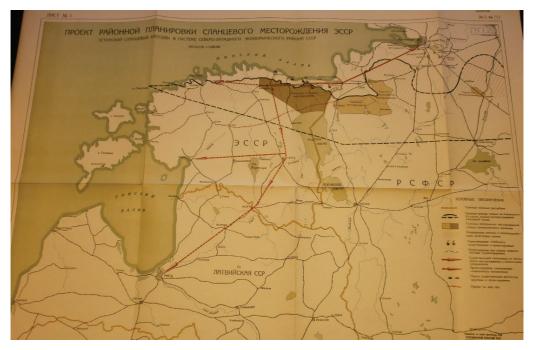


Figure XIII. Planning task for the industrial and urban development of the Estonian SSR's region where oil-shale occurs by the Department of Architecture of the Estonian SSR with its design institute *"Estonproyekt"*, 1951. Dark brown colour in East Estonia marks the oil-shale deposits that are useful for the industry. Light brown colour marks the same in Leningrad Oblast. The black line and the black dashed line mark the whole territory of the oil-shale deposits. The red line marks the existing oil-shale gas pipe, and red dashed line the future oil-shale gas pipes (ERA R-1527.2.44, sheet 1)

The secret project seeks economic efficiency and high productivity for the East Estonian oil-shale territory with an area of 4000 km<sup>2</sup> (from Rakvere to Narva, 100 km-s, and from Gulf of Finland 40 km-s to South) during 1948 to 1970. The territory contains oil-shale towns (for example, Kohtla-Järve, Jõhvi, Ahtme, Kiviõli) and smaller settlements (for example, Sompa, Viivikonna, Kukruse). The project does not concern the textile industry town Narva and the closed uranium-oxide producing town Sillamäe. It contains plans and an explanatory report consisting of sections such as cartography, climate and nature conditions, water resources, forestry, land use, industry, energetics, agriculture, transport and network of roads, population and populated areas, water supply and sewerage, recreation, sanitary characteristics, and the organisation of urban and architectural planning. According to the 1949 staff working document and the official 1951 secret project, the annual total mining of oil-shale had to rise from 3 million tons in 1948 and 3.54 million tons in 1950 up to 25 million tons by 1970 (ERA R-1992.3.11, 27,

45. 58: ERA R-1527.2.44. 24). On 13 March 1954, in a staff working document experts of the GOSPLAN<sup>15</sup> insisted on the annual total of oil-shale mining to rise to 30 million tons by 1970 (ERA R-1992.3.27, 4–8). The official estimate of the 1951 project put the amount of unexplored oil-shale deposits between 3.6 and 6.0 billion tons in East Estonia. The report proposes based on estimated deposits of 3.7 billion tons and annual total mining of 12 million tons that the deposits should last for 300 years (ERA R-1527.2.44, 17). On 26 April 1949 the staff working document proposed the increase in the population of the towns and settlements including five new towns from 60,000 people in 1948 up to 240,000 people by 1970 (ERA R-1992.3.11, 28). Eight months later, on 7 December 1949, the number for 1970 was increased up to 300,000 people in the document (ERA R-1992.3.11, 56). The official 1951 project proposes the increase in population from 58,400 people in 1948 up to 305,000 people by 1970 (ERA R-1527.2.44, 36, 41). However, in the 1954 staff working document, the experts of the GOSPLAN mention the increase in population from 86,000 people in 1954 up to 300,000 people by 1970 (ERA R-1992.3.27, 5). According to the official 1951 project, the annual total mining of oil-shale had to rise for up to ten times and the population up to five times within 22 years. All the above mentioned defined the needs for urban planning in the oil-shale mining and industrial region.

When in October 1948, there were six towns and fourteen settlements counted on the 4000 km<sup>2</sup> oil-shale area, then according to the official 1951 project, the same area was planned to have ten towns (five new ones and five existing ones, including the unification of two towns) by 1970. The existing towns and settlements were intended to reorganise, regroup and enlarge the oil-shale area in order to increase the economic efficiency and high productivity. The section on the organisation of urban and architectural planning contains analyses of existing towns and settlements, and planning of new ones, arrangement of oil-shale industry, perspectives of existing towns and settlements, and arrangement and building of new towns (ERA R-1527.2.44, 35–41, 44–50). The staff working documents contain the density of the population and the number of storeys for the houses of towns to be completed by 1970 (ERA R-1992.3.11, 8, 32, 58, 59).

Meanwhile, the importance of East Estonian oil-shale area improved the industrial perspectives for the whole Estonia - the aspect that, in turn, indirectly influenced the formation of Stalinist urban space of East Estonian oil-shale mining and industrial towns. For instance, the perspective oil-shale gas as the background, the official 1951 report considers the Estonian limited natural gas deposits, while variable in quality, worth to be researched the same document mentioned crude oil prospecting in Estonia (ERA R-1527.2.44, 20). The oil-shale-based industry of East Estonia seemed prosperous for the Soviet Union. Suddenly the oil-shale deposits and oil-shale-based uranium ore deposits of East Estonia and even all of Estonia inspired the local authorities' ambitions, as well. On 28 November 1948, the Secretary-General of the Central Committee of the Communist Party of Estonia Karotamm wrote a letter to the USSR's Minister of Geology Ilya Malyshev and insisted him to intensify crude oil prospecting all over Estonia in the nearest future (in 1949). Two weeks later, Malyshev responded that Estonian natural gas deposits were limited and variable in quality, and crude oil prospecting had been taken place in some Estonian localities without positive results. However, he admitted there should have been some potential crude oil deposits in South Estonia (EARF 1.14a.17, 1–3, 9, 10). The question of crude oil increased the importance of oil-shale areas in East Estonia even higher. Such political and economic local ambitions as one kind of mechanisms boosted the formation of East Estonian oil-shale mining and industrial towns by local authorities.

<u>Ideological, architectural and urban mechanisms</u>. As the research shows the Department of Architecture of the Estonian SSR and its leader Arman processed the masterplans and construction plans of all local towns, including the masterplans and construction plans of the

<sup>&</sup>lt;sup>15</sup> The USSR's State Planning Committee.

East Estonian oil-shale mining and industrial towns (ERA R-1992.2.12, 44–64; ERA R-1992.2.1; ERA R-1992.2.31; ERA R-1992.2.22; ERA R-1992.2.41). What was the actual role of the Department of Architecture of the Estonian SSR as the local branch of the USSR's State Committee of Architecture?

Establishing the USSR's State Committee of Architecture, as stated in section 2.2 (The First Conceptual Reference Point) of this dissertation, took place as a result of the 11th plenum of the Governing Board of the Union of Soviet Architects of the USSR, which was held on 16 to 18 August 1943. As stated in the section 2.2, when the 10th plenum was focused on estimating the destructions of the war, seeking opportunities for the reconstruction and rehabilitation, popularisation of architectural monuments and aesthetics, then the 11th plenum had shifted the focus on the shortcomings of the actual practice of reconstruction and rehabilitation, and on the need for guick and efficient solutions. What caused it? On the one hand, as stated in the section 2.2, the pre-war 1930s ideals and principles of urban planning that were driven by an official ideology were disrupted by the shortcomings (see section 2.2) such as the reality of the Soviet Union town planning. The reality that had become extremely highlighted during the war situation. That reality caused the fear of failing to establish a particular, sustainable Soviet socialist space, which would be its own urban space. That fear of failure, in turn, lead to the fear of non-existence. On the other hand, the state had put pressure on the Union of Soviet Architects of the USSR to guarantee quick, thorough and efficient results in the field of restoration of industrial centres, towns, and settlements in the recaptured western areas due to acute need for uranium ore which had become strategically and military important in 1942, when the Soviet Union realised that Germany, Great Britain and the USA were trying to produce a uranium reactor and a uranium-based atomic bomb. The top-secret administrative order of the USSR's State Defence Committee that was passed on 28 September 1942, concerning the production of a uranium-based bomb or a uranium-based fuel formulated a new doctrine for the restoration of industrial centres, towns, and settlements in the recaptured western areas.

The Soviet Union was in a race against time. Urban planning became both political and militant issue. The state needed architects and specialists to embody the visions of power as the state. East Estonian oil-shale had become one of the focal points of the Soviet state. Due to the ongoing war, the shift was caused by militant reasons, connected with both the results of the war and the post-war situation in Europe and the World.

On 29 September 1943, the USSR's Council of People's Commissars and the Communist Party of the Soviet Union established the USSR's State Committee of Architecture at the USSR's Council of People's Commissars (as the USSR's Stately Defence Committee at the USSR's Council of People's Commissars). The USSR's State Committee of Architecture under the direct authority of the USSR's Council of People's Commissars became the highest executive power of the Soviet urban planning and architecture. The institution administrated and controlled all questions concerning urban planning and architecture, including building. The tasks of the USSR's State Committee of Architecture are stated in section 2.2 (The First Conceptual Reference Point) of this dissertation. The USSR's State Committee of Architecture, which was led by architect Arkadi Mordvinov, had to establish the local branches under the direct authorities of the local Councils of People's Commissars. One of them was the Department of Architecture of the Estonian SSR at the Estonian SSR's Council of People's Commissars (Iz istorii sovetskoi arhitektury 1941–1945 gg. 1978: 95–102, 109). Establishing the USSR's State Committee of Architecture, on the one hand, enforced the 1930s pre-war ideals and principles of urban planning, which were driven by an official ideology, and on the other hand, it founded the new post-war ideas and principles that were supplemented by Mordvinov's seven principles.

The Department of Architecture of the Estonian SSR had the highest executive power of urban planning and architecture on territory of the Estonian SSR, including in the planning of

East Estonian oil-shale mining and industrial towns Jõhvi, Kohtla-Järve, Ahtme, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme, Viivikonna and closed Sillamäe.

However, the institution's power covered even the planning of Ivangorod. In autumn 1948 architect Keppe, who was working at the Planning and Design Office of the Department of Architecture of the Estonian SSR, compiled a masterplan for both Narva and Ivangorod. Ivangorod as a previous East Estonian town nearby Narva was after being incorporated into Leningrad Oblast in 1944 considered to still have connections with the Estonian SSR (CGANTD SPb R-338.12.7, 160–162).

According to the 1949 staff working documents, the Department of Architecture of the Estonian SSR proposed in the "Technical Economic Principles for the Development of the Estonian SSR's Territory Where Oil-Shale Occurs", that was passed in 1947, to use three-storeyed houses with the density of 200 people/ha (10% of the housing stock in towns with the population over 15,000 people), two-storeyed houses with the density of 100–150 people/ha (60–70% of the housing stock in towns with the population over 15,000 people; 65–75% of the housing stock in towns with the population over 15,000 people; 25–35% of the housing stock in towns with the population over 15,000 people; 25–35% of the housing stock in towns with the population under 15,000 people) (ERA R-1992.3.11, 7, 58). However, the USSR's State Committee of Architecture suggested the Department of Architecture of the Estonian SSR to increase the percentage of three-storeyed houses and in addition use four-storeyed houses to increase the density of the population to 250 people/ha for two- to three-storeyed houses and to 150 people/ha for one- to two-storeyed houses (ERA R-1992.3.11, 58, 59).

In the official 1951 secret project, in order to increase the economic efficiency and the high productivity of the oil-shale area, the Department of Architecture of the Estonian SSR proposed to intensify the housing. Firstly, by building two- to three-storeyed houses in all towns and secondly, by increasing the percentage of two- to three-storeyed houses up to 70–80% of the housing stock, while decreasing the percentage of one-storey houses down to 20–30% of the housing stock. Such a proposal aimed to decrease the territory under the settlements from 5,000 ha to 3,300 ha, which means 1,700 ha more for the oil-shale mining while increasing the overall amount of population on the territory with the area of 4000 km<sup>2</sup> by 1970 (ERA R-1527.2.44, 42).

What was the result of such a proposal that formulated the official policy for the urban planning of the territory? In staff working documents, the Department of Architecture of the Estonian SSR pointed out the failed urban planning of Kohtla-Järve, which had located the mining shafts too close and deeply polluted their soil (proposal to decrease the existing amount of the population from 15,000 people to 5,000 people), but the USSR's State Committee of Architecture suggested to save the situation by intensifying the housing (ERA R-1992.2.22, 20-44; ERA R-1992.3.11, 31, 58). In 1951 an official secret project, the Department of Architecture of the Estonian SSR exposed Kohtla-Järve with its new satellite Kohtla with a population of 19,000 people and 17,000 people, accordingly, altogether 36,000 inhabitants by 1970 (ERA R-1527.2.44, 41, 46). Probably, due to the possibility to get more land of previous mining areas and intensifying the housing (caused by the intensified industry), the amount of population of Kohtla-Järve reached 40,464 (51,200, with the Kohtla-Järve agglomeration (since 1960) without Jõhvi and Ahtme) by 1959 (Vseviov 2002: 44; Eesti Statistika, 11 March 2019<sup>16</sup>). Meanwhile, probably in connection with such a development, building of the new town Kohtla, designed by Lengiproshacht, was cancelled (Figure VIII) (EAM 3.1.12; EAM 3.1.16; EAM 3.1.19). The 1951 official secret project indicates to the decrease in the population of Sompa, from

<sup>&</sup>lt;sup>16</sup> Eesti Statistika, the 1959 census. Due to long data processing, the 1959 census results show the figure of the agglomeration as well, established in 1960

15,000 people to 9,000 people, while one-and two-storeyed houses were replaced with two- to three-storeyed houses (ERA R-1527.2.44, 46). Such a change caused a withdrawal of three-fourths of the masterplan, which was designed by Lengiproshacht (Publication 1: Figure 3) (EAM 3.1.46; EAM 3.1.248). Also, the three-fourths of the Kiviõli masterplan, that was designed by Planning and Design Office, design institute "Estonproyekt" of the Department of Architecture of the Estonian SSR, was discarded, (ERA T-14.4-6.941) (Figure IX). The same was the reason for withdrawing two-thirds of the masterplan designed by Lengiproshacht for Ahtme and a half of the masterplan designed by Lengiproshacht for Viivikonna (Figures VII, XIV) (EAM.3.1.50; ERA R-3.3.3148, 18).

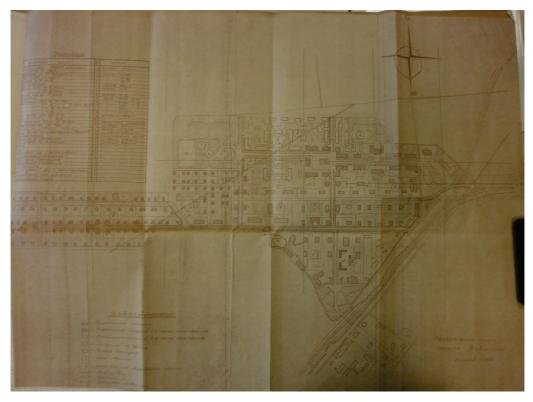


Figure XIV. Masterplan of Viivikonna, 1949, by Lengiproshacht. On the right: the mostly built part of the town. On the left: the mostly unbuilt part of the town with the central square (in the middle right) at the crossing of main streets (ERA R-3.3.3148, 18)

The aim to decrease the territory under the settlements from 5,000 ha to 3,300 ha in order to get 1,700 ha for oil-shale mining, while increasing the overall amount of the population, formulated a pattern for the urban planning and the urban space of the territory. East Estonian oil-shale mining and industrial towns acquired compact and city-like housing-stock, consisting of dominant apartment buildings and monumental public buildings that form functional and stately urban ensembles near the industrial complexes.

Those were the ideological, architectural and urban mechanisms, driven by the military and economic mechanisms, as well as the local authorities' (Karotamm, Veimer) eagerness and personal ambitions, used in the formation of East Estonian oil-shale mining and industrial during the Soviet Stalinist period, in the mid-1940s to the mid-1950s. The mechanisms defined by the functional needs of the Soviet state and power formed the Stalinist masterplans, the urban

composition and space, and the large scale, and formulated the aesthetics and Corinthian style of East Estonian oil-shale mining and industrial towns.

# **3c)** What was the role and influence of Harald Arman, head of the Department of Architecture of the Estonian SSR, in the formation process of East Estonian oil-shale mining and industrial towns? *Publications 1, 2, 3, 4*

Estonian architect Harald Arman-led Department of Architecture of the Estonian SSR, which was a local branch of the USSR's State Committee of Architecture, had a decisive impact on the formation of oil-shale mining and industrial towns (Publication 1: Figure 1). As stated in response to the research question 3b, the founding of the Department of Architecture of the Estonian SSR at the Estonian SSR's Council of People's Commissars followed the establishment of the USSR's State Committee of Architecture in autumn 1943. The USSR's State Committee of Architecture under the direct authority of the USSR's Council of People's Commissars became the highest executive power of the Soviet urban planning and architecture. The institution, led by Mordvinov, administrated and controlled all the questions concerning urban planning and architecture, including building. The Department of Architecture of the Estonian SSR, led by Arman, had similarly the highest executive power of urban planning and architecture on territory of the Estonian SSR (in addition see the response to the first research question, concerning Arman's activity in the mid-1940s to the mid-1950s), including in the planning of East Estonian oil-shale mining and industrial towns Jõhvi, Kohtla-Järve, Ahtme, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme, Viivikonna and closed Sillamäe. The 34-year-old head of the Department of Architecture of the Estonian SSR returned to Estonia in autumn 1944.

Meanwhile, in mid-1944 Arman had begun to organise the restoration of Estonian towns while still based in the Soviet Union (Gorich 1946: 4). The Department of Architecture of the Estonian SSR, as a local leading architectural institution, sometimes convened the Architectural Council of the Estonian SSR. The council consisted of architects from the Department of Architecture of the Estonian SSR, the Union of Soviet Architects of the Estonian SSR, officials and specialists. Arman was the leader of the council.

As documents (protocols, correspondence et cetera), which in most of the cases are signed by Arman, show the Department of Architecture of the Estonian SSR, that was led by him, was deeply involved in the urban planning of East Estonian oil-shale towns, including closed Sillamäe, and played a decisive role with its full measure of authority. For example, as stated in the response to the research question 3b, on 22 November 1945, a state firm Lengazstroi that belonged to Glavgaztopprom sent to the Department of Architecture of the Estonian SSR a plan and an explanatory report for selecting a 78-hectare plot of land to establish a settlement for the workers of the Viktor Kingissepp uranium oxide production factory<sup>17</sup> in Sillamäe. The department, which was led by Arman, approved the request (Figure XV) (ERA R-1992.2.2, 63–67; SM Vypiska iz protokola no 2).

<sup>&</sup>lt;sup>17</sup> Since 1946, officially the Refinery no 7 (response to the research question 3b; Publication 1); sometimes called factory no 1 (for instance, SM Generalny proekt planirovki, NII-9, 1947)

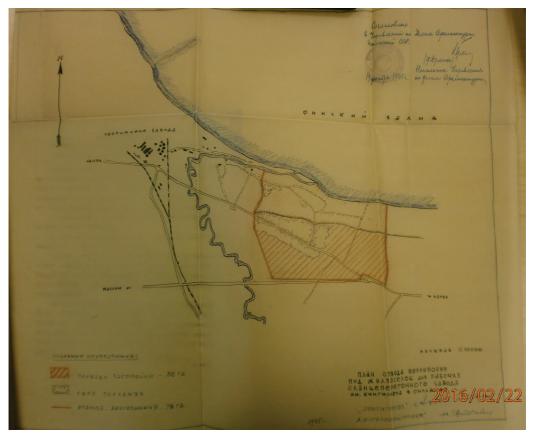


Figure XV. Lengazstroi's map, concerning the establishment of a settlement (territory inside the light brown lines, including the hatched area) for the workers of uranium oxide production factory (on the top left) in Sillamäe. On the top right: Arman's signified approval, 19 December 1945 (ERA R-1992.2.2, 66)

In 1947, under Arman's guidance, the Department of Architecture of the Estonian SSR got an exceptional right from the USSR's State Committee of Architecture to use individual designs instead of standardised designs for the buildings in the planning-task of the oil-shale region (ERA R-1992.1.137, 47, 72). Moreover, it was Arman who sent a signed reference draft of a directive "About the Organisation of Project-Planning Works for the Oil-Shale Region" to Veimer, who was the leader of the Estonian SSR's Council of Ministers (ERA R-1992.1.137, 89-91). The directive "About the Organisation of Project-Planning Works for the Oil-Shale Region" was passed by the Estonian SSR's Council of Ministers on 20 July 1947 (ERA R-1992.1.137, 89–91, 114). According to the directive the Department of Architecture of the Estonian SSR compiled a document "Technical-Economic Principles for the Development of the Estonian SSR's Region Where Oil-Shale Occurs". The technical-economic principles were submitted to Moscow in November 1947 (ERA R-1992.1.137, 48, 90-4, 114, 115, 122, 130, 138, 158-60). In 1948-1950 the Department of Architecture of the Estonian SSR including its design institute "Estonproyekt" compiled a huge secret project "Planning Task for Industrial and Urban Development of the Estonian SSR's Region Where Oil-Shale Occurs", which was printed in 1951, and it is a successor of the "Technical-Economic Principles for the Development of the Estonian SSR's Region Where Oil-Shale Occurs" (ERA R-1992.3.11, 1, 27, 45, 58; ERA R-1527.2.44, 5-6). Both documents with staff working documents are analysed in response to the research question 3b.

The 1947, 1949, 1951 and 1954 documents concerning the development of the oil-shale region as the background, the Department of Architecture of the Estonian SSR processed the masterplans, designed by Lengiprosacht, thoroughly. Even the Department of Local Air Defence of the Estonian SSR's Ministry for Internal Affairs and the Department of Local Air Defence of the USSR's Ministry for Internal Affairs needed approvals from the Department of Architecture of the Estonian SSR. That concerned the unbuilt Kohtla (ERA R-1992.1.137; ERA R-1992.2.41; ERA R-1992.3.3, 3, 14), Ahtme (ERA R-1992.1.137; ERA R-1992.3.3, 4, 11, 15, 21, 30), Jõhvi (ERA R-1992.1.137; ERA R-1992.3.3, 5, 17, 18, 29), Sompa (ERA R-1992.1.137; ERA R-1992.3.3, 7, 13, 20), Kukruse (ERA R-1992.3.3, 19) and Viivikonna (ERA R-1992.2.44, 103-46; ERA R-1992.2.63, 214–48; ERA R-1992.2.76, 100–7; ERA R-1992.3.3, 22). The same also concerned Kiviõli that the department itself designed (ERA R-1992.1.137; ERA R-1992.2.41; ERA.R-1992.3.3, 43, 44). Masterplan of Kohtla-Järve, designed by Lengorstroyproyekt, was also thoroughly processed by the Department of Architecture of the Estonian SSR (ERA R-1992.1.137; ERA R-1992.2.1, 6–8; ERA R-1992.2.22, 20-44; ERA R-1992.2.41, 126-51; ERA R-1992.3.3, 16, 17, 27, 28). Even the masterplan of closed Sillamäe, designed by Lengorstroyproyekt with the Soviet nuclear industry, was thoroughly processed by the Department of Architecture of the Estonian SSR and its leader Arman (ERA R-1992.2.12, 44-64; ERA R-1992.1.137, 5, 16; ERA R-1992.3.3, 9, 10, 33, 34; SLV Detalny proyekt, Tom I, GSPI-12, 1948: 24 (on 5 June 1948)).

However, as stated in response to the second research question, the more complex and challenging masterplans, designed by Lengorstroyproyekt, received more of Arman's attention in comparison with the regular and straightforward grid-based masterplans, designed by Lengiproshacht. For example, as a result of processing masterplans of Sillamäe and Kohtla-Järve, both towns' Stalinist central gridlines have many compositional similarities with the Stalinist central gridlines of Tallinn and Pärnu, which were designed by Arman (see responses to the research questions 1 and 2). Kohtla-Järve's city centre is compositionally similar to the Tallinn Cultural Centre and the Pärnu Oblast Centre complex. The design of the four-storey houses at the crossing axes of Victory Boulevard and Rahu Square in Kohtla-Järve, allows us to speculate on how the centre of Tallinn could have looked like if it had also been designed following the orthodox Stalinist principles.

As stated in response to the research question 2, the Department of Architecture of the Estonian SSR processed at least the masterplans of 1946-1948. Arman designed the masterplans for Tallinn and Pärnu through the mid-1940s and the early-1950s. It would be logical that the Stalinist central gridlines of Tallinn and Pärnu were inspired by the compositions of Kohtla-Järve and Sillamäe, designed by Lengorstroyproyekt. However, it seems to be the opposite. Arman crossed the converging axis with a boulevard already in the 1945 masterplan of Tallinn and the Tallinn Cultural Centre composition. He reused the solution in the 1952 Pärnu Oblast Centre composition. Neither the Sillamäe 1947 masterplan nor the 1948 masterplan used crossing of converging axes and a boulevard – but those are clearly visible on the masterplans of 1949, 1950 and 1958 (SM Generalny proekt, NII-9, 1947; SLV Detalny proekt, Tom I, GSPI-12, 1948; SM Detalny proekt, Albom-foto, GSPI-12, 1948; SLV Proekt planirovki, GSPI-12, 1949; ERA R-1.5s.212, 10–4; SLV Generalny plan, zakaza 229, 1958). Even more, the location of the stadium in those three masterplans resembles his mid-1940s and early-1950s Tallinn masterplans, but in the 1947 masterplan the stadium is visible ((see response to the research question 2) (Figure XII; Publication 1: Figures 5, 8–10). Arman actively processed the masterplans, at least up to the summer of 1949, and was in touch with the following masterplan versions through correspondence with Lengorstroyproyekt. For example, the 1948 masterplan (Detalny proyekt, Tom I, GSPI-12, 1948) has an additional version from 1949 (Proyekt planirovki, GSPI-12, 1949), which is even more influenced by Arman (SM Generalny proekt, NII-9, 1947; SLV Detalny proekt, Tom I, GSPI-12, 1948; SM Detalny proekt, Albom-foto, GSPI-12, 1948; SLV Proekt planirovki,

GSPI-12, 1949). The same is visible in the 1950 masterplan with the top-secret regulations of the Estonian SSR's Council of Ministers (ERA R-1.5s.212, 10–4). The 1958 masterplan of Sillamäe reflects the established situation and the ideas of enlarging the town (SLV Generalny plan, zakaza 229, 1958).

It seems as masterplans, designed by Lengorstroyproyekt for Kohtla-Järve and for the closed uranium-oxide producing Sillamäe, had been under Arman's heightened attention. In 1949 the Department of Architecture of the Estonian SSR awarded first prize to Sillamäe for excellent and comprehensive implementation of the masterplan (ERAF 1.58.13, 14–5).

## 4) What are the urban planning principles, patterns and the compositional identity of East Estonian oil-shale mining and industrial towns' urban space? *Publication 1*

As stated in the answer to the research question 1, the local urban space, developed in the period from 1944 to 1955, which is formed by similarities and continuities, as well as shifts instead of disruptions, and fused the Soviet urban space paradigms with the local urban space design of the 1930s independence period, influenced the urban space of East Estonian oil-shale mining and industrial towns.

As a result of processing masterplans and designing documents for the East Estonian oil-shale mining and industrial towns, designed mostly by Lengorstroyproyekt and Lengiprosacht, and compiling the official papers "Technical-Economic Principles for the Development of the Estonian SSR's Region Where Oil-Shale Occurs" (1947) and "Planning Task for Industrial and Urban Development of the Estonian SSR's Region Where Oil-Shale Occurs" (1947) and "Planning Task for Industrial and Urban Development of the Estonian SSR's Region Where Oil-Shale Occurs" (1948–1950; 1951) with the staff working documents (1949, 1954), the Department of Architecture of the Estonian SSR, led by Harald Arman, established the urban planning principles for the East Estonian oil-shale mining and industrial towns.

The documents do not concern the textile industry town Narva and the closed uranium-oxide producing town Sillamäe. In those documents, whilst seeking the utmost economic efficiency and high productivity for East Estonian oil-shale territory with the area of 4000 km<sup>2</sup> for the period from 1948 to 1970, the Department of Architecture of the Estonian SSR decreased the territory under settlements (towns and smaller settlements), designed by Lengorstroyproyekt and Lengiprosacht, from 5,000 ha to 3,300 ha, in order to get 1,700 ha extra for oil-shale mining, and meanwhile increasing the general amount of the population (ERA R-1527.2.44, 42, 44, 46). When in the earlier planning task documents the population over the 4000 km<sup>2</sup> area was intended to rise from 60,000 people in 1948 up to 240,000 people by 1970, then in the final versions the figure for 1970 was increased to 300,000 – 305,000 people (ERA R-1992.3.11, 28, 56; ERA R-1527.2.44, 36, 41; ERA R-1992.3.27, 5). The annual total mining of oil-shale had to rise from 3 million tons in 1948 and 3.54 million tons in 1950 up to 25-30 million tons by 1970 (ERA R-1992.3.11, 27, 45, 58; ERA R-1527.2.44, 24; ERA R-1992.3.27, 4-8). The official 1951 project proposes based on the estimated oil-shale deposits of 3.7 billion tons and annual total mining of 12 million tons that the deposits should last for 300 years (ERA R-1527.2.44, 17). Thus, on behalf of the utmost economic efficiency and high productivity for East Estonian oil-shale territory of 4000 km<sup>2</sup> the annual total mining of oil-shale had to rise for up to ten times and the population up to five times in 22 years. As stated in answer to the research question 3b, on behalf of economic efficiency and high productivity the increase in the general population was planned through optimising the population of these towns (decreasing in Ahtme, Sompa, increasing in Kohtla-Järve, discarding Kohtla) and intensifying the housing-stock. The optimisation, in turn, was caused by the occurrence of oil-shale deposits in certain territories nearby and under the towns.

At the same time, for instance, it seems that Stalinist urban ensembles of the centres of Sillamäe and Kohtla-Järve are designed to be disproportionately big relative to their population

size. The Soviet architect's handbook of 1952, that was mandatory for all Soviet architects. suggested the need to design a one-hectare sized central square for the town with a population of 50,000 or more (Kratkii spravochnik arhitektora 1952: 20–21). In 1950 the population of Sillamäe could be estimated to be over 12,500 and of Kohtla-Järve over 17,000 (Vseviov 2002: 35, 48; Zabrodskaja 2005: 24, 25; ERA R-1527.2.44, 41, 46). Using the measured guidelines contained in the handbook and using the geotechnical data of Land Information Web Map Application of the Land Board of the Republic of Estonia, it is possible to derive approximate numbers of the planned populations for Sillamäe and Kohtla-Järve (Maa-amet 13 June 2019). A 1.68-hectare Central Square of Sillamäe implied a prospective population of 84,000 and the 2.5-hectare Rahu Square of Järve suggested a population of 125,000 for Kohtla-Järve. According to the 1959 census population of Sillamäe was 8,210 and of Kohtla-Järve 40,464 (51,200, while including its satellites, except Ahtme and Jõhvi, into the Kohtla-Järve agglomeration) (Eesti Statistika 11 March 2019). The planning task documents as the background, that on the behalf of economic efficiency and high productivity, propose an accelerated increase of population through optimising the population of towns and intensifying the housing-stock, the Stalinist urban ensembles of centres of Sillamäe and Kohtla-Järve met the standards of the Soviet architect's handbook of 1952, since the above-derived figures seem in proportion with the amount of general population of the 4000 km<sup>2</sup> by 1970. As stated above, the planning task documents do not concern Sillamäe, however, due to Arman's active processing of the town's masterplans and design documents, the conclusion is valid in that town, as well. Consequently, the towns small by their territory, have central Stalinist urban ensembles with central squares, that are not disproportionately big relative to their planned population size. These towns were designed according to the standards.

As a result, the Department of Architecture of the Estonian SSR, led by Harald Arman, formulated the principles and a pattern of urban planning and urban space of East Estonian oil-shale mining and industrial towns that were defined as towns, that avoid remarkable enlargements, have compact and city-like intensified housing-stock, that consist of dominant apartment buildings and monumental public buildings that all together form a functional stately urban ensembles nearby industrial complexes. Those principles were implemented in Sillamäe, as well, due to Arman's active processing of the town's masterplan and design documents.

Concerning the Pärnu Oblast Centre (see response to the research question 1). As a result, Arman designed (1952) Pärnu, with a population of over 20,000 people, to include a 2.5-hectare central square.<sup>18</sup> Pärnu as a highly valued pre-war resort was intended to be restructured into both an oblast capital and industrial town in the early-1950s. Thus, taking into account the urban planning and urban space pattern, introduced in the planning of East Estonian oil-shale mining and industrial towns, Arman presumably planned to implement the same pattern in Pärnu, which was relatively small by its territory but planned for the population of 125,000 people. According to the 1959 census population of Pärnu was 41,029 (63,396, when including its suburban areas) (Eesti Statistika 11 March 2019). Pärnu was planned to have compact and city-like intensified housing-stock, consisting of dominant apartment buildings and monumental public buildings that all together form functional stately urban ensembles near industrial complexes. Consequently, the Pärnu Oblast Centre, including the central square, was designed according to the standards and is not disproportionately big relative to its planned population size.

The pattern has been influenced by the Soviet Stalinist town planning practices and principles (for example, the seven principles of the socialist urban planning formulated by Baburov and authorized by the 3rd plenum of the Governing Board of the USSR's Soviet Architects' Union,

<sup>&</sup>lt;sup>18</sup> See geotechnical data of Land Information Web Map Application of the Land Board of the Republic of Estonia (Maa-amet 13 June 2019)

held on 7 to 11 July 1938), the Estonian town planning principles and practices of the Soviet Stalinist period, between 1944 and 1955, the practices of Estonian 1930s independence period – that all follow the Beaux-Arts-based City Beautiful movement samples. Taking into account the above-stated analyses (see responses of all the research questions), it is evident that the pattern, introduced in East Estonian oil-shale mining and industrial towns, having in parallel an impact on urban planning and urban space of Pärnu, demonstrates that identity of East Estonian oil-shale mining and industrial towns is a natural part of Estonian Soviet Stalinist period, urban planning and urban space and is equal to that.

Consequently, the Stalinist urban ensembles in the centres of East Estonian oil-shale mining and industrial towns, as well as in Pärnu, are following the contemporaneous standards and are not megalomaniac.

For comparison, while the area of the Tallinn Central Square was 2 hectares, then since 1949, after renaming it the Stalin Square, the territory of the square was considered more significant, encompassing 5.5 hectares. Thus, according to the standards of the Soviet architect's handbook of 1952, and using the geotechnical data of Land Information Web Map Application of the Land Board of the Republic of Estonia, the planned population of the capital of the Estonian SSR was approximately 275,000 (Maa-amet 13 June 2019). According to the 1959 census, the population of Tallinn was 281,714 (Eesti Statistika 11 March 2019).

#### Conclusion

Stalinist urban ensembles of the centres of Kohtla-Järve, Sillamäe, Ahtme, Sompa, Jõhvi, Kukruse, Kiviõli, Kohtla-Nõmme and Viivikonna as the core of architectural urban space of those East Estonian oil-shale mining and industrial towns is formed based on the Soviet Stalinist town planning principles and practice, in the 1930s to the mid-1950s, the Estonian town planning principles and practice, during the Soviet Stalinist period, in 1944 to 1955, and the Estonian town planning practice during the independence period of the 1930s.

Estonian post-war Stalinist period urban space design and urban planning had much in common with the Estonian 1930s independence period. On the one hand, Estonian post-war urban space was as a replacement of the 1930s independence period legacy and establishment of new urban design according to the Soviet ideology currently in force. On the other hand, the Estonian town planning principles and practice of the Soviet Stalinist period, in 1944 to 1955, and the 1930s independence period practice have similarities and continuities, as well as shifts instead of disruptions. As is revealed by comparing the Estonian town planning from the 1930s with the Soviet period, the Soviet Union Stalinist principles were similar to the local principles, with some differences in the scale of the building and the construction materials used. Architecture, urban space, and public space as the most suitable to represent the state and the power received much attention from the occupying Soviet Union. Estonian architecture and urban space, both in practice and in unrealised ideas, as the Lefebrian Representational Space was to be "corrected and adjusted" by the Soviet Union with the means of the Representation of Space. Local architecture and urban space as the carriers of public memory were to retreat and the memory purified by the occupying regime. Leaning on the Soviet Stalinist Urban planning and urban space practice and principles, the Estonian post-war urban planning, urban space and architecture faced different circumstances and challenges. They needed to match the official Soviet ideology, but keep the legacy of its previous practice. That is a case of ensotopia, which is more suitable to describe the situation, in comparison with the Foucault's heterotopia. One may see this phenomenon in case studies of the Tallinn Central Square, the Tallinn Cultural Centre and the Pärnu Oblast Centre, but also the East Estonian oil-shale mining and industrial towns. For instance, similarly to the 10-kilometre Moscow south-west axes, the prolongated 2-kilometre Tallinn Cultural Centre axes follow the aesthetic logic, principles and practice of the Beaux-Arts-based City Beautiful movement – both through the Moscow example and through the Estonian 1930s independence practice. Thus, the latter one, as a personal and local issue, became reinforced in the mid-1940s to the mid-1950s and with the Soviet Stalinist town planning principles and practice (the 1930s to the mid-1950s) it formed the Estonian town planning principles and practice of the Soviet Stalinist period (between 1944 and 1955). Despite the occupying regime's attempts to shift the local memory, to "re-educate" local architects by compelling them to start thinking and planning in a new way and to be ideologically aware, the local urban space practice, during the Soviet Stalinist period stubbornly remained similar to the 1930s independence period. Estonian town planning practices during the independence period of the 1930s, with Tallinn Liberty Square, the new business and transport centre in Pärnu and the new institutional ensemble in Tartu as case studies, indicate that they follow the functionality and aesthetics of the Beaux-Arts-based City Beautiful movement. The same concerns the Estonian town planning principles and practices of the Soviet Stalinist period, in 1944 to 1955 with the Tallinn Central Square, the Tallinn Cultural Centre and the Pärnu Oblast Centre as the case studies. In the 1930s, during the World War II and after the war (from the 1930s to the mid-1940s and up to early-1950s) in the Soviet Union, there were urban planning principles and practice formed that, regardless of the political rhetoric, with its functionality and aesthetics follow the functionality and aesthetics of the Beaux-Arts-based City Beautiful movement.

Consequently, it is evident that, in 1944 to 1955, the ostensible replacement of the Estonian 1930s independence period urban space took place as a shift, through alterations and continuities, that forms a similar but shifted urban space – urban space that is formed by similarities and continuities, as well as shifts instead of disruptions. Urban space practices developed from 1944 to 1955 and fused the Soviet urban space paradigms with the local urban space design of the 1930s independence period.

Such an urban space influenced the urban space of East Estonian oil-shale mining and industrial towns. It helped to determine the ideological and architectural mechanisms of the formation of those towns. The results of the influence are visible, for example, in the compositional solutions of Stalinist urban ensembles of Kohtla-Järve's and Sillmäe's centre, designed by the Leningrad-based Lengorstroyproyekt. However, also indirectly in the compositional solutions of Ahtme, Sompa, Jõhvi, Kukruse, Kohtla-Nõmme, Viivikonna, which were designed by the Leningrad-based Lengiprosacht, and Kiviõli, which was designed by the Planning and Design Office of the Department of Architecture of the Estonian SSR (architect Otto Keppe).

However, the ideological and architectural mechanisms of the formation of East Estonian oil-shale mining and industrial towns were driven by military and economic mechanisms. The military and economic mechanisms, in turn, were defined by the role and significance of East Estonian oil-shale mining and industrial towns for the USSR. The East Estonian oil-shale mining and industrial region gained strategic importance for the Soviet Union already in 1939and 1940, while the state was facing a shortage of uranium ore. The Soviet Union's acute need for uranium ore was one of the reasons for occupying Estonia in 1940. Meanwhile, the Soviet Union was interested in the East Estonian oil-shale deposits which were suitable for heating and producing electricity, oil-shale gas, shale oil, oil-shale gasoline et cetera. For the Soviet Union, on the one hand, East Estonia was well-known by its oil-shale deposits, but, on the other hand, the Soviet Union was interested above all in the graptolitic argillite (also known as dictyonema argillite) which was suitable for producing uranium oxides, molybdenum and vanadium. As a result, East Estonian oil-shale mining and industrial region became one of the most strategically critical western territories for the Soviet Union already during the Second World War, when the state realised that Germany, Great Britain and the USA were trying to produce both a uranium reactor and a uranium-based atomic bomb in mid-1942 and after the American nuclear attacks to Hiroshima and Nagasaki in August 1945. All of that determined the Soviet Union's activity in East Estonia since autumn 1944, resulting in the launch of the secret and strategical Sillamäe experimental factory in order to produce uranium oxides, vanadium, molybdenum, and nickel from the oil-shale-based uranium ore suitable for producing a uranium-based atomic bomb and uranium-based fuel. The factory was the reason for the establishment of closed Sillamäe town.

Meanwhile, due to the Soviet Union's need for East Estonian oil-shale deposits, the Department of Architecture of the Estonian SSR, led by Harald Arman, compiled the documents "Technical-Economic Principles for the Development of the Estonian SSR's Region Where Oil-Shale Occurs" (1947) and "Planning Task for the Industrial and Urban Development of the Estonian SSR's Region Where Oil-Shale Occurs" (1948–1950; 1951) which with the staff working documents (1949, 1954), on the one hand, defined the military and economic mechanisms (exploration of oil-shale deposits with utmost efficiency and the highest productivity) and, on the other hand, the ideological and architectural mechanisms (establishment of mining and industrial towns, except Sillamäe). The latter mechanisms were influenced by the unique role of the Department of Architecture of the Estonian SSR as the local branch of the USSR's State Committee of Architecture and as the highest executive power of the Soviet urban planning and architecture. Similarly, did the Department of Architecture of the

Estonian SSR have the highest executive power on the territory of the Estonian SSR. Arman, while being involved in the planning of the Tallinn Central Square, the Tallinn Cultural Centre, and the Pärnu Oblast Centre, compiled the masterplan for Tallinn (1945), which partially leaned on his pre-war independence period experience (Tallinn Liberty Square urban space and architectural contest; urban space and architectural contest for the new business and transport centre in Pärnu) trying to strike a balance between the official Soviet ideology and the legacy of Estonian former architectural practice, was deeply involved in the urban planning of East Estonian oil-shale towns (including the closed Sillamäe) and played a decisive role with his full measure of authority.

As a result of processing the masterplans and design documents of East Estonian oil-shale mining and industrial towns, designed mostly by Lengorstroyproyekt and Lengiprosacht, and compiling the documents "Technical-Economic Principles for the Development of the Estonian SSR's Region Where Oil-Shale Occurs" (1947) and "Planning Task for the Industrial and Urban Development of the Estonian SSR's Region Where Oil-Shale Occurs" (1948–1950; 1951) with the staff working documents (1949, 1954), the Department of Architecture of the Estonian SSR, led by Harald Arman, established urban planning principles and a pattern for the East Estonian oil-shale mining and industrial towns. The formulated pattern for urban planning and urban space of East Estonian oil-shale mining and industrial towns which were defined as towns avoids remarkable enlargements, has compact and city-like intensified housing-stock, consists dominantly of apartment buildings and monumental public buildings that all together form functional and stately urban ensembles near industrial complexes. Those principles were also implemented in Sillamäe due to Arman's active processing of the town's masterplans and design documents.

The pattern of urban planning and urban space defines the Stalinist urban ensembles of the centres of East Estonian oil-shale mining and industrial towns Kohtla-Järve, Sillamäe, Ahtme, Sompa, Jõhvi, Kukruse, Kiviõli, Kohtla-Nõmme and Viivikonna which were formed by ideological and architectural mechanisms driven by military and economic mechanisms. By the way, the latter mechanisms were also driven by local authorities' (Veimer, Karotamm) eagerness and personal ambitions.

The pattern has influenced the Soviet Stalinist town planning practices and principles (the early-1930s to the mid-1950s), Estonian town planning principles and practices of the Soviet Stalinist period in 1944 to 1955, and practices of Estonian 1930s independence period. All of them follow the Beaux-Arts-based City Beautiful movement examples. Consequently, taking into account the above-stated analyses, results and conclusions, it is evident that the pattern, introduced in the East Estonian oil-shale mining and industrial towns, has in parallel an impact on the urban planning and urban space of Pärnu. It demonstrates that the identity of the East Estonian oil-shale mining and anatural part of the Estonian Soviet Stalinist period, urban planning and urban space and is equal to that.

According to the pattern the Stalinist urban ensembles in centres of East Estonian oil-shale mining and industrial towns, as well as in Pärnu, are following the contemporaneous standards and it is questionable to consider those ensembles megalomaniac. The same conclusion is adaptable to Tallinn, as well.

As already stated, the urban space practices developed from 1944 to 1955 fused the Soviet urban space paradigms with the local urban space design of the 1930s independence period. Such a fusion is evident in the urban space practice of Stalin era's East Estonian oil-shale mining and industrial towns. That practice, through the introduced pattern, shows a powerful reaction by the Estonian urban space culture against the Soviet, Stalinist urban space culture. A reaction that incorporated and melted the foreign urban ideology into local practice by integrating it and making it familiar through the unification of foreign and local principles. Those East Estonian oil-shale mining and industrial towns represent ensotopias that have already been integrated into local culture, accepted as familiar since the moment of establishment. The East Estonian oil-shale mining and industrial towns may have been taken as heterochronias, but unlike heterotopias those towns have high potential to overcome the status of heterochronia. Ensotopia characterises, for example, the urban space of East European countries that were compelled to belong to the Eastern Block after World War II, including Lithuania, Latvia.

Nowadays, the East Estonian legacy has underused spatial development potential that faces a decline in the planning of the region. While in Kohtla-Järve, Ahtme, Sompa, Jõhvi, Kukruse, Kiviõli, Kohtla-Nõmme and Sillamäe, the Stalinist urban ensembles are protected by comprehensive plans and considered as built-up areas of cultural and environmental value, then Viivikonna has neither of those (as of 2019). Meanwhile, in 2017, in Sillamäe, the Stalinist ensemble of nine houses in Sõtke street were demolished since those had been left out of the culturally and environmentally valuable built-up area. The same threatens Viivikonna since the town is somewhat broken due to the lack of maintenance. Even though most of the central Stalinist urban ensembles of East Estonian oil-shale mining and industrial towns have been conserved and renovated, then in the conditions of decreasing population, it is becoming increasingly doubtful from the economic point of view to preserve these towns: both the suburbs and even the cores (central Stalinist ensembles). Preserving these towns for the sake of preservation is not sustainable.

East Estonian oil-shale mining and industrial towns were defined as towns, that avoid remarkable enlargements (in order to save the surrounding territory for oil-shale mining), have a compact and city-like intensified housing-stock, which dominantly consists of apartment buildings and monumental public buildings that all together form a functional and stately urban ensembles nearby industrial complexes. Consequently, in order to manage these towns when the planning of the region is declining, it is reasonable to demolish the enlargements, which were erected in the 1960s to 1980s and ignore the original pattern, and to give the demolished areas back to nature and to focus on the development of central districts.

The dissertation determined the East Estonian oil-shale mining and industrial towns' formation mechanisms and urban space identity. These two issues open the potential for the spatial development of those towns. Now, leaning on the results of this dissertation and applying the results to the spatial planning, it is necessary to decide the purpose of those towns in a couple of years and the parts of those towns worthy of preservation – both in the economic and aesthetic sense. That serves as a field of research for the state, local authorities, strategical planners, spatial planners, human geographers, and architects in tight cooperation with the urban and architectural historians.

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### Sillamäe Linnavalitsus (Sillamäe Municipality: SLV)

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- SM 1F 6079. Sillamäe Kesk tänav ja Keskväljak [Kesk Street and Central Square in Sillamäe]. (in Estonian)

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## Abstract

# Stalinist Urban Ensembles in East Estonian Oil-Shale Mining and Industrial Town Centres: Formation Mechanisms and Urban Space Identity as the Potential for Spatial Development

Objects of this doctoral thesis are East Estonian oil-shale mining and industrial towns, such as Sillamäe, Kohtla-Järve, Ahtme, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme, Jõhvi and Viivikonna during the post-war Stalinist period (1944–1955) with the focus on Stalinist urban ensembles and urban space of these town centres. Current dissertation is a combination of six original articles published previously and this volume.

The legacy of East Estonia is a direct result of the Cold War, which helped form the core structure and appearance of the oil-shale mining and industrial towns of the Stalin era. These towns formed the backbone of the East Estonian oil-shale mining and industries producing electrical energy, heating oil, shale oil, oil-shale gas and other oil-shale products for the USSR. The territory covered an area of 4000 km<sup>2</sup> during the years of 1944 to 1991. Compared to other oil-shale mining and industrial towns, Sillamäe as a closed town was focused on the production of oil-shale-based uranium oxides, which made the town strategically very important for the Soviet nuclear industry in 1944–1952 (1955). At the beginning of the Cold War, East Estonian industrial region became one of the most strategically critical western territories of the Soviet Union. For instance, neither Lithuania nor Latvia had been equipped with such vast and complex industrial area. Nowadays, since these towns mostly are not planned by local architects, their appearance seems to differ from the Stalinist appearance of the rest of Estonian towns. The appearance of the East Estonian Stalinist oil-shale mining and industrial towns is considered different and unfamiliar in Estonia. In comparison with the rest of the Estonian Stalinist urban planning and urban space practices, the urban ensembles of East-Estonian oil-shale mining and industrial towns are under-researched. The legacy of East Estonia has spatial development potential, but it is not being used and thus, faces a decline in planning in the region.

Aim of this dissertation is to determine the formation mechanisms and urban space identities of East Estonian oil-shale mining and industrial towns: Kohtla-Järve, Sillamäe, Ahtme, Sompa, Kukruse, Kiviõli, Jõhvi, Kohtla-Nõmme and Viivikonna with focus on Stalinist urban ensembles and the urban space of these town centres during the post-war Stalinist period (1944–1955). It is essential to determine the mechanisms in order to shed light on the underused potential of East Estonian Soviet Stalinist town planning and urban space in the field of urban space design. This dissertation deals with the issue against the background of the Soviet Stalinist town planning principles and practice in the 1930s to the mid-1950s, and Estonian town planning principles and practice during the Soviet Stalinist period in 1944 to 1955, and Estonian town planning practice during the period of independence in the 1930s. The dissertation analyses reasons, processes and aims of founding these quiet ensemble-like towns which had to embody the Soviet Union's prosperous future and support the state's power in the Cold War. In order to achieve this purpose, the following tasks are carried out. Estonian Soviet Stalinist period (1944–1955) urban planning principles and practice is redefined in order to overcome contradictory definition of the issue, which in turn causes segregation between Estonian Stalinist urban planning and East Estonian Stalinist urban planning. The redefinition determines the town planning factors, which influence the urban space of East Estonian oil-shale mining and industrial towns in 1944–1955. Analyses of the formation process of East Estonian oil-shale mining and industrial towns reveal the role and significance of these towns for the USSR, factors that had impact on establishing the towns in 1944–1955 and the role and influence of Harald Arman, head of the Department of Architecture of the Estonian SSR, in the process. Analyses of Stalinist urban ensembles and masterplans of East Estonian oil-shale mining and industrial towns with the Soviet Stalinist urban ensembles and masterplans and Estonian Stalinist urban ensembles and masterplans being the background system, determine the pattern and compositional identity\_of these towns' urban planning and space.

The methodological framework of this doctoral thesis is formed and determined by a philosophical discussion about representation of power through urban space, urban ensemble and architecture, as well, as town planning's, urban space's and urban ensemble's ability to represent power. Two conceptual reference points follow the framework. The first concerns identity of the Soviet Stalinist urban planning principles and practice, the second Estonian post-war Stalinist period's (1944–1955) urban space design's relations with that of the 1930s independence period. This doctoral thesis is a case study which generally uses a qualitative research method, but an analytical method as well. Sources of this dissertation are approached using a hermeneutic analysis method.

The dissertation, consisting of six publications and the volume which is divided into three chapters, concludes that between 1944 and 1955, the seeming replacement of Estonian 1930s independence period urban space took place as a shift, through alterations and continuities, which formed a similar and shifted urban space instead of the disrupted urban space. Urban space practices developed in the period of1944 to 1955, which fused the Soviet urban space paradigms with the local urban space design of the 1930s independence period. This urban space influenced the urban space of East Estonian oil-shale mining and industrial towns and helped to develop ideological and architectural mechanisms for the formation of these towns. The latter ones were driven by militarist and economical mechanisms, which were defined by the role and significance of these East Estonian oil-shale mining and industrial towns for the USSR – the state's need for mineral resources: oil-shale based uranium ore (nuclear arms race, army) and oil-shale (industry and economy). Because there was a need for uranium ore, secret Sillamäe factory (Refinery no 7) and the closed town of Sillamäe were established.

Moreover, due to the need for oil-shale detailed and complex documents for industrial and urban development in East Estonian region and about occurrence of oil-shale in this region, were compiled by the Department of Architecture of the Estonian SSR, which was led by Arman. The documents that did not concern Sillamäe, on the one hand, defined the militarist and economic mechanisms and, on the other hand, defined the ideological and architectural mechanisms of the formation of East Estonian oil-shale mining and industrial towns. As a result of processing masterplans and putting together documents for East Estonian oil-shale mining and industrial towns, which were designed mostly by Lengorstroyproyekt and Lengiprosacht, residing in Leningrad (St Petersburg), and of compiling the detailed and complex documents for industrial and urban planning of East Estonian oil-shale region, the Department of Architecture of the Estonian SSR, led by Harald Arman, established an urban planning and spatial pattern of East Estonian oil-shale mining and industrial towns. This pattern also influenced Sillamäe and had a parallel impact on Pärnu, demonstrating that Stalinist urban space identity of East Estonian Stalinist urban space.

# Lühikokkuvõte

# Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade keskuste stalinistlikud linnaansamblid: kujunemise mehhanismid ja linnaruumi identiteet kui ruumilise arengu potentsiaal

Selle doktoritöö uurimisobjektideks on Ida-Eesti põlevkivikaevandus- ja -tööstuslinnad Sillamäe, Kohtla-Järve, Ahtme, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme, Jõhvi ja Viivikonna sõjajärgsel stalinistlikul perioodil (1944–1955) fookusega nende linnade keskuste stalinistlikel ansamblitel ja linnaruumil. See doktoritöö on kombinatsioon kuuest originaalsest publikatsioonist ja käesolevast köitest.

Ida-Eesti uurimisaluse pärandi põhjuseks on külm sõda, mis Stalini ajal vormis põlevkivikaevandus- ja -tööstuslinnade südamikustruktuuri ning -ilme. Need linnad moodustasid aastatel 1944 kuni 1991 Nõukogude Liidu jaoks 4000 km<sup>2</sup> suurusel territooriumil põlevkivivarude kaevandamise ning elektrienergiat, kütet, põlevkivi õli, põlevkivi gaasi ja põlevkivitooteid tootva tööstuse selgroo. Teiste põlevkivikaevandus- ja -tööstuslinnade taustal oli Sillamäe kui suletud linn keskendunud põlevkivibaasil uraanioksiidide tootmisele, mis tegi selle linna Nõukogude tuumatööstuse jaoks oluliseks, olles aastatel 1944–1952 (1955) strateegilise tähtsusega. Külma sõja alguses sai Ida-Eesti tööstusregioon üheks strateegiliselt tähtsaimaks lääneterritooriumiks Nõukogude Liidus. Näiteks ei Leedu ega Läti omanud sellist ulatuslikku ja kompleksset tööstusala. Tulenevalt tõsiasjast, et Ida-Eesti põlevkivikaevandus- ja -tööstuslinnad on enamasti planeerinud mittekohalikud arhitektid, paistab silma nende stalinistlike linnaansamblite ilme teatav erinevus ülejäänud Eesti linnade omadest. Tänapäeva Eestis peetakse neid linnu erinevaks, võõraks. Võrreldes ülejäänud Eesti stalinistliku linnaplaneeringu ja linnaruumi praktikaga, on Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade linnaansambleid uuritud vähe. Ida-Eesti pärand omab alakasutatud arengupotentsiaali, mis on silmitsi regiooni kahaneva planeeringuga.

Doktoritöö eesmärk on määrata kindlaks Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade Kohtla-Järve, Sillamäe, Ahtme, Sompa, Kukruse, Kiviõli, Jõhvi, Kohtla-Nõmme ja Viivikonna kujunemise mehhanismid ning identiteet fookusega nende linnade keskuste stalinistlikel linnaansamblitel ja linnaruumil sõjajärgsel stalinistlikul perioodil (1944–1955). Mehhanismid tuleb määrata kindlaks selleks, et heita valgust Ida-Eesti nõukogude stalinistliku linnaplaneeringu ja linnaruumi alakasutatud potentsiaalile linnaruumi kavandamise alal. Doktoritöö käsitab teemat 1930. aastatest kuni 1950. aastate keskpaigani hõlmava Nõukogude Liidu stalinistliku linnaplaneeringu põhimõtete ja praktika, nõukogude stalinismi perioodi aastatel 1944 kuni 1955 hõlmava Eesti linnaplaneeringu põhimõtete ja praktika ning 1930. aastate iseseisvusperioodi hõlmava Eesti linnaplaneeringu praktika taustal. Doktoritöö analüüsib nende külma sõja ajal nõukogude helget tulevikku ja riigi võimsust kehastama pidanud esinduslike ansambliliste linnade rajamise põhjuseid, protsesse ja eesmärke. Eesmärgi saavutamiseks lahendatakse järgmised püstitatud ülesanded. Doktortöö defineerib uuesti Eesti nõukogude stalinistliku perioodi (1944–1955) linnaplaneeringu põhimõtted ja praktika selleks, et lahendada senise definitsiooni vastuolulisus, mis omakorda on toonud kaasa vahetegemise Eesti stalinistlikul linnaplaneeringul ja Ida-Eesti stalinistlikul linnaplaneeringul. Uuesti defineerimine määrab kindlaks linnaplaneeringu faktorid, mis mõjutasid Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade linnaruumi aastatel 1944-1955. Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade kujunemiseprotsess avab rolli ja tähenduse NSV Liidule, faktorid, mis andsid tõuke nende linnade rajamisele aastatel 1944–1955 ning Eesti NSV Arhitektuuri Valitsuse juhi Harald Armani rolli ja mõju selles protsessis. Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade stalinistlike linnaansamblite ja generaalplaanide analüüs Nõukogude Liidu stalinistlike esinduslike linnaansamblite ja generaalplaanide ning Eesti stalinistlike linnaansamblite ja generaalplaanide taustal määrab kindlaks nende linnade linnaplaneeringu ja linnaruumi mudeli ning kompositsioonilise identiteedi.

Doktoritöö metodoloogilise raamistiku moodustab filosoofiline arutelu linnaruumi, linnaansambli ja arhitektuuri kaudu võimu esindamise teemal, samuti linnaplaneeringu, linnaruumi ja linnaansambli võimu esindamise võimekuse teemal. Raamistikule järgnevad kaks kontseptuaalset lähtekohta. Esimene puudutab Nõukogude Liidu stalinistliku linaplaneeringu põhimõtete ja praktika identiteeti, teine Eesti sõjajärgse stalinistliku perioodi (1944–1955) linnaruumi kavandamise suhteid 1930. aastate iseseisvusperioodi omaga. Doktoritöö, kasutades üldiselt kvalitatiivset uurimismeetodit, on juhtumianalüüs, samuti kasutatakse töös analüütilist meetodit. Doktoritöös on allikatele lähenetud hermeneutilisel analüüsimeetodil.

Kuuest artiklist ja kolmepeatükilisest köitest koosnevas doktoritöös järeldatakse tulemuste põhjal, et aastatel 1944 kuni 1955 Eesti 1930. aastate iseseisvusperioodi linnaruumi näiline asendamine toimus siiski muutmise ja jätkuvuse kaudu nihkena, mis vormis katkestatud linnaruumi asemel sarnase ja nihkunud linnaruumi. Aastatel 1944 kuni 1955 arenenud linnaruumipraktika sulatas nõukogude linnaruumi paradigma ühte 1930. aastate iseseisvusperioodi linnaruumi kavandamisega. Selline linnaruum mõjutas Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade linnaruumi ning aitas välja areneda nende linnade kujunemise ideoloogilistel ja arhitektuurilistel mehhanismidel. Viimaseid määrasid ära sõjalised ja majanduslikud mehhanismid, mille omakorda defineerisid Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade roll ja tähendus NSV Liidule – riigi vajadus maavarade järele: põlevkivibaasil uraanimaak (tuuma võidurelvastumine, armee) ja põlevkivi (tööstus ja majandus). Uraanimaagi vajaduse pärast rajati salajane Sillamäe vabrik (Kombinaat nr 7) ja suletud Sillamäe linn. Põlevkivi vajaduse tõttu koostas Armani juhitud Eesti NSV Arhitektuuri Valitsus Ida-Eesti põlevkivi leiukoha regiooni tööstuse ja linna planeeringu detailsed ja komplekssed dokumendid. Need dokumendid, mis ei puuduta Sillamäed, ühelt poolt defineerisid Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade kujunemise sõjalised ja majanduslikud mehhanismid ning teiselt poolt selle ideoloogilised ja arhitektuurilised mehhanismid.

Enamasti Lengorstroiprojekti ja Lengiprošahti (asusid Leningradis (Peterburis)) loodud Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade generaalplaanide ja projekteerimisdokumentide menetlemise ning Ida-Eesti põlevkivi regiooni tööstuse ja linna planeeringu detailsete ja komplekssete dokumentide koostamisega rajas Harald Armani juhitud Eesti NSV Arhitektuuri Valitsus Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade linnaplaneeringu ja linnaruumi mustri ja mudeli. See mudel mõjutas ka Sillamäed. Olles paralleelselt mõjutanud ka Pärnut, demonstreerib see mudel, et Ida-Eesti põlevkivikaevandus- ja -tööstuslinnade stalinistlik linnaruumi identiteet on Eesti stalinistliku linnaruumi identiteedi loomulik osa.

# Appendix

### **Publication 1**

Formation Mechanisms of Stalinist Oil-shale Mining and Industrial Towns in East Estonia: Soviet Nuclear Needs and Local Ambitions

Sultson, Siim. 2019. Formation Mechanisms of Stalinist Oil-shale Mining and Industrial Towns in East Estonia: Soviet Nuclear Needs and Local Ambitions. Journal of Urban History, ...: ... [is being published]

# Formation Mechanisms of Stalinist Oil-shale Mining and Industrial Towns in East Estonia: Soviet Nuclear Needs and Local Ambitions

### Siim Sultson<sup>1</sup>

### Abstract

Planning of oil-shale mining and industrial towns Kohtla-Järve, Jõhvi, Sillamäe, Ahtme, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme and Viivikonna was caused by Soviet Union`s need for mineral resources, nuclear arms race, army, industry and economy. East Estonian region gained strategic importance for the Soviet Union already in 1940. Although these towns were planned mostly by non-local architects and stately architectural firms, for instance, Stalinist central gridlines and central urban ensembles of Kohtla-Järve and Sillamäe were designed under the guidance of local architect Harald Arman. As a head of the Department of Architecture of the Estonian SSR, he processed both masterplans and construction plans of those towns within ambitious planning of oil-shale region during the mid-1940s and early-1950s. Those factors established urban planning principles and a pattern of East Estonian oil-shale mining and industrial towns. **Keywords** 

Industrial town, Stalinism, Mineral resources, Nuclear energy, Estonia

#### Introduction

This paper focuses on formation mechanisms of East Estonian oil-shale mining and industrial towns Kohtla-Järve, Sillamäe, Ahtme, Sompa, Kukruse, Kiviõli, Jõhvi, Kohtla-Nõmme and Viivikonna during the post-war Stalinist period (1944 – 1955). The aim of this paper is to analyse reasons, processes and targets of founding those stately ensemble-like towns that had to embody Soviet prosperous future and support state's might in the Cold War. It is important to open the mechanisms in order to shed light on potential of East Estonian Soviet town planning and urban space in the field of urban space design. In 2017, Siim Sultson published article "Estonian urbanism 1935–1955: the Soviet-era implementation of pre-war ambitions", where he analyses *similarity* and *continuity* in the urban space design of the post-war Stalinist period and that of the Estonia's period of independence during the 1930s. In addition, the article, that has taken Tallinn, Pärnu and Tartu as examples and very shortly considers Kohtla-Järve, gives a very

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Siim Sultson, Tallinn University of Technology, Ehitajate tee 5, 19086 Tallinn, Estonia Email: siim.sultson@eek.ee short overview of Estonian Soviet-era history with regard of town planning and architect Harald Arman's, head of the Department of Architecture of the Estonian SSR, role in Estonian post-war town planning.<sup>1</sup> In current article, Arman's central role with regard of East Estonian oil-shale mining and industrial towns is unveiled.

Post-war stately urban ensemble of East Estonian oil-shale mining and industrial towns was influenced by Stalinist utopianism and nuclear arms race within Cold War threats. Corinthian style and large scale of the towns' central Stalinist stately ensembles represent the Soviet state's ambition to develop the region of strategic mineral resources. Arman-led Department of Architecture of the Estonian SSR, a local branch of the USSR's State Committee of Architecture, had decisive impact on formation of the oil-shale mining and industrial towns.

Available literature on the issue consists of articles from the Stalinist period (mid-1940s to mid-1950s) to the post-Soviet period (early1990s to present). During the Stalinist period, masterplans and urban space of East Estonian oil-shale mining and industrial towns were discussed in professional periodical publications like 'ENSV Arhitektide Almanahh' (Almanac of Architects of Estonian SSR). Authors included architect Voldemar Tippel,<sup>2</sup> Arman and architect Ivan Starostin,<sup>3</sup> architects Voldemar Meigas,<sup>4</sup> Vsevolod Tihomirov.<sup>5</sup> After Stalin's death, scholarship around urban space and town planning seemed much less popular. There was merely the occasional generic reference in post-Stalin Soviet period literature. For instance, in the 1965 book, 'Eesti arhitektuuri ajalugu' (History of Estonian Architecture), edited by Arman, the issue was discussed neutrally, more as a matter of protocol.<sup>6</sup> In 1983, the historian of architecture and architect Oleg Kochenovski published an article that gives a neutral overview on formation of Kohtla-Järve (including Ahtme, Sompa, Kohtla-Nõmme, Kukruse and Jõhvi) in mid-1940s to early-1980s.<sup>7</sup> In the post-Soviet period, more diverse analytical approaches emerged as a result of regained independence. The new circumstances offered the opportunity to treat the topic objectively. In 1991, the historian of architecture Leonid Volkov, who lived through the Stalin era, published the article, 'Eesti arhitektuurist aastail 1940 – 1954' (About Estonian Architecture within 1940 – 1954).8 Historian of architecture Mart Kalm considered the issue in his book, 'Eesti 20. sajandi arhitektuur' (Estonian 20<sup>th</sup> Century Architecture).<sup>9</sup> In the book, he makes a distinction between the local urban space (towns like Tallinn, Pärnu, and Tartu) and non-local urban space (such as Kohtla-Järve and Sillamäe). The topic is developed further in Kalm's article 'Perfect Representations of Soviet Planned Space. Mono-industrial towns in the Soviet Baltic Republics in the 1950s-1980s.'.<sup>10</sup> Historian David Vseviov analysed formation and structure of the East-Estonian towns in his doctoral dissertation 'Kirde-Eesti urbaanse anaomaalia kujunemine ning struktuur pärast teist maailmasõda' (The formation and structure of the urban anomaly in northeast Estonia after the Second World War).<sup>11</sup> Historian Olaf Mertelsmann, following Vseviov's dissertation, analyses reasons of immigration from other parts of the Soviet Union into East-Estonia. <sup>12</sup> In 2012, architect Lilian Hansar gives a short description of some Stalinist masterplans of Sillamäe in her expert opinion concerning Sillamäe centre as heritage site. <sup>13</sup> Historian of architecture Henry Kuningas also explores this topic, in his article, "Hiilgava tuleviku poole. Stalinistlikud utoopialinnad põlevkivibasseinis" (To the Bright Future. Stalinist Utopian Towns in the Oil-Shale Basin).<sup>14</sup> Detailed overview and deeper information about the present state of research of Estonian post-war urban space one can find in Sultson's 2016 article, where he highlights a need to incorporate East-Estonian industrial towns into research about Estonian post-war Stalinist urban space.<sup>15</sup>

This paper focuses above all on formation mechanisms, factors that as premises on their turn formed conditions for establishing urban planning principles and a pattern of East Estonian oil-shale mining and industrial towns. The paper sheds light on role and significance of East Estonian oil-shale for the USSR and opens role and influence of Harald Arman, head of the Department of Architecture of the Estonian SSR, in the formation process of East Estonian oil-shale mining and industrial towns during the post-war Stalinist period (1944 – 1955). The formation mechanisms are opened via documents that are used within theme "East Estonian oil-shale mining and industrial towns" for the first time. Collections of original archival documents and original archival documents are quoted step by step and chronologically in order to restore the processes that formed mechanisms for establishing those towns.<sup>16</sup> What were the reasons to establish East Estonian oil-shale mining and industrial towns? What was behind those reasons? What was the strategy in establishing the towns? What was purpose of those towns? All these moments formed premises for planning and designing the towns.

#### East Estonia and its mineral resources

The oil-shale industry was not anything new in Estonia before 1940. The Republic of Estonia exploited mineral resources for producing shale oil and gasoline in Kohtla-Järve since the mid-1920s. During the seizure of the country by the Soviet Union the new regime considered East Estonia as a resource for oil-shale that could supply Leningrad (St Petersburg) and north-west Russia with liquid fuels, natural gas and electricity. Ahtme, Sompa, Kukruse, Kiviõli, Viivkonna, Sillamäe and Kohtla-Nõmme as previous villages and settlements were remodelled into oil-shale mining and industrial towns. Jõhvi as historical local administrative centre and pre-war town, was remodelled into oil-shale mining town. Meanwhile, Kohtla-Järve and Sillamäe were designed to be exemplary "socialist" industrial cities between the 1940s and 1950s. In the beginning of the Cold War, East Estonian industrial region became one of the most important western territories in the Soviet Union. For instance, neither Lithuania nor Latvia had not been equipped with such vast and complex industrial area. In North Lithuania, there was founded cement industrial town Naujoji Akmenė (nearby ancient Akmenė) in 1947 – 1953 and in South Lithuania there was remodelled paper industrial town Grigiškės in 1948. In North Latvia, there was founded peat industrial town Seda in 1953 – 1959.

East Estonian industrial region lost majority of its population due to war-losses, deportations to Russia and emigration to the West. Only about 60% of the native population remained there by 1944. Unlike other Estonian towns, new inhabitants of the Kohtla-Järve, Sillamäe, Ahtme, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme, Jõhvi and Viivikonna were forcibly relocated from other parts of the Soviet Union. The formation of this type of urban space in the region was brought about by economical-political policy of the Soviet authorities and is a unique phenomenon in the history of post-war Europe.<sup>17</sup> For instance, neither Latvia nor Lithuania met such a policy. For the Soviet Union, East Estonia became a territory with strategic significance, that on its turn formed the Stalinist urban space of the oil-shale mining and industrial towns via certain mechanisms.

#### Formation mechanisms as premises and context for planning those towns

Which mechanisms determined formation of Stalinist urban space of East Estonian oil-

shale mining and industrial towns? There are ideological, architectural and urban mechanisms, driven by military and economical mechanisms. Stalinist masterplans, urban space, large scale, aesthetics and Corinthian style were formulated and realised by functional needs of the occupying regime. Local officials and architects served those needs in order to realize their ambitions, adapt those needs into local conditions, build prosperous future. Architects implemented visionaries', the Soviet governors' visions.

#### Military and economical mechanisms

On the one hand, East Estonia was well-known by its oil-shale deposits that were suitable for heating, producing electricity, oil-shale gas, shale oil, oil-shale gasoline. On the other hand, the Soviet Union was interested first of all in graptolitic argillite (also known as dictyonema argillite) – a marinite-type black shale, a blackish to greyish lithified claystone. The graptolitic argillite was suitable for producing uranium oxides, molybdenum and vanadium. East Estonia gained strategic importance for the Soviet Union already in 1940.

#### Uranium ore - one of the crucial needs of the Soviet Union

In the late-1930s, Soviet Union was facing shortage of uranium ore: in the interests of research, the ore was purchased from abroad and, meanwhile, the state tried to find ore reserves in the eastern and southern parts of the Soviet Union. In mid-June 1940, while the Soviet Union was occupying Estonia, Soviet academicians, Vladimir Vernadsky and Vitaly Hlopin, wrote a letter to academician-secretary of the Department of Geology and Geography of the Academy of Sciences of the USSR, Pavel Stepanov, stating that Soviet Union was in acute short of uranium ore. The academicians insisted Stepanov to prepare a plan of searching new uranium ore mining areas for the Soviet Government, immediately. The outbreak of the Second World War eliminated uranium ore purchases from abroad.<sup>18</sup> On 1 October 1940, in a session discussing about uranium ore reserves in the Soviet Union, the Academy of Sciences of the USSR admitted, according 1934, 1938 and 1939 explorations, that West Leningrad Oblast oil-shale deposits contained vanadium and uranium ore. According to samples, taken no later than in September 1940 by the Academy of Sciences of the USSR, East Estonian oil-shale had higher concentration of uranium ore compared to the Leningrad Oblast samples. The academicians considered East Estonian oil-shale very interesting and perspective for the Soviet Union.<sup>19</sup> Consequently, one of the reasons to occupy Estonia was the Soviet Union's acute need for uranium ore.

The topic of uranium ore became highly strategic and military in 1942, while the Soviet Union realised that Germany, Great Britain and USA were trying to produce both uranium reactor and uranium-based atom bomb. On 15 March and 27 March 1942, the First General Administration of the USSR's People's Commissariat for Internal Affairs asked its British and USA agents to control suspicions and to get more information. In early-May, the Second General Administration of the Main Intelligence Directorate of the Red Army General Staff wondered whether it was possible to use nuclear energy for military purposes.<sup>20</sup> For instance, in 1942, the estimated amount of world uranium ore (as pure metal uranium) deposits were 12,000 – 15,000 tons: 1,000 tons in Europe, 9,000 tons in North America and only 500 tons in the Soviet Union. The top-secret directive of

the USSR's State Defence Committee<sup>21</sup> at the USSR's Council of People's Commissars<sup>22</sup>, passed on 28 September 1942, ordered the Academy of Sciences of the USSR to prepare a report concerning production of uranium-based atom bomb or uranium-based fuel. Two months later, the committee commanded the USSR's People's Commissariat of Non-Ferrous Metals to increase mining of uranium ore in the eastern regions of the state.<sup>23</sup> On 27 March 1944, the Institute of Geological Sciences of the Academy of Sciences of the USSR stated that East Estonian oil-shale-based graptolitic argillite contained an unprecedented amount of uranium ore that could be suitable for producing uranium oxides and the deposits needed to be explored thoroughly<sup>24</sup>. East Estonian oil-shale had become highly strategic and militarily significant for the Soviet Union.

On 10 November 1944, while the Soviet Union had seized Estonia, the Headquarters of High Army Command of the USSR imposed a two-kilometre closed special zone and seven-kilometre special zone from the coast of Gulf of Finland in order to guarantee secrecy of sensitive military sites. The two-kilometre closed special zone set up restrictions for natives to return their homes and partial deportations of inhabitants within twenty days starting 6 December. The seven-kilometre special zone was under strict surveillance.<sup>25</sup> Meanwhile, following the directive of the Presidium of the USSR's Supreme Soviet, "About incorporation of populated area being situated on eastern bank of the Narva River into Leningrad Oblast", passed on 24 November 1944, the Soviet authorities separated 29,230 hectares of the East Estonian territory with Ivangorod and made it a part of Leningrad Oblast on 6 December 1944.<sup>26</sup>

At the same time, in November 1944, the scientific director of the Institute of Geology of the USSR Michail Altgausen visited East Estonia in order to explore local graptolitic argillite for uranium ore.<sup>27</sup> The top-secret directive of the USSR's State Defence Committee, passed on 8 March 1945, dispatched Altgausen to estimate consistence of East Estonian graptolitic argillite and amount of its components, firstly of uranium ore.<sup>28</sup> In March 1945, Altgausen explored East Estonian graptolitic argillite again and submitted detailed results concerning uranium ore, molybdenum, glauconitic sands to Moscow twice.<sup>29</sup> According Altgausen's memoirs, a final decision was reached at a secret meeting in the Kremlin concerning the raw material for nuclear industry. The oilshale under Sillamäe seemed to contain uranium ore suitable for producing uranium oxides.<sup>30</sup> That was vital for the Soviet Union at the beginning of the Cold War. The secret directive of the USSR's Council of the People's Commissars, passed on 5 May 1945, ordered both the Committee for Geology<sup>31</sup> at the USSR's Council of People's Commissars and the Estonian SSR's Council of the People's Commissars to arrange an additional, detailed and complex geological exploration of East Estonian oil-shale-based graptolitic argillite in order to use consistence of the mineral resource as efficiently as possible in the nearest future.<sup>32</sup> As the Committee for Geology stated, East Estonian oil-shale-based graptolitic argillite containing uranium ore had good outlook for producing uranium oxides.33

The Soviet Union's need for uranium ore became urgent after the USA nuclear attacks to Hiroshima and Nagasaki. On 20 August 1945, the USSR's State Defence Committee, led by Stalin, passed a top-secret directive. According to the directive, the Special Committee at the USSR's State Defence Committee was established. The new committee, led by the USSR's People's Commissar for Internal Affairs Lavrentiy Beria, had to supervise all concerning nuclear energy: research, exploration, technical questions, technical projects of erections, buildings, settlements etc. The committee on its turn led the First General Administration at the USSR's Council of People's Commissars. The First General Administration as an executive organ was responsible for exploratory geological works, construction works (e.g. architectural works, urban planning) for industrial plants in order to use uranium nuclear energy (mining of uranium ore, producing uranium oxides etc) and producing atom bombs. The First General Administration was accountable only to the Special Committee and legally distinct and functionally independent from any of other organisations or institutions.<sup>34</sup> Both the USSR's Council of People's Commissars as the government and the USSR's State Defence Committee at the USSR's Council of People's Commissars were led by Stalin.

In autumn 1945 the geological exploratory of the East Estonian oil-shale-based graptolitic argillite became more detailed and extended.<sup>35</sup> The exploratory works were taken very seriously – the state was in a hurry. For instance, in the conditions of the postwar acute shortage of fuels and strict limitations on fuels even for the officials, the Committee for Geology allocated to the scientific director of the Institute of Geology of the USSR Altgausen, as leader of the Estonian expedition, unlimited amount of gasoline for his official car "...to work on special metals.".<sup>36</sup> Meanwhile, on 22 November 1945, state firm Lengazstroi<sup>37</sup> that belonged to Glavgaztopprom<sup>38</sup> sent to the Department of Architecture of the Estonian SSR a plan and an explanatory report for selecting a 78-hectare plot of land to establish a settlement for the workers of the Viktor Kingissepp oil-shale processing and distillation (e.g. producing uranium oxides) factory in Sillamäe. The department, led by Arman, approved the request (Figure 1).<sup>39</sup>



Figure 1. Architect Harald Arman (sitting centre) with architect Anton Soans (left) and architect August Volberg at the turn of 1940s and 1950s. Source: EAM 16.4.56.

On 17 January 1946, the First General Administration presented a strongly topsecret report to Stalin. According to the report, there was not any special exploration of uranium ore in the Soviet Union up to 1944. As the report stated, by the beginning of 1946, there were ascertained 285 tons of uranium ore (as pure metal uranium) deposits in the Soviet Union. Meanwhile, the report's estimate put the amount of unexplored uranium ore (as pure metal uranium) deposits at 18,390 tons in the Soviet Union, including 17,500 tons in East Estonia. The report mentioned that, in East Estonia and Leningrad Oblast, mineshaft building works had been launched and planning of East Estonian experimental uranium oxide factory had been started.<sup>40</sup> The experimental uranium oxide factory was intended to produce 100 tons of uranium oxides per year.<sup>41</sup> According to the top-secret directive of the USSR's Council of Ministers, passed on 9 April 1946, project of the experimental uranium oxide factory had to be finished by 1 May 1946 and the factory launched by the fourth quarter the same year. The factory was planned to produce 200 tons of uranium oxides per year by 1950. For instance, meanwhile, East European new uranium oxide factories, ruled by the Soviet Union, were intended to produce less uranium oxides per year: Bulgaria 50 tons, Czechoslovakia 30 tons, Eastern-Germany (Saxony) 5 tons.<sup>42</sup> Strongly top-secret protocol of the Special Committee, compiled on 18 May 1946, shows that its leader Beria<sup>43</sup> ordered the First General Administration to develop a plan of launching East Estonian oil-shale-based heating, gas, molybdenum, vanadium, uranium oxides production in ten days. The production process had to be as efficient as possible and the arrested German nuclear engineers had to be involved.44

On 27 July 1946, Beria mentioned in his top-secret letter to Stalin that the Sillamäe experimental uranium oxide factory would produce uranium oxides annually 15 tons in 1947, 80 tons in 1948, 150 tons in 1949, 200 tons in 1950. In order to build the factory with settlement, Beria proposed to use 10,000 war prisoners consisting of Estonians, Latvians, Lithuanians that had served in German army + 16,000 criminal prisoners.<sup>45</sup> Those 26,000 prisoners became the first inhabitants of Sillamäe. Due to postwar reconstruction and rehabilitation, there was an acute shortage of labour and even of forced labour in the Soviet Union. For instance, on 30 November 30 1944, Secretary General of the Central Committee of the Communist Party of Estonia Nikolai Karotamm and Chairman of the Estonian SSR's Council of People's Commissars Arnold Veimer asked Stalin to send to East Estonian oil-shale area 9,000 convicts in order to reconstruct and rehabilitate the area,<sup>46</sup> but without any remarkable results.<sup>47</sup> However, in 1946, due to new circumstances and strategic importance of the object, 26,000 convicts were intended to be used in building of the factory and its settlement.

According to a top-secret directive, passed on 27 July 1946, the USSR's Council of Ministers, led by Stalin, decided to launch the Sillamäe experimental factory in order to produce uranium oxides, vanadium, molybdenum, nickel. The factory's official name became Refinery No. 7 of the First General Administration at the USSR's Council of Ministers. The directive, based on the previous 1946 documents, fixed activities for the next half a year: details and dates of building the factory and settlement nearby it, launching of the factory, assignments, additional explorations of East Estonian graptolitic argillite and amount of its components, firstly of uranium ore. All found uranium ores both from East Estonia and Leningrad Oblast had to be sent to the new factory.<sup>48</sup> This directive was an official launch for building both the closed factory and its settlement in Sillamäe.

On 6 August 1946, following the top-secret directive of the USSR's Council of Ministers, passed on 27 July 1946, Secretary General of the Central Committee of the Communist Party of Estonia Karotamm and Chairman of the Estonian SSR's Council of Ministers Veimer passed top-secret joint directive No. 039. The directive concerns exploration of East Estonian graptolitic argillite, the experimental uranium oxide Refinery

No. 7 and territories for developing the closed settlement in Sillamäe. Although the joint directive does not mention Sillamäe it refers both to Narva as an existing town and to a coastal mining territory for the factory in East Estonia – that corresponds to the above-stated documents.<sup>49</sup>

All those activities since autumn 1944, especially since August 1945, and rather short dates show how strategically important was East Estonia for the Soviet Union. That was a solid foundation for urban space planning in that area, firstly uranium ore deposits and then oil-shale deposits supported its importance. Whilst strategy and tasks of the oil-shale-based uranium oxides production were clear by 1946, the attempts to organize proper strategy for the rest of the oil-shale territory took place in 1947.

#### Oil-shale - reason for regional planning of East Estonia

The Soviet Union was interested in East Estonian oil-shale deposits that were suitable for heating and producing electricity, oil-shale gas, shale oil, oil-shale gasoline etc. As states Olaf Mertelsmann, before the Second World War, in spring 1941, the Soviet Union intended to increase annual total mining of East-Estonian oil-shale up to 8 million tons by 1945, e. g. over four times within five years - that amount could have been nearly 80 % of the whole state's capacity.<sup>50</sup> However, the war postponed the plans.

As stated above, the Soviet Union was highly interested in East Estonian oil-shale deposits by 1944. On 15 June 1945, the USSR's People's Commissar of Coal Industry Vassiliy Vachrushev passed a governmental command concerning reconstruction and rehabilitation of East Estonian oil-shale industry and settlements. The governmental command ordered both central and local state institutions to reconstruct and build 14 mining shafts in order to rise total annual mining of oil-shale from 1.9 million tons to 7.8 million tons in the period from 1945 to 1948. The governmental command ordered Lengiproshacht<sup>51</sup> to project the oil-shale mining and industrial settlements and establish living conditions for 20,000 convicts, 1,000 workers, design technical schools, hospitals, clinics etc.<sup>52</sup> Nearly a month later, on 10 July 1945 the USSR's Stately Defence Committee fixed a five-year plan (1945 – 1950). According to the five-year plan annual total mining of oil-shale had to rise from 1.9 million tons up to 8.4 million tons by 1950. However, both plans (7.8 million tons by 1948 and 8.4 million tons by 1950) were too ambitious - for instance, in 1948, the actual annual total mining was 3 million tons and, in 1950, - 3.54 million tons.<sup>53</sup> Both the order to increase annual total mining over four times just within four - five years and the order to use 20,000 convicts against the background of the decision of late-1944 concerning seven-kilometre special zone from the coast of Gulf of Finland reflect the Soviet Union's utter need for the oil-shale deposits.

Although works for the first masterplans of East Estonian oil-shale area started in early-1946, the first attempts to organize the territory took place in mid-1947. On 20 July 1947, the Estonian SSR's Council of Ministers passed a directive "About organisation of project-planning works for oil-shale region". According to the directive the Department of Architecture of the Estonian SSR compiled "Technical-economic principles for development of the Estonian SSR's region of the occurrence of oil-shale" that does not concern Sillamäe. The technical-economic principles were submitted to Moscow in November 1947.<sup>54</sup>

In 1948 – 1950 the Department of Architecture of the Estonian SSR compiled with its design institute "Estonproyekt" a large secret project "Planning task for industrial

and urban development of the Estonian SSR's region of the occurrence of oil-shale", printed in 1951 (Figure 2). The secret project followed the directive of the USSR's Council of Ministers, passed on 21 May 1948. That directive on its turn followed the directive of the USSR's Council of the People's Commissars and the USSR Central Executive Committee "About compilation and approval of planning projects for socialist reconstruction of the Soviet Union towns and other settlements", passed on 22 July 1933. The directive determined that all construction and building in regions that were or had been planned to have solemn or grouped enterprises, towns and settlements serving those enterprises, and that had common transport, energetics, mineral resources, had to be organised on the basis of region development plan. The secret project was successor of the "Technical-economic principles for development of the Estonian SSR's region of the occurrence of oil-shale" and does not concern Sillamäe or uranium oxides production.<sup>55</sup>



Figure 2. Planning task for industrial and urban development of the Estonian SSR's region of the occurrence of oil-shale by the Department of Architecture of the Estonian SSR with its design institute "Estonproyekt", 1951. Top right: Sompa, Kohtla, Kohtla-Järve, Kukruse, Jõhvi, Ahtme. Right: Viivikonna. Centre: Kiviõli. Centre left: Rakvere. Centre: new town Koidu. Centre right: new town Illuka. Source: ERA R-1527.2.44, sheet 7.

The secret project seeks economic efficiency and high productivity for East Estonian oil-shale territory with area of 4000 km<sup>2</sup> (from Rakvere to Narva and from Gulf of Finland 40 km-s to South) in the period from 1948 to 1970. The territory contains oil-shale towns (for example, Kohtla-Järve, Jõhvi, Ahtme, Kiviõli etc) and smaller settlements (for example, Sompa, Viivkonna, Kukruse etc). The project does not concern textile industry town Narva and closed uranium-oxide producing town Sillamäe. It consists of

plans and explanatory report containing sections such as cartography, climate and nature conditions, water resources, forestry, land use, industry, energetics, agriculture, transport and road network, population and populated areas, water supply and canalisation, recreation, sanitary characteristics, organisation of urban and architectural planning. According to the 1949 staff working document and the official 1951 secret project, annual total mining of oil-shale had to rise from 3 million tons in 1948 and 3.54 million tons in 1950 up to 25 million tons by 1970.<sup>56</sup> On 13 March 1954, experts of the GOSPLAN<sup>57</sup> insisted to rise annual total mining of oil-shale up to 30 million tons by 1970 in 1954 staff working document.<sup>58</sup> The official 1951 project's estimate put the amount of unexplored oil-shale deposits between 3.6 and 6.0 billion tons in East Estonia. The report proposes on the base of estimated deposits of 3.7 billion tons and annual total mining of 12 million tons that the deposits should last for 300 years.<sup>59</sup> On 26 April 1949, the staff working document proposes to rise population of the towns and settlements including five new towns from 60.000 people in 1948 up to 240.000 people by 1970.<sup>60</sup> Eight months later. on 7 December 1949 the indicator of 1970 was increased up to 300,000 people in the document.<sup>61</sup> The official 1951 project proposes to rise population from 58,400 people in 1948 up to 305,000 people by 1970<sup>62</sup>. However, in the 1954 staff working document, experts of the GOSPLAN mention rise of population from 86,000 people in 1954 up to 300,000 people by 1970<sup>63</sup>. According to the official 1951 project, the annual total mining of oil-shale had to rise for up to ten times and population up to five times within 22 years. All that defined needs for urban planning in the oil-shale mining and industrial region.

While in October 1948, there were counted six towns and fourteen settlements in the 4000 km<sup>2</sup> oil-shale area then, according to the official 1951 project, the same area was planned to have ten towns (five new ones + five existing ones, including unification of two towns) by 1970. The existing towns and settlements were intended to reorganize, regroup and enlarge in order to increase economic efficiency and high productivity of the oil-shale area. The section of organisation of urban and architectural planning contains analyses of existing mining shafts and planning of new ones, arrangement of oil-shale industry, perspectives of existing towns and settlements, arrangement and building of new towns.<sup>64</sup> The staff working documents contain density of population and number of stories for houses of the towns by 1970<sup>65</sup>.

#### Crude oil - dreams, ambitions and reality

Importance of the oil-shale area improved industrial perspectives of the whole Estonia – the aspect that, on its turn, influenced formation of Stalinist urban space of East Estonian oil-shale mining and industrial towns, indirectly. For instance, against the background of perspective oil-shale gas, the official 1951 report considers Estonian limited natural gas deposits, whilst variable in quality, worth to be researched. The same document mentioned crude oil prospecting in Estonia.<sup>66</sup> East Estonian oil-shale-based industry seemed prosperous for the Soviet Union and inspired local authorities´ ambitions, as well. On 28 November 1948, Secretary General of the Central Committee of the Communist Party of Estonia Karotamm wrote a letter to the USSR´s Minister of Geology Ilya Malyshev and insisted him to intensify crude oil prospecting all over Estonia within the nearest future, in 1949. Karotamm convinced Malyshev to continue explorations of natural gas, to start exploration of asphaltites in East Estonia and to focus on crude oil prospecting –"…because even the Second Secretary of the Communist Party of the Soviet

Union Andrei Zhdanov had suggested to prospect crude oil in Estonia consistently.". According to Karotamm's proposal, there should have been made five prospecting boreholes: three in North Estonia, two in South Estonia and West Estonia in 1949. Several additional prospecting boreholes on six west-east lines, counted down from the north to the south, should have been drilled within the next years. On 11 December 1948, Malyshev responded that Estonian natural gas deposits were limited and variable in quality and crude oil prospecting had been taken place in some Estonian localities without positive results. However, he admitted there should have been potential crude oil deposits in South Estonia.<sup>67</sup> A question of crude-oil raised importance of East-Estonian oil-shale area higher. Such political and economical local ambitions as one kind of mechanisms boosted formation of East Estonian oil-shale mining and industrial towns by local authorities.

### Ideological, architectural and urban mechanisms

The Department of Architecture of the Estonian SSR and its leader processed masterplans and construction plans of all local towns, including masterplans and construction plans of East Estonian oil-shale mining and industrial towns.<sup>68</sup> What was the actual role of the Department of Architecture of the Estonian SSR as a local branch of the USSR's State Committee of Architecture?

The USSR's State Committee of Architecture was found as a result of need to administrate and control the Soviet Union's urban planning and architecture efficiently with quick and thorough results. On 16 to 18 August 1943, the 11th plenum of the Governing Board of the Union of Soviet Architects of the USSR analysed war-time urban planning practice of evacuees' functional settlements in the eastern regions of the state and attempts to restore wrecked towns and industrial centres in the recaptured central regions and necessities of post-war mass-building in urban space. Central issue of the plenum was miserable reality, full of serious shortcomings, as low quality of projecting, planning, reconstruction, building within poverty and indifference. There was an acute lack of professional architects, urban planners, order and discipline within survived architects and builders, disorder, chaos and thefts within officials of towns and settlements, local authorities. The tempo of reconstruction and rehabilitation of towns, industrial centres, built-up areas had stalled. Meanwhile, the state had put pressure on the Union of Soviet Architects of the USSR to guarantee quick, thorough and efficient results in the field of restoring industrial centres, towns, settlements in the recaptured western areas. The plenary resolution obliged the Union of Soviet Architects of the USSR to ask the USSR's Council of People's Commissars to establish an all-encompassing governing and controlling architectural institution with strong administrative power.<sup>69</sup>.

Why did the Union of Soviet Architects of the USSR focus on those urban planning shortcomings exactly midst the deep war, while, for example, the siege of Leningrad<sup>70</sup> was still actual?

Three months after the siege of Moscow, during the siege of Leningrad and before the battle of Stalingrad<sup>71</sup>, on 25 April 1942, the 10<sup>th</sup> plenum of the Governing Board of the Union of Soviet Architects of the USSR called architects to follow the Soviet troops for the western regions, estimate destructions of towns, architectural monuments and industrial complexes, seek for opportunities to start simple massive building with simple maintenance and restoration of industrial complexes, use local mineral resources

and materials, help local authorities in urban planning and compiling of building norms. Architects were called to popularize architectural monuments in order to evoke patriotism among people, deal with war commemoration monuments, nationalist folklore motifs, local traditions in appearance of towns and built-up areas.<sup>72</sup>

Over a year later, on 24 July 1943, architect Karo Alabyan published an article "Contours of future Stalingrad" that set new compositional principles for post-war urban planning, urban space and urban ensemble - the principles complemented with a victory theme.<sup>73</sup> However, in the 11<sup>th</sup> plenum, reflection of those compositional novelties practically did not get any attention, even the victory theme was considered formally. The central issues of the plenum were concern for the failed situation and hopeless perspectives in the field of urban planning and need for an all-encompassing governing and controlling architectural institution.

While the 10<sup>th</sup> plenum was optimistically focused on estimating of war destructions, seeking for restoration opportunities, popularisation of architectural monuments, aesthetics, the 11<sup>th</sup> plenum had shifted the focus on shortcomings of the real practice of the restoration, need for quick and efficient solutions. The state had put pressure on the Union of Soviet Architects of the USSR to guarantee quick, thorough and efficient results in the field of restoration of industrial centres, towns, settlements in the recaptured western areas due to acute need for uranium ore that had become strategically and military important in 1942, while the Soviet Union realised that Germany, Great Britain and USA were trying to produce uranium reactor and uraniumbased atom bomb. The top-secret administrative order of the USSR's State Defence Committee, passed on 28 September 1942, concerning production of uranium-based bomb or uranium-based fuel formulated a new doctrine for restoration of industrial centres, towns, settlements in the recaptured western areas. The Soviet Union was in a race against time. East Estonian oil-shale had become one of the focal points for the Soviet state. Urban planning became both political and militant issue. The state needed architects, specialists to embody visions of the power, the state. East Estonian oil-shale had become one of the focal points for the Soviet state. Due to ongoing war, the shift was caused by militant reasons, connected both with the results of the war and the post-war situation in the Europe and in the World.

The request of the 11<sup>th</sup> plenum was taken into consideration already in four days. The resolution of the USSR's Council of People's Commissars "About immediate means for economy reconstruction on the territories liberated from German occupation", passed on 22 August 1943, compelled all architectural and building workshops, organisations, institutions to bunch under one all-encompassing institution in order to restore settlement of the state.<sup>74</sup>

Nearly a month later, on 29 September 1943, the USSR's Council of People's Commissars and the Communist Party of the Soviet Union established the USSR's State Committee of Architecture at the USSR's Council of People's Commissars (similarly as the USSR's State Defence Committee at the USSR's Council of People's Commissars). The USSR's State Committee of Architecture under the direct authority of the USSR's Council of People's Commissars became the highest executive power of the Soviet urban planning and architecture. The institution with its head administrated and controlled all questions concerning urban planning and architecture, including building. Tasks of the USSR's State Committee of Architecture were:

approval and certification of planning and building projects of towns, settlements, industrial complexes, objects, important administrative and public buildings, urban

ensembles, residential buildings;

- state architectural and building quality control of towns, settlements, industrial complexes, urban ensembles, public buildings, administrative buildings, residential buildings;
- development and approval of design, construction, building norms and regulations;
- supervision, monitoring and control of architectural, design and building organisations;
- curating of architectural research and experimental institutions, architectural education in colleges and universities;
- defence of architectural monuments and curating of restoration works.
   The USSR's State Committee of Architecture had to develop and submit for approval to the USSR's Council of People's Commissars:
- draft regulations of planning and building projects of towns, settlements, industrial complexes, objects, important administrative and public buildings, urban ensembles, residential buildings;
- draft regulations concerning production of new building and finishing materials, experimental buildings, innovation proposals.

The USSR's State Committee of Architecture, led by architect Arkadi Mordvinov, had to establish local branches under the direct authorities of the local Councils of People's Commissars. One of them was the Department of Architecture of the Estonian SSR at the Estonian SSR's Council of People's Commissars.<sup>75</sup>

The Department of Architecture of the Estonian SSR, led by Arman, had similar highest executive power of urban planning and architecture on territory of the Estonian SSR, including planning of East Estonian oil-shale mining and industrial towns Jõhvi, Kohtla-Järve, Ahtme, Sompa, Kukruse, Kiviõli, Kohtla-Nõmme, Viivikonna and closed Sillamäe. The 34-year-old head of the Department of Architecture of the Estonian SSR returned to Estonia in autumn 1944. Meanwhile, Arman had begun to organize the restoration of Estonian towns whilst based in the Soviet Union, in mid-1944.<sup>76</sup>

Thus, East Estonian towns were processed by the Department of Architecture of the Estonian SSR. The leading architectural institution sometimes convened the Architectural Council of the Estonian SSR. The council consisted of architects from the Department of Architecture of the Estonian SSR, the Union of Soviet Architects of the Estonian SSR, officials and specialists. Arman was leader of the council.

### Results of the 1951 secret project and Arman's influence

Under the guidance of Arman, the Department of Architecture of the Estonian SSR was deeply involved in urban planning of East Estonian oil-shale towns (including closed Sillamäe) and played decisive role with its full measure of authority.

For instance, in 1947, the institution got from the USSR's State Committee of Architecture exceptional right to use individual designs instead standardized designs for buildings within the planning-task of the oil-shale region<sup>77</sup>. According to 1949 staff working documents, the Department of Architecture of the Estonian SSR proposed in "Technical-economic principles for development of the Estonian SSR's oil-shale occurrences territory", passed in 1947, to use three-storied houses with density of 200 people/1 ha (10% of housing stock in towns with population over 15,000 people), two-storied houses with density of 100 – 150 people/1 ha (60 – 70% of housing stock in towns with population over 15,000 people); 65 – 75% of housing stock in towns with population

under 15,000 people) and garden-type one-storied houses (20 - 30% of housing stock in towns with population over 15,000 people; 25 - 35% of housing stock in towns with population under 15,000 people)<sup>78</sup>. However, the USSR's State Committee of Architecture suggested the Department of Architecture of the Estonian SSR to increase percentage of three-storied houses and to use four-storied houses so as to increase density of population to 250 people/1 ha for two- to three-storied houses and to 150 people/1 ha for one- to two-storied houses.<sup>79</sup>

In the official 1951 secret project, in order to increase economic efficiency and high productivity of the oil-shale area, the Department of Architecture of the Estonian SSR proposes to intensify housing: firstly, by building two- to three-storied houses in all towns and secondly, by increasing percentage of two- to three-storied houses up to 70 - 80% of housing stock, while decreasing percentage of one-storied houses down to 20 - 30% of housing stock. The aim of such a proposal was to decrease territory under settlements from 5,000 ha to 3,300 ha – it means 1,700 ha more for oil-shale mining –, while increasing general amount of population on the territory with area of 4000 km<sup>2</sup> by 1970.<sup>80</sup>

What was the result of such a proposal that formulated official policy for urban planning of the territory? In staff working documents, the Department of Architecture of the Estonian SSR indicated onto failed urban planning of Kohtla-Järve due to too close mining shafts and deeply polluted soil (proposal to decrease existing amount of population form 15,000 people to 5,000 people), but the USSR's State Committee of Architecture suggested to save the situation by intensifying housing.<sup>81</sup> In 1951 official secret project, the Department of Architecture of the Estonian SSR exposed Kohtla-Järve with its new satellite Kohtla with a population of 19,000 people and 17,000 people, accordingly, - all together 36,000 inhabitants by 1970.82 Probably, due to possibility to get more land of previous mining areas and intensifying housing (caused by intensified industry), amount of population of Kohtla-Järve reached to to 40,464 (51,200, as Kohtla-Järve agglomeration (since 1960) without Jõhvi and Ahtme) by 1959.83 Meanwhile, probably in connection with such a development, building of new town Kohtla, plan designed by Lengiproshacht, was cancelled.<sup>84</sup> The 1951 official secret project indicates to decreasing of amount of population for Sompa from 15,000 people to 9,000 people, while one- to two-storied houses were replaced with two- to three-storied houses.<sup>85</sup> Such a change caused discard of 3/4 of the masterplan designed by Lengiproshacht.<sup>86</sup> The same reason caused discard of 2/3 of the masterplan designed by Lengiproshacht for Ahtme.87

The aim to decrease territory under settlements from 5,000 ha to 3,300 ha, in order to get 1,700 ha for oil-shale mining, while increasing general amount of population, formulated a pattern of urban planning and urban space of the territory. East Estonian oil-shale mining and industrial towns got compact and city-like housing-stock, consisting of dominant apartment-buildings and monumental public buildings that form functional stately urban ensembles near-by industrial complexes. Those principles were implemented in Sillamäe, as well, due to Arman's active processing of the town's masterplans and design documents.

### Question of urban composition – ambitions and implementations

While Ahtme, Sompa, Kukruse, Kohtla, Jõhvi and Viivikonna were designed mainly by

Lengiproshacht (architects B. Sokolov, A. Volkova, G. Ivanov), Kohtla-Järve and Sillamäe were erected according to the projects, designed by Lengorstroyproyekt.<sup>88</sup> Masterplan and urban space of Kohtla- Järve was designed by architects Jevseiy Vitenberg, I. Pisareva and F. Kirzideli. Closed Sillamäe was designed architects Alexandr Nikayev and Michail Pospechov. Since Sillamäe was closed uranium-oxide producing town, the Soviet nuclear industry (Leningrad filial of NII-9<sup>89</sup> in 1946 – 1947; Leningrad filial of GSPI-12<sup>90</sup> in 1949 – 1950, 1958) designed the town together with Lengorstroyproyekt. Masterplan of Kiviõli was compiled by the Planning and Design Office, design institute "Estonproyekt" of the Department of Architecture of the Estonian SSR (architects Otto Keppe and Olev Soans).

Lengiprosacht laid out Jõhvi, Ahtme, Sompa, Kukruse, Kohtla-Nõmme and Viivikonna using regular and simple grids, the same concerns unbuilt Kohtla nearby later built Kohtla-Nõmme (Figure 3). However, masterplans of Sompa and Ahtme were not organised using orthogonal geometry and contained radial street patterns at one corner of the grid like in Kohtla-Järve, designed by Lengorstroyproyekt (Figure 4). Masterplan of Kiviõli, designed by the Planning and Design Office of the Department of Architecture of the Estonian SSR, exploits the same radial street pattern. Stalin era masterplan of Kukruse and probably of Kohtla-Nõmme were designed by Lengiproshacht, as well. Due to absence of copies of the masterplans in archives it is hard to estimate to what extent these two towns were implemented. The masterplan of Ahtme was implemented to an extent of 1/3, the masterplans of Sompa and Kiviõli, each to an extent of 1/4, the masterplan of Viivikonna to an extent of 1/2.<sup>91</sup>



Figure 3. Masterplan of Sompa, 1946 by Lengiproshacht (B. Sokolov). Left quarter: realised part of the town. Centre and right: unbuilt part of the town. Source: EAM 3.1.248.



Figure 4. Centre of Kohtla-Järve crossing axes, 1951 (Otto Keppe) following version of Lengorstroyproyekt. Centre: Victory Boulevard and stadium between converging axes. Park and the pre-war settlement (left) formed 2-kilometre sanitary zone. Source: ERA T-14.4-6.34581.

Against the background of the 1947, 1949, 1951 and 1954 documents concerning development of the oil-shale region, the Department of Architecture of the Estonian SSR processed the masterplans, designed by Lengiprosacht, thoroughly. Even the Department of Local Air Defence of the Estonian SSR's Ministry for Internal Affairs and the Department of Local Air Defence of the USSR's Ministry for Internal Affairs needed approvals from the Department of Architecture of the Estonian SSR. That conserns unbuilt Kohtla<sup>92</sup>, Ahtme<sup>93</sup>, Jõhvi<sup>94</sup>, Sompa<sup>95</sup>, Kukruse<sup>96</sup> and Viivikonna<sup>97</sup>. The same concerns Kiviõli, designed by the department itself.<sup>98</sup> Masterplan of Kohtla-Järve, designed by Lengorstroyproyekt, was processed by the Department of Architecture of the Estonian SSR thoroughly, as well.<sup>99</sup> Even masterplan of closed Sillamäe, designed by Lengorstroyproyekt with the Soviet nuclear industry, was processed by the Department of Architecture of the Estonian SSR thoroughly.<sup>100</sup>

Use of similar radial street pattern at one corner of the grid on the one hand, in

1947 – 1954 masterplan of Kiviõli and, on the other hand, in 1946 masterplans of Ahtme, Sompa and Kohtla indicates to influence of Lengiprosacht on the Department of Architecture of the Estonian SSR. Even Lengorstroyproyekt used the same pattern in 1947 masterplan of Kohtla-Järve, but not in 1946 – 1950, 1958 masterplans of Sillamäe (Figure 5). The Department of Architecture of the Estonian SSR, whilst processing the masterplans of East Estonian oil-shale mining and industrial towns, on its turn influenced Lengorstroyproyekt.

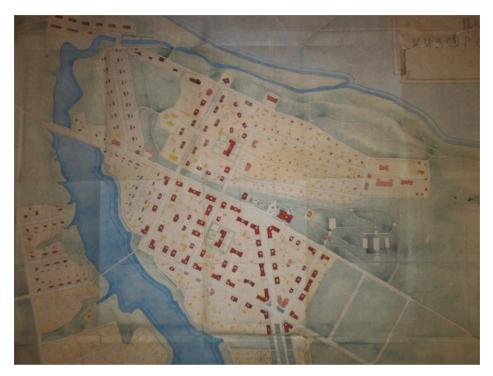


Figure 5. Sillamäe centre by Lengorstroyproyket (Alexandr Nikayev), 1948. Centre: Central Square with Palace of Culture (right). Right: recreation area and park. Source: Detalny proyekt, Tom I, GSPI-12, 1948.

However, the more complex and challenging masterplans, designed by Lengorstroyproyekt, got more attention in comparison with the regular and simple gridsbased masterplans, designed by Lengiproshacht. Stately urban ensembles of Sillamäe and Kohtla-Järve as quintessence and backbones of those masterplans, designed by Lengorstroyproyekt, followed orthodox Stalinist principles more in comparison that of stately urban ensembles within masterplans, designed by Lengiproshacht. Responding to a leading Soviet architects and theoreticians Ivan Zholtovskij's and architect Mordvinov's principles of urban design<sup>101</sup>, the Stalin-era architects and designers of Sillamäe and Kohtla-Järve tried to embody an approach to that implied a prosperous future - a kind of socialist paradise. These towns had to demonstrate the advantages of the Socialist system over its capitalist competitor by means of compositional unity and the illusion of luxurious of facades, courtyards, parks and inspiring sculptures. Stately urban ensemble as centre of Kohtla-Järve was built about one kilometre to the east of the pre-war settlement. The last one with the distance of one kilometre had to form a two-kilometre sanitary zone between oil-shale mine with industry and new town 'sotzgorod' (socialist town).<sup>102</sup> Stalinist stately ensemble as urban space of the town consists of two crossing main axes. The southwest – northeast one, named Victory Boulevard (now Kesk Boulevard), that is over 50 metres wide and 700 meters long, connects the Palace of Culture with a park and the cinema (Pobeda, 'Victory') (on the axis of the boulevard). The Victory Boulevard is crossed by the southeast-northwest axis of Rahu (Peace) Square (200 meters long, 125 meters wide), which was intended to concentrate local government building and four-storeyed apartment buildings with colossal orders and avant-corpses. The rest of the houses on the crossing axes are two-to three-storeyed apartment buildings with pitched roofs (Figure 6).<sup>103</sup> In 1956, local architect V. Tippel from "Estongiprogorstroi"<sup>104</sup> made a supplementary masterplan for Kohtla-Järve that clearly follows previous versions of Lengorstroyproyekt. Nearly 3/4 of the masterplan was implemented.<sup>105</sup>



Figure 6. Stalinist centre of Kohtla-Järve, early 1950s by Lengorstroyproyekt (Jevseiy Vitenberg, I. Pisareva, F. Kirzideli). Perspective view along the Victory Boulevard. Photo taken from crossing of the main axes in 1950s. Source: RM F 646.176.

The near complete implementation of the Stalinist masterplan in Sillamäe makes it fairly unique occurrence both in Estonia and the former Soviet Union. Processing of uranium oxides for the nuclear industry gave Sillamäe a special position and promoted the rapid and planned development. For instance, the same development concerned nuclear towns such as Ozersk (Ural), Zheleznogorsk (Siber), Seversk (Siber), Ozyorsk (Chelyabinsk-65; Siber) etc.

Sillamäe's centre as stately urban ensemble of the town consists of three main streets and a boulevard crossing the central square and recreational area. Southeast –

northwest oriented 30-meter wide converging Kalda and Kesk Streets are situated on two coastal levels and surround a park. The two streets converge at the Central Square of 140 x 120 metres that consists of a junction, greenery, flanked with Corinthian Palace of Culture, towered town hall and a grand staircase that leads to 40 metres wide and 250 meters long Mere Boulevard that connects with the sea. The boulevard is flanked with monumental four-storied apartment houses. The composition of the boulevard and the staircase is similar to Stalingrad staircase axes (monumental staircase between Volga River and Alley of Heros (*Alleya Geroyev*)). The rest of the stately urban ensemble is housed with neo-classicist apartment houses, public buildings ornamented with basreliefs, balustrades, pediments, columns etc.

The current grid of the town was developed within the years of 1946 – 1950, 1958. The Department of Architecture of the Estonian SSR processed at least the masterplans of 1946 – 1948. Stalinist central gridlines of the masterplans for Kohtla-Järve and Sillamäe have many compositional similarities with Stalinist central gridlines of Tallinn and Pärnu, designed by Arman. He designed the masterplans for Tallinn and Pärnu through the mid-1940s and early-1950s. It would be logical that the Stalinist central gridlines of Tallinn and Pärnu were inspired by the compositions, designed by Lengorstroyproyekt. However, it is on the contrary. Arman crossed converging axis with boulevard already in the 1945 masterplan of Tallinn and Cultural Centre composition (Figure 7).



Figure 7. Design for the Cultural Centre in Tallinn, 1945 – 1953 by Harald Arman. The 1953 version. Bottom right: Estonia Theatre near Estonia Boulevard. Centre: Academy of Sciences of Estonian SSR building near Lenin Boulevard. Top left: between prolongated axes was planned a stadium, built in 1955. Source: EAM 3.1.32.

He reused the solution in the 1952 Pärnu Oblast Centre composition. Neither the Sillamäe 1946-1947 masterplan nor the 1948 masterplan used crossing of converging axes and boulevard – but those are clearly visible on the 1949 (Figure 8), the 1950 (Figure 9) and the 1958 masterplans (Figure 10). Even more, location of stadium in those three masterplans resembles to his mid-1940s and early-1950s Tallinn masterplans. Arman actively processed the masterplans at least up to summer 1949 and was in touch with later masterplan versions via correspondence with Lengorstroyproyekt. For example, the 1948 masterplan<sup>106</sup> had an additional variant<sup>107</sup> that is influenced by Arman even more.<sup>108</sup> The same is visible in the 1950 masterplan within top-secret regulations of the Estonian SSR's Council of Ministers.<sup>109</sup> The 1958 masterplan of Sillamäe reflects realized situation and ideas of enlarging the town.<sup>110</sup> It seems as masterplans, designed by Lengorstroyproyekt, had been under Arman's heightened attention. In 1949, the Department of Architecture of the Estonian SSR awarded the first prize to Sillamäe for excellent and comprehensive implementation of masterplan.<sup>111</sup>



Figure 8. Sillamäe centre by Lengorstroyproyekt (Alexandr Nikayev and Michail Pospechov), 1949. Centre: Central Square with Palace of Culture (right) and grand staircase (top). Top right: Mere Boulevard crossing with converging axes via the staircase. Bottom right: stadium near converging axes. Source: SLV Proyekt planirovki, GSPI-12, 1949.



Figure 9. Sillamäe centre by Lengorstroyproyekt (Alexandr Nikayev and Michail Pospechov), 1950. Centre: Central Square with Palace of Culture (right) and grand staircase (top). Top right: Mere Boulevard crossing with converging axes via the staircase. Bottom right: stadium between converging axes. Source: ERA R-1.5s.212, 10–4.



Figure 10. Sillamäe centre by Lengorstroyproyekt (Alexandr Nikayev and Michail Pospechov), 1958. Centre: Central Square with Palace of Culture (right) and grand staircase (top). Top right: Mere Boulevard crossing with converging axes via the staircase. Bottom right: stadium between converging axes. Source: SLV Generalny plan, zakaza 229, 1958.

# Aspect of the population growth

According abovementioned documents, population of the 4000 km<sup>2</sup> area (without Sillamäe) was 60,000 people in 1948, 86,000 people in 1954 and was planned to be from 240,000 up to 305,000 people by 1970. If to compare years of 1948 and 1954, while increase of population was 26,000, then on the base of such a tempo the amount of population could have been 104,000 people in 1970 and 312 000 in 2010. For instance, real population of the same area was 115,600 people by the beginning of 2017. The difference between figure the 1970 and the project planned-figures would have been 2.1 – 2.9 times. Consequently, the secret project proposes accelerated increase of population in order to increase economic efficiency and high productivity of East Estonian oil-shale mining and industry.

# Conclusion

There were ideological, architectural and urban mechanisms in forming urban plans and urban spaces of East Estonian oil-shale mining and industrial towns. Those mechanisms

were driven by military and economical mechanisms of the Soviet Union as well as local authorities' (Karotamm, Veimer) eagerness and ambitions. Meanwhile, local state architect Arman, as head of the Department of Architecture of the Estonian SSR was deeply involved in urban planning of East Estonian oil-shale towns, including closed Sillamäe and played decisive role with its full measure of authority. The institution formulated pattern of urban planning and urban space of East Estonian oil-shale mining and industrial towns.

Those towns were designed to be compact and functional with city-like intensified housing-stock and stately urban ensembles and without remarkable enlargements. On the behalf of economic efficiency, high productivity, increase of general population was planned via optimizing of population of the towns and intensifying the housing-stock. The optimization, on its turn was caused by the occurrence of oil-shale deposits in certain territories nearby and under the towns. The pattern of urban planning and urban space define Stalinist urban ensembles of centres of East Estonian oil-shale mining and industrial towns that were formed by ideological and architectural mechanisms, driven by military and economical mechanisms. The mechanisms, defined by functional needs of the Soviet state and power, as well as local ambitions, formed Stalinist masterplans, urban composition, urban space, large scale, and formulated aesthetics and Corinthian style of East Estonian oil-shale mining and industrial towns. Whilst urban space of Estonian Soviet Stalinist period, between 1944 and 1955, influenced urban space of East Estonian oil-shale mining and industrial towns, the latter one influenced the first one, as well.

### Notes

<sup>&</sup>lt;sup>1</sup> Siim Sultson, "Estonian urbanism 1935–1955: the Soviet-era implementation of pre-war ambitions." *Planning Perspectives*, 33(3) (2017): 385–409. doi: <u>10.1080/02665433.2017.1348977</u>.

<sup>&</sup>lt;sup>2</sup> Voldemar Tippel, "Eesti NSV põlevkivi-tööstuslinnadest." [About oil-shale industrial towns of Estonian SSR]. ENSV Arhitektide Almanahh 1947 (1948): 54–9.

<sup>&</sup>lt;sup>3</sup> Harald Arman and Ivan Starostin, "Arhitektuurialastest saavutustest ja ülesannetest Nõukogude Eestis." [About Achievements and Tasks of Architecture in Soviet Estonia]. ENSV Arhitektide Almanahh IV (1951): 7–18.

<sup>&</sup>lt;sup>4</sup> Voldemar Meigas, "Eesti NSV linnaehitusest." [About urban construction of Estonian SSR]. *ENSV* Arhitektide Almanahh IV (1951): 19–30.

<sup>&</sup>lt;sup>5</sup> Voldemar Tippel and Vsevolod Tihomirov, "Uusi ühiskondlikke hooneid." [Some new public buildings]. *ENSV Arhitektide Almanahh IV* (1951): 31–43.

<sup>&</sup>lt;sup>6</sup> *Eesti arhitektuuri ajalugu* [History of Estonian Architecture]. Ed. H. Arman (Tallinn: Eesti Raamat, 1965).

<sup>&</sup>lt;sup>7</sup> Oleg Kochenovski, "Kohtla-Järve linnaehituslik kujunemine" [Urban Formation of Kohtla-Järve]. *Ehitus ja Arhitektuur* (1983): 12–23.

<sup>&</sup>lt;sup>8</sup> Leonid Volkov, "Eesti Arhitektuurist aastail 1940–1954." [About Estonian Architecture within 1940–1954]. In *Linnaehitus ja Arhitektuur: Tallinn* (Tallinn: Ehituse Teadusliku Uurimise Instituut, 1991), 183–213.

<sup>&</sup>lt;sup>9</sup> Mart Kalm, *Eesti 20. sajandi arhitektuur. Estonian 20th century architecture* (Tallinn: Prisma Prindi Kirjastus, 2001).

<sup>&</sup>lt;sup>10</sup> Andis Cinis, Marija Drėmaitė and Mart Kalm, "Perfect representations of Soviet planned space. Mono-industrial towns in the Soviet Baltic Republics in the 1950s–1980s.". *Scandinavian Journal of History.* 33 (3) (2008): 226–46.

<sup>11</sup> David Vseviov, *Kirde-Eesti urbaanse anaomaalia kujunemine ning struktuur pärast teist maailmasõda: Doktoritöö*. [The formation and structure of the urban anomaly in north-east Estonia after the Second World War. Doctoral Dissertation] (Tallinn: Tallinna Pedagoogikaülikool, 2002).

<sup>12</sup> Olaf Mertelsmann, "Ida-Virumaale sisserändamise põhjused pärast teist maailmasõda" [The reasons for immigration in the Ida-Virumaa regionafter the second World War]. *Ajalooline Ajakiri.* 1 (119) (2007): 51–74.

<sup>13</sup> Lilian Hansar, Sillamäe kesklinna muinsuskaitseala eksperdihinnang mälestise tunnustele vastavuse kohta [Expert opinion on Sillamäe centre as heritage site meeting the monument criteria] (Tallinn, 2012). One may find similar, but shorter mention on masterplans of Sillamäe and short mention on masterplan of Kohtla-Järve in: Lilian Hansar, "Linnade planeerimise juhised. Uued tööstuslinnad" [Instructions for planning towns. New industrial towns]. In *Eesti kunsti ajalugu. 6, I osa. 1940 – 1991* (Tallinn, 2013), 221–30.

<sup>14</sup> Henry Kuningas, "Hiilgava tuleviku poole. Stalinistlikud utoopialinnad põlevkivibasseinis" [To the Bright Future. Stalinist Utopian Towns in the Oil-Shale Basin]. In *Sõda ja sõjajärgne Narva linnamaastikus* (Narva, 2015), 245–61.

<sup>15</sup> Siim Sultson, "Replacement of urban space: Estonian post-war town planning principles and local Stalinist industrial towns." *Journal of Architecture and Urbanism*, 40(4) (2016): 283–294. doi: <u>10.3846/20297955.2016.1247999</u>

<sup>16</sup> One may find additional information on uranium production process in Sillamäe in 1946 – 1989 in: Ello Maremäe, Hain Tankler, Henno Putnik, lige Maalmann, *Historical Survey of Nuclear Non-Proliferation in Estonia, 1946–1995* (Tallinn: Estonian Radiation Protection Centre, 2003).

<sup>17</sup> Vseviov, Kirde-Eesti urbaanse, 8.

<sup>18</sup> Atomny proyekt SSSR – dokumenty i materialy. T. 1. 1938–1945. Ch. 1 [Atom Project of the USSR – Documents and Materials Vol. 1. 1938–1945. Part 2] (Collection of original archival documents) (Moscow: Nauka. Fizmatlit, 1998), 113–14.

<sup>19</sup> Ibid., 168–77.

<sup>20</sup> Ibid., 259–63.

<sup>21</sup> Established on 30 June 1941 due to the war.

<sup>22</sup> In March 1946, all Councils of People's Commissars were renamed Councils of Ministries (for example: the USSR's Council of Ministries, the Estonian SSR's Council of Ministries) and all People's Commissariats were renamed Ministries (for example: the USSR's Ministry for Internal Affairs; the Estonian Ministry for Internal Affairs).

<sup>23</sup> Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 1, 269–76.

<sup>24</sup> Atomny proyekt SSSR – dokumenty i materialy. T. 1. 1938–1945. Ch. 2 [Atom Project of the USSR – Documents and Materials. Vol. 1. 1938–1945. Part 2] (Collection of original archival documents) (Moscow: Izdatel'stvo "MFTI", 2002), 53–5.

<sup>25</sup> ERA (Rahvusarhiiv (National Archives of Estonia)) R-1.5.95, 48–9, 68–71, 85.

<sup>26</sup> ERA R-1.5.95, 78–80.

<sup>27</sup> Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 208–16; Vseviov, Kirde-Eesti urbaanse, 26–7.

<sup>28</sup> Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 239–42.

<sup>29</sup> ERA R-1.5.104, 21, 36.

<sup>30</sup> Vseviov, *Kirde-Eesti urbaanse*, 26–7.

<sup>31</sup> Since 1946: the USSR's Ministry of Geology.

<sup>32</sup> ERA R-1.5.104, 73-6.

<sup>33</sup> Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 349–51.

<sup>34</sup> Atomny proyekt SSSR – dokumenty i materialy. T. 2. Atomnaya bomba. 1945–1954. Kn. 1 [Atom Project of the USSR – Documents and Materials. Vol. 2. Atom Bomb. 1945–1954. Book 1] (Collection of original archival documents) (Moscow-Sarov: Nauka. Fizmatlit. VNII/VNIIEF, 1999),

11-3; 18-9.

<sup>35</sup> Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 385–90.

<sup>36</sup> ERA R-1.5.104, 189.

<sup>37</sup> Leningrad State Building Enterprise of Synthetic Liquid Fuel and Gas Industry.

<sup>38</sup> The USSR's General Directorate of Synthetic Liquid Fuel and Gas at the USSR's Council of People's Commissars. <sup>39</sup> ERA R-1992.2.2, 63–66; SM (Sillamäe Muuseum (Sillamäe Museum)) Vypiska iz protokola no 2 (Statement of protocol number 2) <sup>40</sup> Atomny proyekt SSSR, T. 1. 1938–1945. Ch. 2, 413–24. <sup>41</sup> Atomny provekt SSSR – dokumenty i materialy. T. 2. Atomnava bomba. 1945–1954. Kn. 2 [Atom Project of the USSR – Documents and Materials. Vol. 2. Atom Bomb. 1945–1954. Book 2] (Collection of original archival documents) (Moscow-Sarov: Nauka. Fizmatlit. VNII/VNIIEF, 2000), 313-6. <sup>42</sup> Ibid., 189–91. <sup>43</sup> Meanwhile, since 1946: the USSR's Minister for Security Affairs. <sup>44</sup> Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 1, 102–8. <sup>45</sup> Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 2, 262–3. <sup>46</sup> ERA R-1.5.92, 23. 47 ERA R-1.5.95. <sup>48</sup> Atomny proyekt SSSR, T. 2. Atomnaya bomba. 1945–1954. Kn. 2, 263–7; ERA R-1.5s.133, 1–2. <sup>49</sup> ERA R-1.5s.133, 3–8; ERAF (Rahvusarhiiv (National Archives of Estonia)) 1.5.8, 1–6. <sup>50</sup> Mertelsmann, "Ida-Virumaale sisserändamise", 53–4. <sup>51</sup> Leningrad filial of all-Soviet Union Giproshacht (State Institute for Planning Mines under the USSR's People's Commissariat of Coal Industry). 52 ERA R-1.5.104, 80-99. 53 ERA R-1992.3.11, 27, 45; ERA R-1527.2.44, 24. <sup>54</sup> ERA R-1992.1.137, 48, 90-4,114,115,122,130,138,158-60. <sup>55</sup> ERA R-1992.3.11, 1, 27, 45, 58; ERA R-1527.2.44, 5–6. <sup>56</sup> ERA R-1992.3.11, 27, 45, 58; ERA R-1527.2.44, 24. <sup>57</sup> The USSR's State Planning Committee. 58 ERA R-1992.3.27, 4-8. <sup>59</sup> ERA R-1527.2.44, 17. <sup>60</sup> ERA R-1992.3.11, 28. <sup>61</sup> ERA R-1992.3.11, 56. <sup>62</sup> ERA R-1527.2.44, 36, 41. 63 ERA R-1992.3.27, 5. <sup>64</sup> ERA R-1527.2.44, 35-41, 44-50. <sup>65</sup> EAR R-1992.3.11, 8, 32, 58, 59. 66 ERA R-1527.2.44, 20. <sup>67</sup> EARF 1.14a.17, 1–3, 9, 10. <sup>68</sup> ERA R-1992.2.12, 44–54; ERA R-1992.2.1; ERA R-1992.2.31; ERA R-1992.2.22; ERA R-1992.2.41. <sup>69</sup> "Plenum pravlenija Sojuza arhitektrov." [Plenum of the Board of the Union of Soviet Architects]. Pravda, (August 19, 1943); Iz istorii sovetskoj arhitektury 1941-1945 gg. Dokumenty i materialy. Hronika voennyh let. Arhitekturnaja pechat [From History of Soviet Architecture 1941-1945. Documents and Materials. Chronicle of War Years. Architectural Publishing] (Collection of original archival documents) (Moscow: Izdatel'stvo "Nauka", 1978), 88–90; Julia L. Kosenkova, Sovetskij gorod 1940-h – pervoj poloviny 1950-h godov. Ot tvorcheskih poiskov k praktike stroiteľstva. Izd. 2e, dop. [Soviet Town from 1940s to the First Half of 1950s. From the Creative Searches to the Practice of Building. Ed. 2, Amended] (Moscow: Knizhnyj dom "LIBROKOM", 2009), 41, 42. <sup>70</sup> Up to January 1944. <sup>71</sup> 23 August 1942 – 2 February 1943. <sup>72</sup> Iz istorii, 30–34. <sup>73</sup> Iz istorii, 78, 142,172. <sup>74</sup> Arhitektura SSSR 1917–1987 [Architecture of the USSR 1917–1987]. Moscow: Stroi<sup>×</sup>izdat, 1987.,

109.

<sup>75</sup> Iz istorii, 95–102, 109.

<sup>76</sup> I. Gorich, "V masterskoj zodchego." [In Architect's Atelier]. Sovetskaya Estoniya (August 10, 1946), 4.

<sup>77</sup> ERA R-1992.1.137, 47, 72.

<sup>78</sup> EAR R-1992.3.11, 7, 58.

<sup>79</sup> EAR R-1992.3.1, 58, 59.

<sup>80</sup> ERA R-1527.2.44, 42.

<sup>81</sup> ERA R-1992.2.22, 20–44; ERA R-1992.3.11, 31, 58.

<sup>82</sup> ERA R-1527.2.44, 41, 46.

<sup>83</sup> Vseviov, *Kirde-Eesti urbaanse*, 44; Eesti Statistika [Statistics Estonia]. The 1959 census (Tallinn, Pärnu, Sillamäe, Kohtla-Järve). [online] (<u>https://www.stat.ee/20399</u> (accessed on 11 March 2019)). Due to long data processing, the 1959 census results show figure of the agglomeration, established in 1960, as well).

<sup>84</sup> EAM (Eesti Arhitektuurimuuseum [Museum of Estonian Architecture]) 3.1.12; EAM 3.1.16; EAM 3.1.19.

<sup>85</sup> ERA R-1527.2.44, 46.

<sup>86</sup> EAM 3.1.46; EAM 3.1.248.

<sup>87</sup> EAM.3.1.50.

<sup>88</sup> Leningrad filial of all-Soviet Union Gorstroyproyekt (Planning Institute for Town Building under the USSR's Ministry of Heavy Industry).

<sup>89</sup> Scientific Research Institute No 9.

<sup>90</sup> State Specialised Planning Institute No 12.

<sup>91</sup> EAM 3.1.50; EAM 3.1.46, EAM 3.1.248; ERA T-14.4-6.941, 1; ERA R-3.3.3148, 18.

<sup>92</sup> ERA R-1992.1.137; ERA R-1992.2.41; ERA R-1992.3.3, 3, 14.

<sup>93</sup> ERA R-1992.1.137; ERA R-1992.3.3, 4, 11, 15, 21, 30.

<sup>94</sup> ERA R-1992.1.137; ERA R-1992.3.3, 5, 17, 18, 29.

<sup>95</sup> ERA R-1992.1.137; ERA R-1992.3.3, 7, 13, 20.

96 ERA R-1992.3.3, 19.

<sup>97</sup> ERA R-1992.2.44, 103–46; ERA R-1992.2.63, 214–48; ERA R-1992.2.76, 100–7; ERA R-1992.3.3, 22.

98 ERA R-1992.1.137; ERA R-1992.2.41; ERA.R-1992.3.3, 43, 44.

<sup>99</sup> ERA R-1992.1.137; ERA R-1992.2.1, 6–8; ERA R-1992.2.22, 20–44; ERA R-1992.2.41, 126–51; ERA R-1992.3.3, 16, 17, 27, 28.

<sup>100</sup> ERA R-1992.2.12, 44–63; ERA R-1992.1.137, 5, 16; ERA R-1992.3.3, 9, 10, 33, 34; SLV (Sillamäe Linnavalitsus [Sillamäe Municipality]) Detalny proyekt planirovky zhilogo posyolka, Tom I, GSPI-12, 1948 [Detail design for planning of settlement. Vol. 1. GSPI-12, 1948].

<sup>101</sup> Ivan V. Zholtovskij, "Printzip zodchestva." [Principle of Architecture]. *Arhitektura SSSR no. 5* (1933); Ivan V. Zholtovskij, "Ancambl' v arhitekture." [Ensemble in Architecture]. *Stroitel'naja gazeta*, (May 30, 1940); Ivan V. Zholtovkij, "Vospitanye Zodzhego." [Bringing up Architect]. *Sovetskoye iskusstvo*, (November 30, 1945); Kosenkova, *Sovetskij gorod 1940-h*, *42*.

<sup>102</sup> Tippel, "Eesti NSV põlevkivi-tööstuslinnadest", 55.

<sup>103</sup> ERA R-1992.2.57; ERA R-1992.2.41.

<sup>104</sup> Successor of Estonproyekt. Estongiprogorstroi (Estonian SSR's State Institute for Town Planning and Building), established as distinct institution in 1955. Since 1957 renamed to Estonproyekt.

<sup>105</sup> EAM 3.1.281.

<sup>106</sup> SLV Detalny proyekt.

<sup>107</sup> SLV Proyekt planirovki zhilogo posyolka, GSPI-12, 1949 [Design for planning of settlement, GSPI-12, 1949].

<sup>108</sup> SM Generalny proyekt planirovki žhilposyolka zavoda no 1 i razvertki glavnyh ulic (fotomatarialy). NII-9. 1947 [Masterplan of settlement of factory no 1 and scanning of the main streets (photomaterials). NII-9. 1947]; SLV Detalny proyekt; SM Detalny proyekt planirovki zhilogo posyolka. Albom-foto. Tom IV. GSPI-12, 1948 [Detail design for planning of settlement. Photoalbum. Vol. 4. GSPI-12, 1948], SLV Proyekt planirovki.

<sup>109</sup> ERA R-1.5s.212, 10-4.

<sup>110</sup> SLV Generalny plan zhilogo posyolka, zakaza 229, 1958 [Masterplan of settlement, order 229, 26

26

1958]. <sup>111</sup> ERAF 1.58.13, 14–5.

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# **Publication 2**

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# Towards Prosperous Future Through Cold War Planning: Stalinist Urban Design in the Industrial Towns of Sillamäe and Kohtla-Järve, Estonia

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This chapter focuses on Estonian industrial towns Sillamäe and Kohtla-Järve and the deployment of Soviet urban design approaches from the mid-1940s through to the mid-1950s. The new industrial towns were built in order to exploit local mineral resources by the occupying Soviet regime and were examples of Stalinist planning, intended as utopias. Stately urban ensembles of those towns formulated a paradigm that was unfamiliar to the existing local urban design and architectural traditions. Sillamäe and Kohtla-Järve were designed under the guidance of stately architectural firms Lengorstroyproyekt and Lengiproshacht residing in Leningrad (St. Petersburg). In the 1950s both towns, with populations of 10 000, had a morphology that allowed them to be developed into much larger industrial centres. Sillamäe and Kohtla-Järve were designed to be model Soviet industrial towns in order to demonstrate the route to a prosperous future. Unlike other Estonian towns, the inhabitants of Sillamäe and Kohtla-Järve were imported from the large Soviet Union. Sillamäe was a Soviet 'closed city' due to the processing of uranium oxides for the nuclear industry and military needs. Kohtla-Järve as an agglomeration consists of six satellite settlements (Järve, Ahtme, Kukruse, Sompa, Oru, Viivikonna with Sirgala) that were collectively regarded as an oil-shale mining and processing complex in order to produce electricity in large thermal power plants. Though research of Estonian Stalinist urban space considers both Stalinist industrial towns unfamiliar, as from parallel dimension, those have got perspective and functional plans that, however, have much in common with the Stalinist central gridlines of Tallinn and Pärnu, planned by local architects. This essay reflects upon the possibilities of integrating partially abondaned, and mostly Russian-speaking, Sillamäe and Kohtla-Järve into the entire state by the means of legacy of local Stalinist stately urban ensembles.

Keywords: Urban space, Industrial town, Ideology, Stalinism, Cold War

### Introduction

In the summer of 1940, independent Estonia was occupied by the Soviet Union. A year later, the German's took over Estonia and stayed until 1944 when the Soviet Union seized the country for a second time. This occupation would last until 1991, spanning the years of the post-war Soviet Stalinist period, beginning of Cold War and Stalin's death in March 1953.

Due to the ongoing World War Two and the relatively short duration of the occupations, neither the first Soviet takeover, nor the German occupation, had an impact on Estonian town planning or architectural design. However, Stalinist principles greatly influenced the urban landscape after 1944, and until November 1955, when the Communist Party of the Soviet Union's Central Committee decided to move away from the characteristically exaggerated architectural style (*Ob ustranenii...*, 1955, pp. 8, 11, 13, 15)

In line with official Stalinist ideology, Soviet town planning needed to stand in opposition to that of the West, so as to elevate socialist principles above those of capitalism. This was one of the crucial themes during post-war Cold War years. Post-war stately urban ensemble in the Soviet east Estonian industrial towns was influenced markedly by Stalinist utopianism and Cold War threats and contained architectural features and political iconography that had to demonstrate a path to a prosperous future. There were noticeable anomalies between the size of population and the scale of town centre developments in Sillamäe and Kohtla-Järve.

This chapter focuses on east Estonian industrial towns during the post-war Stalinist period (1944–1955), portraying stately urban ensemble practices that occurred during the Stalinist period of the Cold War in Sillamäe and Kohtla-Järve agglomeration and reflecting upon. architectural identity of those towns and possibility to consider the legacy as a natural and familiar part of Estonian Stalinist urban space practice. On the one hand, Stalinist stately urban ensemble contrasted with local planning traditions; on the other hand, it has much in common with the Stalinist central gridlines of Tallinn and Pärnu, planned by local architects.

Due to the fact the first phases of Sillamäe and Kohtla-Järve were not planned by localarchitects (indicated by surviving Russian language records, masterplans and documentation), they are different to other Estonian towns. The Stalinist appearance of these east Estonian industrial towns is still considered unfamiliar, and even exotic today, as quite different to the urban form elsewhere in the country. The planning and architecture of these east Estonian industrial towns is under researched and it is important to incorporate them into wider scholarship of Estonian Stalinist urban space. Stalinist centres of Sillamäe and Kohtla-Järve agglomeration have architectural and urban compositional similarities with Stalinist centres of Tallinn and Pärnu. The Department of Architecture of the Estonian Soviet Socialist Republic (SSR) and its head Harald Arman that processed masterplans and construction plans of all local towns were familiar with masterplans and construction plans of both industrial towns already in mid1940s (ERA.R-1992.2.12: 44–54; ERA.R-1992.2.1; ERA.R-1992.2.31; ERA.R-1992.2.22; ERA.R-1992.2.41). The Stalinist period is a part of Estonian history, deeper knowledge of the period helps to define the perspectives of the state and its inhabitants. Since urbanism is a physio-spatial and social issue, deeper knowledge of the east-Estonian industrial towns helps to integrate mostly Russian-speaking north-east Estonia into the entire state and support improvement of the area.

Available literature on these topics consists of articles from the Stalinist period (mid-1940s to mid-1950s) to the post-Soviet period (early1990s to present). Descriptive articles concerning masterplans and urban space of the East-Estonian industrial towns in the Stalinist period appeared in professional periodical publications like "ENSV Arhitektide Almanahh" (Almanac of Architects of Estonian SSR) by architect Voldemar Tippel (Tippel, 1948, pp. 54–59), the head of the Department of Architecture of the Estonian SSR Harald Arman and architect Ivan Starostin (Arman & Starostin, 1951, pp. 7–18), architects Voldemar Meigas (Meigas, 1951, pp. 19–30), Vsevolod Tihomirov (Tippel & Tihomirov, 1951, pp. 31–43). After Stalin's death, scholarship around urban space and town planning seemed much less popular. There was merely the occasional generic reference in post-Stalin Soviet period literature. For example, in the 1965 book, 'Eesti arhitektuuri ajalugu' (History of Estonian Architecture), edited by H. Arman, the issue was discussed neutrally, more as a matter of protocol (*Eesti arhitektuuri ajalugu*, 1965).

In the post-Soviet period, more diverse analytical approaches emerged as a result of Estonia's political independence. The new circumstances offered the opportunity to treat the topic objectively. In 1991, the historian of architecture Leonid Volkov, who lived through the Stalin era, published the article, 'Eesti arhitektuurist aastail 1940 – 1954' (About Estonian Architecture within 1940 – 1954) (Volkov, 1991, pp. 183– 213). Historian of architecture Mart Kalm considered the issue in his book, 'Eesti 20. sajandi arhitektuur' (Estonian 20<sup>th</sup> Century Architecture) (Kalm, 2001). The topic is developed further in Kalm's article 'Perfect Representations of Soviet Planned Space. Mono-industrial towns in the Soviet Baltic Republics in the 1950s-1980s.'(Cinis, Drémaité, Kalm, 2008, pp. 226–246). Historian David Vseviov analysed formation and structure of the East-Estonian towns in his doctoral dissertation 'Kirde-Eesti urbaanse anaomaalia kujunemine ning struktuur pärast teist maailmasõda' (The formation and structure of the urban anomaly in northeast Estonia after World War II) (Vseviov, 2002). East-Estonian Stalinist urban space is considered for instance in Siim Sultson's article about alteration in the awareness of Estonian city space (Sultson, 2016a, pp. 49–55).

More detailed overview and deeper information about the present state of research of Estonian post-war urban space one can find in Siim Sultson's article, where the author highlights a need to incorporate East-Estonian industrial towns into research about Estonian post-war Stalinist urban space (Sultson, 2016b, pp. 283–294). In his 2017 article the author analyses *similarity* and *continuity* in the urban space design of the postwar Stalinist period and that of the Estonia's period of independence during the 1930s (Sultson, 2017).

### 1. Principles of Stalinist town planning

For ideological reasons private property was abolished in the Soviet Union, resulting in complete state ownership of the land. Consequently, it was easier to determine town structures as a means to control society via the re-planning of urban space. It was especially crucial after World War Two – the necessity to restore wrecked towns and to establish new ones afforded the opportunity to celebrate the victorious Soviet regime and its communist ideology.

The question of urban ensemble in town planning and urban space was crucial to Stalinist-era architecture. However, urban ensemble in Soviet sense leaned on to new method socialist realism. In 1932, the previous Soviet People's Commissar of Education Anatoly Lunacharskiy stated that a task of architecture is to integrate functionality and

utility in a harmonized way into an ideological idea (Kosenkova, 2009, pp. 19–20). A year later those features were interlaced into new term: the Soviet Communist Party found a new ideological method – socialist realism; the method was supposed to "embody an absolute apocalyptical future where the difference between past and future abolishes significance." (Groys, 1998, p. 859). The method had to embrace literature, music, art, architecture. In 1934 Soviet Writer's Union of the USSR formulated socialist realism as a method that demands artist to depict reality faithfully, historical events in explicit way within revolutionary development. The depiction had to be in tight connection with educating workers (Soviet citizens) in socialist spirit. Socialist realism as evolving and ambient category was intended to provide artist vast opportunities to choose different forms, styles and genres. (ENE, VII, 1975, p. 243)

A leading Soviet architects and theoreticians, Ivan Zholtovskij, emphasised the importance of composition in urban ensemble. In 1933, he defined five principles of Soviet urban ensemble: the unity of different forms; the tectonic accuracy of architectural forms; the dynamics and organic growth of architectural forms; the natural architectural organism; and the unexpected compatibility of different elements of architectural forms (Zholtovskij, 1933).

In 1940, Zholtovskij stated that every architect should take ensemble as unity into account. According to socialist realism, architecture in a city space was supposed to be ensemble-like: every house had to be ruled by ensemble. This meant organising cities according to a certain hierarchy, in which every component of the urban landscape had to abide by the principle of unity. In Zholtovskij's words, '[t]here is no architecture outside urban ensemble. The architect is responsible for one's people's architecture, the town's architecture, and street architecture whilst designing a house.' (Zholtovskij, 1940). Urban ensemble, e.g. stately urban ensemble became one of the crucial principles by the means of socialist realist method after World War Two (in order to celebrate the victory) and in Cold War (in order to demonstrate preferences of socialist practices compared to the capitalist ones).

During World War Two, according to a plenary resolution of the USSR's Soviet Architects' Union, Soviet architects were expected to be ready to undertake massive post-war restoration works (Plenum pravleniya, 1943). The following instructions, given by the USSR's Council of People's Commissars and the Soviet Communist Party, compelled architects to design and restore wrecked towns in a grandiose manner, according to state ideology (Iz istorii..., 1978, pp. 95–102, 109). Perhaps the greatest transformation of the Stalinist urban space and ensemble occurred in Stalingrad (Volgograd) during and after World War Two, where architect Karo Alabyan developed new designs (1943) (Iz istorii..., 1978, pp. 78, 142, 172). Stalingrad, given its association to the nation's leader and being one of the most symbolic battlefields of the war, was rebuilt as a proving ground for new ideas (Sultson, 2017). Other cities in the USSR were being re-designed to have to Stalingrad a similar shape, composition and principles. The gridline of new Soviet towns in order to express order, harmony, inevitable prosperous future via pomposity had to be more classicist, with axes, squares, forums, junctions, and the composition of urban ensembles more symmetrical, hierarchical (the highest houses in the centres and around squares), and dynamic with perimetral housing. While cities like Rome, and Paris were still regarded as exemplars, Leningrad, Moscow and Stalingrad became mandatory models for other Soviet towns after 1945. The squares and streets needed to be much larger to enable mass processions and parades during ideological events and stately anniversaries (Barhhin, 1986, pp. 127–128). These principles, that became compulsory for every Soviet architect, were complemented with a World War Two victory theme.

In 1945, the head of the USSR's State Committee of Architecture, Arkadi Mordvinov, formulated seven principles of Soviet post-war town planning that were compulsory for all architects: town planning was supposed to be interrelated with the natural environment in order to expose its beauty; town plans needed a balanced compositional centre (for instance, city centre – main street – railway station square); monumental public buildings had to be erected on junctions; residential guarters had to be planned in complex ways and designed as one ensemble; all buildings had to be painted only in light colours (to echo the dream of a positive future); functionality and high quality of structures and infrastructures (electricity, water supply etc.) were a priority; and thorough quality controls both of architects' projects and the building process was necessary (Kosenkova, 2009, p. 42). Those principles, based on Soviet experience and ideology, had to guarantee flourishing of post-war town planning. However, much of that remained a dream, ideals that were implemented mostly in central parts of towns. One the one hand, those ideas were only partially effective in reshaping the bigger city centres (as Moscow, Stalingrad, St Petersburg, Kiev, Minsk) and closed nuclear or industrial towns. On the other hand, in majority cases the ideas to reshape towns for socialism remained just fake window dressing.

### 2. East Estonian industrial towns

Estonian architect Harald Arman was compelled to go to the Soviet Union with the Red Army in 1941. When he returned to Estonia in 1944 as head of the Department of Architecture of the Estonian SSR. He had already begun to organize the restoration of Estonian towns whilst based in the Soviet Union, in mid-1944 (Gorich, 1946). However, after World War Two, Estonian architecture and urban space experienced contradictory developments. On the one hand, the urban design of the Estonian post-war Stalinist period followed the Soviet doctrine in concept, forms and building materials – including in Tallinn, Pärnu, Kohtla-Järve and Sillamäe. The most radical solution, as happened in Narva, meant the replacement both of city and its inhabitants. One the other hand, there was some similarity and continuity inherited from urban design practices developed during the 1930s, like in Tallinn, Pärnu, Tartu, Kohtla-Järve centre in Järve. While urban space design during the Estonian post-war Stalinist period (1944-1955) is usually considered to be in conflict with that of the 1930s, Estonian architecture, town planning, and urban space design were already similar to the later Stalinist period by 1940. Indeed, there seems to have been a smooth transition to Stalinist urban space design practice from that of the independence period, both in the appearance and composition of buildings. Estonian 1930s architecture and urban space design became increasingly Corinthian and stately by 1940; Estonian architecture in the mid-1940s is rather similar to that of the late 1930s. During Stalin era, while local architects (except H. Arman) were not involved in the planning of Sillamäe and Kohtla-Järve, Stalinist stately urban ensembles of Tallinn, Pärnu, and Tartu were designed by the same architects that worked during Estonia's period of independence.

Similarly, the oil-shale industry was not anything new in Estonia before 1940. The Republic of Estonia made its first attempts to exploit mineral resources for producing oil-shale oil and gasoline in Kohtla-Järve in mid 1920s. However, during the seizure of the country by the Soviet Union the new regime considered East-Estonia as a resource for oil-shale that could supply Leningrad (St Petersburg) and north-west Russia with liquid fuels,

### natural gas and electricity.

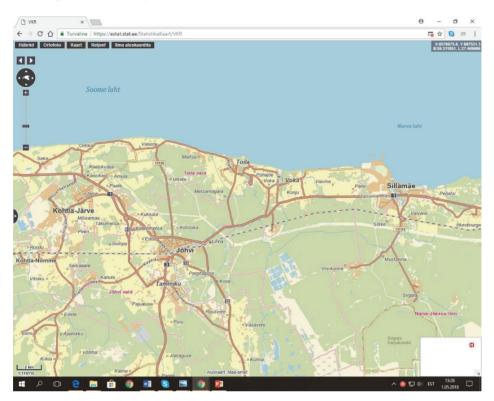


Figure 1. Map of Kohtla\_järve agglomeration and Sillamäe. Source: Eesti Statistikaamet.

The East Estonian towns of Sillamäe and Kohtla-Järve, which were fairly small and widely dispersed settlements before the Soviet time, became exemplars for "socialist industrialisation" and the deployment of Soviet urban space design from the mid-1940s to the mid-1950s. During these years Sillamäe and Kohtla-Järve (that was developed to agglomeration) were designed to be new mono-industrial towns and were supposedly examples of Stalinist utopias and future economic prosperity. Thus, compared to other Estonian towns, Sillamäe and Kohtla-Järve were newly designed settlements.



Figure 2. Lenin Square in Kohtla-Järve, early-1950s, by Lengorstroyproyekt. Photo taken in 1950s. Source: RM F 207.5.

East-Estonian industrial zones became the most important Soviet territory in the country, after Tallinn. The area was rapidly urbanised. During the two war-time occupations the area lost the majority of its population due to war-losses, deportations to Russia and emigration to the West. Only about 60% of the native population remained there by 1944. Unlike other Estonian towns, new inhabitants of the Sillamäe and Kohtla-Järve urban agglomeration were forcibly relocated from other parts of the Soviet Union. The formation of this type of urban space in the East-Estonian industrial zone was brought about by economical-political policy of the Soviet authorities and is a unique phenomenon in the history of post-war Europe. (Vseviov, 2002, p. 8) As early as November 1944 the Soviet authorities imposed a seven-kilometre closed zone from the coast of Gulf of Finland in order to guarantee the secrecy of sensitive military sites. The closed zone set up restrictions for natives to return their homes. (ERA.R-1.5.95:48–49)

### 2.1 Sillamäe

Sillamäe enjoyed a special position in the east Estonian industrial region because of the processing of uranium oxides. Consequently, it was a classified and closed town until the end of Soviet occupation.

In May 1945 the Council of the People's Commissars of the USSR arranged for a detailed geological investigation in the east Estonian oil-shale area. (ERA.R-1.5.104:74–76) According to the memoirs of the scientific director of the Institute of Geology of the USSR, M. Altgausen, the decision was reached at a secret meeting in the Kremlin concerning the raw material for nuclear industry. The oil-shale under Sillamäe seemed

to contain uranium oxides – it was vital for the Soviet Union at the beginning of the Cold War. (Vseviov, 2002, pp. 26–27)

By the end of 1945 the Leningrad Department of Building Factories (Lengazstroi) acting on behalf of Glavgaztopprom of the Council of the People's Commissars of the USSR sent a request to the Department of Architecture of the Estonian (DAE) SSR to select a 78-hectare plot of land to establish a settlement for the workers of Viktor Kingissepp oil-shale processing and distillation factory. The local department agreed the request. The DAE examined and processed masterplan of Sillamäe designed by the architects of Lengorstroyproyekt through to the autumn of 1946. (ERA.R-1992.2.2:63–66)

Meanwhile, in summer 1946, following the regulations of the Council of Ministers of the USSR both Council of Ministers of the Estonian SSR and the Central Committee of the Communist Party of the Estonian SSR issued a top secret regulation concerning uranium oxides oriented oil-shale research in Refinery No 7 and development of the classified settlement in Sillamäe (ERA.R-1.5.133). Probably after issuing this regulation the further development of the masterplan ceased (ERA.R-1992.2.12:44).

The Soviet nuclear industry-oriented regulation finally established Sillamäe's special position both in Estonia and the Soviet Union: the town, that was dedicated to enrichment of uranium oxides, received homogenous Stalinist urban design within ten years of the end of the World War Two. Presumably due to need for loyalty to the Soviet authorities, new inhabitants for the rapidly growing settlement were imported from the inner regions of the Soviet Union itself. (ERA.R-1.5.179:17)

During the Stalinist-era it was a settlement that emerged practically from nothing and within ten years became a town with a population of over 12 500 by 1950 (Vseviov, 2002, pp. 35, 48). According to the first masterplan of 1946 by Lengorstroyproyekt a population of Sillamäe was planned to be only 2 000 (ERA.R-1992.2.12). In January 1949, while Sillamäe workers' village was taken under the authority of Narva, it had a population of 7 000 and encompassed area of about 900 hectares (ERA.R-3.3.1071:1–4). According to the 1959 census population of Sillamäe was 8 210 (Vseviov, 2002, p. 44). On June 29<sup>th</sup>, 1957 Sillamäe became a town under the authority of Tallinn (ERA.R-3.3.3044). By the beginning of 2018 population of Sillamäe was 13 406 (Siseministeerium, 2018). In 1989 population of the town was highest - 20 561 (Vseviov, 2002, p. 94).



Figure 3. Design for Stalinist Central Square of Sillamäe, 1948 by Lengorstroyproyekt / GSPI-12. Source: SM Sillamäe keskuse perspektiivvaade.

Sillamäe's centre as stately urban ensemble of the town consists of three main streets and a boulevard crossing the central square and recreational area. Southeast – northwest oriented 30-meter wide converging Kalda and Kesk Streets are situated on two coastal levels and surround a park. The two streets converge at the Central Square of 140 x 120 metres that consists of a junction, greenery flanked with Corinthian Palace of Culture, towered town hall and a grand staircase that leads to 40 metres wide and 250 meters long Mere Boulevard that connects with the sea. The boulevard is flanked with monumental four-storied apartment houses. The composition of the boulevard and the staircase is similar to Stalingrad staircase axes (monumental staircase between Volga River and Alley of Heros (*Alleya Geroyev*)). The rest of the stately urban ensemble is housed with neo-classicist apartment houses, public buildings ornamented with bas-reliefs, balustrades, pediments, columns etc.



Figure 4. Stalinist centre of Sillamäe, view from staircase with sculptures along Mere Boulevard towards sea, early 1950s, by Lengorstroyproyekt / GSPI-12. Photo taken in 1950s. Source: SM 1F 6273.



Figure 5. Stalinist centre of Sillamäe, view from staircase along Mere Boulevard, early-1960s, by Lengorstroyproyekt / GSPI-12. Photo taken in early 1960s. Source: SM 1F 6057.

The current grid of the town was developed within the years of 1946/1947 - 1949. Whilst up to September 1946 the settlements masterplan was designed only by

architects of Lengorstroyproyekt (Leningrad filial of all-Soviet Union Gorstroyproyekt (Planning Institute for Town Building under the Ministry of Heavy Industry of the USSR), the next versions of the masterplans were made by Lengorstroyproyekt with Leningrad filial of NII-9 (Scientific Research Institute number 9) in 1947 and with Leningrad filial of GSPI-12 in 1948 – 1949 (Stately Specialised Planning Institute number 12). Both latter organisations belonged to the Soviet nuclear industry. (SM Generalny proekt, NII-9, 1947; SLV Detalny proekt, Tom I, GSPI-12, 1948; SLV Proekt planirovki, GSPI-12, 1949)



Figure 6. View along Kesk Street and Stalinist Central Square of Sillamäe, early 1950s, by Lengorstroyproyekt/GSPI-12. Photo taken in 1950s. Source: SM 1F 6079.

The near complete implementation of the Stalinist masterplan in Sillamäe is fairly unique occurrence both in Estonia and the former Soviet Union. Processing of uranium oxides for the nuclear industry gave the new Soviet settlement Sillamäe a special position and promoted the rapid and planned development. For instance, the same development concerned nuclear towns such as Ozersk, Zheleznogorsk, Seversk etc.



Figure 7. Stalinist centre of Sillamäe, view from staircase along Mere Boulevard, early-1950s, by Lengorstroyproyekt / GSPI-12. Photo taken in 2013. Source: Siim Sultson.



Figure 8. Stalinist centre of Sillamäe, view to staircase of the Central Square, early-1950s, by Lengorstroyproyekt / GSPI-12. Photo taken in 2013. Source: Siim Sultson.

# 2.2 Kohtla-Järve agglomeration

Kohtla-Järve was conceived as oil-shale mining and processing centre to supply Leningrad (St Petersburg) and North-West Russia with liquid fuels, natural gas and electricity. The agglomeration consists of six satellite towns (Järve, Ahtme, Kukruse, Sompa, Oru, Viivikonna with Sirgala) and also included Kohtla-Nõmme, Kiviõli, Jõhvi, Püssi settlements during the Soviet era. The latter four are now independent towns. Regardless of the dynamics of its constitution, Järve was always the administrative and civic centre of the agglomeration of towns formed in June 1946.



Figure 9. Stalinist centre of Kohtla-Järve centre (Järve), early-1950s by Lengorstroyproyekt. Perspective view along the Victory Boulevard. Back: oil-shale industry. Photo taken in mid 1950s. Source: a postcard.

Due to the changing constitution of the city region it is difficult to track population figures. However, according to the agglomerated data of the six conjoined towns, by 1950 the population of Kohtla-Järve had risen from the amount of 7 200 in 1945 to over 17 000 in 1950 (Zabrodskaja, 2005, pp. 24, 25). Between April 1946 and June 1947 the Department of Architecture of the Estonian SSR Estonian Council of Ministers of the Estonian SSR examined and approved the masterplans of Kohtla-Järve. According to the masterplans, Järve was designed to accommodate 15 000 inhabitants by 1967, Sompa 15 000 inhabitants by 1966 and Ahtme 25 000 inhabitants by 1966 (Tippel, 1948, pp. 54–59). According to the 1959 census population of Kohtla-Järve was 51 200 (Vseviov, 2002, p. 44). By the beginning of 2018 population of Kohtla-Järve consisting of current six satellite towns and settlements was 35 395 (Siseministeerium, 2018). In 1989 population of the town was highest – 90 828, including figures of Kohtla-Nõmme, Kiviõli, Jõhvi, Püssi in addition to the current six satellite towns (Vseviov, 2002, p. 94).



Figure 10. Stalinist centre of Kohtla-Järve centre (Järve), early-1950s by Lengorstroyproyekt. Perspective view along the Victory Boulevard. Photo taken in mid-1950s. Source: RM F 646.176.



*Figure 11. Stalinist centre of Kohtla-Järve centre (Järve), early-1950s by Lengorstroyproyekt. Perspective view along the Victory Boulevard. Photo taken in early-1950s. Source: RM F 87.70.* 

Whilst Kohtla-Järve's civic centre was designed by Lengorstroyproyekt, the rest of the agglomeration (except Oru and Sirgala) was erected mainly according to the projects of Lengiproshacht (Leningrad filial of all-Soviet Union Giproshacht (Stately Institute for Planning Mines under the Ministry of Oil-Shale industry of the USSR)).



Figure 12. Stalinist centre of Kohtla-Järve centre (Järve), early-1950s by Lengorstroyproyekt. Perspective view along the Victory Boulevard. Photo taken in early-1950s. Source: RM F 87.69.

The Soviet period centre of Kohtla-Järve was built about one kilometre to the east of the pre-war settlement. The last one with the distance of one kilometre had to formulate a two-kilometre sanitary zone between oil-shale mine and new town "sotzgorod" (socialist town). (Tippel, 1948, p. 55) Stalinist stately ensemble urban space of Järve consists of two crossing main axes. The southwest – northeast one, named Victory Boulevard (now Kesk Boulevard), that is over 50 metres wide and 700 meters long, connects the Palace of Culture with a park and the cinema (Pobeda, 'Victory') (on the axis of the boulevard). The Victory Boulevard is crossed by the southeast-northwest axis of Rahu (Peace) Square (200 meters long, 125 meters wide), which was intended to concentrate local government building and four-storeyed apartment buildings with colossal orders and avant-corpses. The rest of the houses on the crossing axes are two to three-storeyed apartment buildings with pitched roofs. (ERA.R-1992.2.57; ERA.R-1992.2.41)



Figure 13. Stalinist centre of Kohtla-Järve centre (Järve), early-1950s by Lengorstroyproyekt. Perspective view along the Victory Boulevard. Centre: one of the main crossing axes (Rahu Square) and apartment building with colossal order. Photo taken in 2013. Source: Siim Sultson.

In 1956, local architect V. Tippel from "Estongiprogorstroi" (Estonian filial of all-Soviet Union Giprogorstroi (State Institute for Town Planning and Building)) made a supplementary masterplan for Järve that clearly took into account previous versions of Lengorstroyproyekt. Nearly three-quarters of the masterplan was implemented. (EAM.3.1.281)



Figure 14. The Palace of Culture in Kohtla-Järve centre (Järve), early-1950s by Lengorstroyproyekt. Photo taken in 1952. Source: Eesti Entsüklopeedia, 2017.

Compared to Järve the rest of the six satellites (except Oru and Sirgala as a part of Viivikonna that were started in the early-1960s according to post-Stalinist modern town planning principles) were laid out using regular and simple grids, designed by Lengiproshacht. However, the masterplans of Sompa and a new area of Ahtme (near old, pre-war Ahtme) were not organised using orthogonal geometry and contained radial street patterns like those of Järve. Presumably, Stalinist era masterplans of Kukruse and Viivikonna were designed by Lengiproshacht, as well. Due to absence of the copies of the various masterplans in archives it is hard to estimate to what extent each of these were implemented. The masterplan of Ahtme was implemented to an extent of a third and masterplan of Sompa to an extent of one quarter. (EAM.3.1.248; EAM.3.1.50)

# 3. Legacy and reflection

Though the east Estonian mono-industrial towns were planned mostly by non-local architects (first of all Sillamäe), Stalinist central gridlines of the masterplans for Järve and Sillamäe were designed by Lengorstroyproyekt (later on accordingly by Estongiprogorstroi and Lengorstroyproyekt/NII-9/GSPI-12) and have many compositional similarities with Stalinist central gridlines of Tallinn and Pärnu designed by local architects. It was H. Arman, as head of the Department of Architecture of the Estonian SSR, who processed the masterplans and construction plans in the settlements during the mid-1940s. The same architect designed the masterplans for Tallinn and Pärnu through the mid-1940s and early-1950s. It would be logical that the Stalinist central gridlines of Tallinn and Pärnu were inspired by the compositions designed by

Lengorstroyproyekt. However, it seems to be on the contrary. H. Arman crossed converging axis with boulevard already in 1945 Tallinn masterplan and Cultural Centre composition. He reused the solution in 1952 Pärnu oblast centre composition. Neither Sillamäe 1946 masterplan (Lengorstroyproyekt/NII-9) nor 1947 masterplan (Lengorstroyproyekt/NII-9) nor 1947 masterplan (Lengorstroyproyekt/NII-9) did not use crossing of converging axes and boulevard. H. Arman actively processed the masterplans up to autumn 1946 and was in touch with later masterplan versions via correspondence with stately architectural firm. Meanwhile he processed the first masterplans of Kohtla-Järve (started by Lengorstroyproyekt). (ERA R-1992.2.12: 44–64; ERA R-1992.2.1; ERA R-1992.2.31; ERA R-1992.2.22; ERA R-1992.2.41; SM Generalny proekt, NII-9, 1947; SLV Detalny proekt, Tom I, GSPI-12, 1948; SLV Proekt planirovki, GSPI-12, 1949)

Stalinist stately urban ensembles in Estonia provided architects with an opportunity to put some of their architectural ideas from the period of independence into practice. Megalomaniac town planning and city space dreams, though expensive and unrealistic, still appealed both to the small independent Estonia and the architects. According to the global tendencies of the 1930s, local architects were interested in monumental and representative architecture. Compared to small independent Estonia, the Soviet Union, which encompassed one-sixth of the planet, had much larger resources to finance urban planning projects or dreams.

Meanwhile stately urban ensemble of Sillamäe and Kohtla-Järve, especially of Järve *sotzgorod* followed a more orthodox Stalinist principle when compared to other Estonian towns. Responding to both Zholtovskij's and Mordvinov's principles of urban design, in Stalinist-period the architects and designers of Sillamäe and Järve tried to embody an approach to that implied a prosperous future - a kind of socialist paradise. These towns had to demonstrate the advantages of the Socialist system over its capitalist competitor by means of compositional unity and the illusion of luxurious of facades, courtyards, parks and inspiring sculptures.



Figure 15. Sculpture of basketball players in Sillamäe recreation area (park). Photo taken in late-1950s. Source: SM Korvpallimängijate skulptuur Sillamäe pargis.



Figure 16. Sculpture of gymnasts in Sillamäe recreation area (park). Photo taken in late-1950s. Source: SM Võimlejate skulptuur Sillamäe pargis.

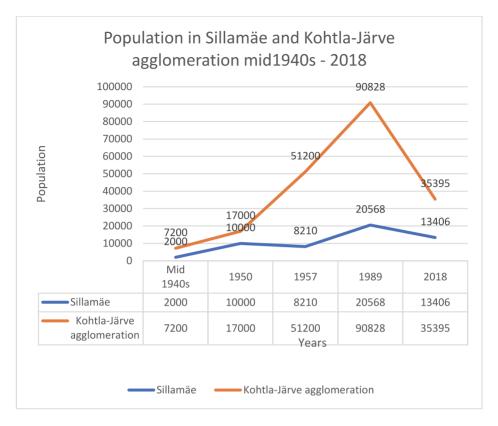
On the one hand, the prestigious appearance of these towns was inevitable due to authorship of Leningrad-based design organisations. However, the Stalinist stately urban ensemble of Sillamäe and Järve were under populated, having been designed for a much larger number of inhabitants than ever settled in Sillamäe and Kohtla-Järve.



Figure 17. Sculpture of discus thrower (discobolus) in greenery of Victory Boulevard in Kohtla-Järve center (Järve). Photo taken in mid-1950s. Source: EAM Fk 2844.

The Soviet architect's handbook of 1952 suggested the need to design a onehectare sized central square for the town with the population of 50 000 or more (*Kratkii spravochnik...*, 1952, pp. 20–21). Using the measured guidelines contained in the handbook (that was compulsory for architects) it is possible to derive approximate numbers of the planned populations of Cold War era Sillamäe and Kohtla-Järve. A 1.68hectare Central Square of Sillamäe implied a prospective population of 84 000 and the 2.5-hectare Rahu Square of Järve suggested a planned population of 125,000 for Kohtla-Järve.

If to compare trends of population growth in Sillamäe and Kohtla-Järve agglomeration, one can see that within the period of mid 1940s – 1950 (accordingly from planned 2 000 to 10 000 and from 7 200 to 17 000) it was sharper in Sillamäe (5 times against 2.4 times in Kohtla-Järve agglomeration). Within next period until 1959 population of Sillamäe decreased 1,2 times (8 210 inhabitants in 1959), while in Kohtla-Järve agglomeration it increased 3 times (51 200 inhabitants in 1959). Obviously, the decrease is caused by the fact that in early 1950s Sillamäe lost its importance as one of the best uranium raw material mine in the Soviet Union. Since 1950s the Refinery No 7 Sillamäe enriched uranium that was imported from socialist East European countries – uranium had higher importance compared to oil-shale in the Soviet Union in Cold War years; meanwhile importance of Sillamäe decreased due to reorientation of Soviet nuclear industry from uranium to plutonium in 1950. However, within the years of 1959 and 1989 growth of population was again sharper in Sillamäe than in Kohtla-Järve agglomeration – accordingly 2,5 times to 20 568 inhabitants in 1989 and 1,8 times to 90 828 in 1989 (meanwhile the agglomeration was increased by four settlements (Kohtla-Nõmme, Kiviõli, Jõhvi, Püssi)).



Graph 1. Change of population in Sillamäe and Kohtla-Järve agglomeration in mid-1940s to 2018.

If to compare derived planned perspective population numbers of Sillamäe and Kohtla-Järve agglomeration (accordingly 84 000 and 125 000) to population numbers in 2018 (accordingly 13 406 and 35 395) it seems that Stalin period Sillamäe was planned for 6.3 times and the same period Kohtla-Järve agglomeration for 3.5 times bigger population. Stalinist stately ensemble urban spaces of Sillamäe and Kohtla-Järve agglomeration (based on Järve *sotzgorod*) following imperial over-emphasized industrialization and Cold War threats from the West were intended for a much greater number of inhabitants than ever settled in either town.

According to historian D. Vseviov, by the beginning of the 1950s, within less than ten years since the end of World War Two, total change in the population of Sillamäe, Kohtla-Järve and the surrounding areas had taken place within the conditions of beginning Cold War. The proportion of rural people had decreased sharply, and East-Estonian industrial area had become the most urbanised area with the dominance of Russian speaking townspeople. (Vseviov, 2002, pp. 9–10)

Legacy of East-Estonian does not consist of well preserved and still-used settles. For instance, Viivikonna settlement of Kohtla-Järve agglomeration has practically been abandoned.



Figure 18. Viivikonna of Kohtla-Järve agglomeration, early-1950s, by Lengiproshacht. Photo taken in late-1950s. Source: RM F 186.6.



Figure 19. Viivikonna of Kohtla-Järve agglomeration, early-1950s, by Lengiproshacht. Photo taken in 2012. Source: EVM F 455.205.



Figure 20. Viivikonna of Kohtla-Järve agglomeration, early-1950s, by Lengiproshacht. Photo taken in 2012. Source: EVM F 455.210.

Within nearly 50 years, until the end of Soviet occupation the Factory number 7 produced about 12 million tonnes of radioactive waste. The 40-hectare tailing pond near Sillamäe and on the coast of Gulf of Finland is now cleaned up and covered by nowadays. (Tailings.info, 2017)

# Conclusion

Population figures and derived statistics show that the east Estonian mono-industrial settlements played an important role in Soviet Union within the Stalinist-period years of the Cold War. Large-scale colonisation of eastern Estonia and immigration of non-native inhabitants to Sillamäe and Kohtla-Järve from the inner regions of Soviet Union occurred.

Due to functional grid and planned prospective population growth the stately urban ensembles of these towns have still under used urban potential. As stated above, the Stalinist central grids have much in common with those built in Tallinn and Pärnu. It is used to consider Estonian post-war Stalinist period (1944 – 1955) urban space design as a conflict or rupture compared to the independent Estonian 1930s urban space design. Though Stalinist period Sillamäe and Kohtla-Järve were mostly planned by non-local architects, central gridlines and stately urban ensembles of these towns have much in common with the same period stately urban ensembles of Tallinn and Pärnu. Stalinist period urban space of Tallinn, Pärnu, Tartu are designed by the same architects that worked in independent Estonia. Consequently, architectural identity of Cold War industrial towns Sillamäe and Kohtla-Järve agglomeration embody a legacy that is a natural and familiar part of Estonian Stalinist stately urban ensemble and space practice.

Such an architectural question of familiarity via urban space research, that is social issue, as well, could contain a key to integrate mostly Russian-speaking and often unemployed north-east Estonia into the state and support the improvement of the area. The industrial Cold War urban legacy - is both stately and functional, full of potential to reuse and develop.

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# Archive materials

Rahvusarhiiv (ERA) = National Archives of Estonia. ERA R-1992.2.1

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# Estonian urbanism 1935–1955: the Soviet-era implementation of pre-war ambitions

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#### ABSTRACT

Estonian 1940s–1950s town planning practices show that Stalinist principles were in line with those of Estonian architects during the 1930s pre-war, independence period. However, between 1944 and 1955, within the context of the Soviet regime's occupation, urban planning was faced with rigid ideological constraints. After the Second World War, Estonian architects were forced to abandon projects in historical city centres, which focused on maintaining local natural conditions and cultural heritage, as well as using local materials. Some existing town centres, such as in Tallinn, Narva, and Pärnu, were reconstructed after suffering damage in the war, as well as for ideological reasons. Yet, during this time period, most efforts were directed towards building new industrial towns in East Estonia that exemplified a Stalinist utopia; this also presented the Soviet regime with an opportunity to exploit local mineral resources.

KEYWORDS

Town planning; architecture; society; ideology; Stalinism

# Introduction

During the second half of the 1930s, Estonia had been an authoritarian, yet economically successful, independent country for 20 years. In the summer of 1940, the first Soviet occupation of Estonia took place; a year later, Estonia became occupied by Germany for three years, until 1944. In the autumn of 1944, the Soviet Union seized the country for a second time - this occupation would last until 1991, spanning the years of the second Soviet Stalinist period (which started in September 1944), and Stalin's death in March 1953. Due to the ongoing Second World War and the short time periods of the occupations, neither the first Soviet takeover, nor the German, had a lasting impact on Estonian architecture and town planning. Nonetheless, Stalinist principles greatly influenced the urban landscape after 1944, and until November 1955, when the Communist Party of the Soviet Union's Central Committee decided to move away from the characteristically exaggerated architectural style.<sup>1</sup> The aim of this paper is thus to focus on *shifts* and *similarities* of the Estonian town planning principles during the independence period of the 1930s, and the Soviet Stalinist period, between 1944 and 1955. It will be argued that to analyse Estonian Soviet town planning and urban space, to define its typology, and to shed light on its potential in the field of urban space design, it is important to compare urban planning practices developed during the 1930s to those that emerged during the post-war Soviet occupation.

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#### 386 😉 S. SULTSON

In line with official Stalinist ideology, Soviet town planning needed to stand in opposition to that of the West, so as to elevate socialist principles against those of capitalism. Current Estonian Stalinist urban space research either tends to consider the period's trends as unfamiliar, typically Socialist, opposed to practices pertaining both to the West and the Estonian independence period, or presents a cursory narrative of it. Further, current analysis risks to be too simplistic, portraying urban planning in the post-war period as merely opposing both the Western experience and the architectural ambitions of the 1930s independence years. Indeed, this literature is often superficial, only offering an overview of the period; although some comparison of graphic material has been conducted, a deeper exploration of the contexts within which *shifts* and *similarities* in Estonian urban planning emerged is needed.

While urban space design during the Estonian post-war Stalinist period (1944–1955) is usually considered to be in conflict with that of the 1930s, Estonian architecture, town planning, and urban space design were already similar to the later Stalinist period by 1940. Indeed, there seems to have been a smooth transition to Stalinist urban space design practice from that of the independence period, both in the appearance and composition of buildings. Estonian 1930s architecture and urban space design became increasingly Corinthian and stately by 1940; Estonian architecture in the mid-1940s is rather similar to that of the late 1930s. The Stalinist period is a crucial part of Estonian history: deeper and analytical knowledge of the period helps to define it more clearly, to incorporate it into local history of urban space and architecture more evenly, and to simultaneously define the perspectives of the state and its inhabitants. During the Stalinist period, while local architects were not involved in the planning of Kohtla-Järve, and Sillamäe in eastern Estonian, Tallinn, Pärnu, and Tartu were designed by the same architects that worked during Estonia's period of independence.

The aim of this paper is thus to analyse urban space design practices in Estonia during the postwar Stalinist period (1944–1955), looking at *similarities* and *continuities*, as well as *shifts*, compared to that of Estonia's period of independence during the 1930s. The towns of Tallinn, Pärnu and Tartu have been chosen as examples, given that all have urban space ensembles from both periods. Compositionally similar centre of local Stalinist industrial town Kohtla-Järve is linked to the benchmarking.

Three periods are identified in existing literature about Estonian urbanism: the Stalinist period (mid-1940s to mid-1950s), the post-Stalin Soviet period (mid-1960s to 1980s), and the modern period (early1990s to present). During the Stalinist period, Soviet town planning and urban space were discussed in professional periodical publications like 'ENSV Arhitektide Almanahh' (Almanac of Architects of Estonian SSR). Articles published in 'ENSV Arhitektide Almanahh' and other publications, provided, on the one hand, insights into ongoing town planning; on the other, they reproduced state ideology. Topics discussed covered master plans of existing and future towns, urban space, and urban ensemble; authors included the head of the Department of Architecture of the Estonian SSR Harald Arman,<sup>2</sup> as well as architects Ernst Ederberg,<sup>3</sup> Lorenz Haljak,<sup>4</sup> Otto Keppe,<sup>5</sup> Voldemar Meigas,<sup>6</sup> Anton Soans,<sup>7</sup> Ivan Starostin.<sup>8</sup> Similar discussions were developed in Harald Arman's book, 'Tuleviku-Tallinn. Eesti NSV Poliitiliste ja Teadusalaste Teadmiste Levitamise

<sup>&</sup>lt;sup>2</sup>Arman, "Problemy architektury"; Arman, "Linnade planeerimise," 5–8; Arman, "Detailplaneerimise küsimusi," 10–17; Arman, "Tallinna kultuurikeskuse," 25–9.

<sup>&</sup>lt;sup>3</sup>Ederberg, "Tähtsamad sõja," 59–63; Ederberg, "Narva vanalinna," 60–5.

<sup>&</sup>lt;sup>4</sup>Haljak, "Projektide võistlused," 52–70.

<sup>&</sup>lt;sup>5</sup>Keppe, "Kokkuvõte Üleliidulise," 66–70.

<sup>&</sup>lt;sup>6</sup>Meigas, "Eesti NSV," 5–9; Meigas, "Tallinna keskväljaku," 20–4.

<sup>&</sup>lt;sup>7</sup>Soans and Keppe, "Tallinna linna," 9–20; Soans, "Pärnu arenemine," 30–5.

<sup>&</sup>lt;sup>8</sup>Arman and Starostin, "Arhitektuurialastest saavutustest," 7–8.

Ühing 1 (45)' (Future Tallinn. Society for Spreading of Knowledge of Politics and Science 1 (45)).<sup>9</sup> and in an article titled, 'Voprosy planirovki i zastrojki centra Tallina' (Questions Concerning Planning and Building-up of Tallinn), which was published in the Soviet professional periodical publication 'Problemy sovetskogo gradostroitel'stva' (Problems of Soviet Town Planning).<sup>10</sup> Newspapers were also involved in these debates, as can be seen in publications such as 'Sirp ja Vasar', 'Sovetskaja Estonija', 'Rahva Hääl', 'Õhtuleht', and 'Postimees'. After Stalin's death, the focus on urban space and town planning was lost, and few works about these topics circulated in more general publications. For example, in the book, 'Eesti arhitektuuri ajalugu' (History of Estonian Architecture), edited by H. Arman and published in 1965, the issue is discussed neutrally, more as a matter of protocol.<sup>11</sup> The architect Paul Härmsons adopts a similar stance in an article he published around the same time.<sup>12</sup>

In the modern period, a number of new and diverse analytical approaches came to light as a result of regained independence, and the opportunity this offered to treat the topic objectively. In 1991, the historian of architecture Leonid Volkov, who lived through the Stalin era, published the article, 'Eesti arhitektuurist aastail 1940–1954' (About Estonian Architecture within 1940–1954).<sup>13</sup> The former Chief Architect of Tallinn (1960-1980), Dmitri Bruns, considered the Stalinist town planning of Tallinn in his book, 'Tallinn: linnaehituslik kujunemine' (Tallinn: Urban Formation).<sup>14</sup> Both discussions are also framed by protocol, but not by Soviet ideology. Nonetheless, the urbanism of their time period is presented as different from that of the pre-war independence period. Historian of architecture Mart Kalm considered the issue as an architectural context in his monograph, 'Alar Kotli',<sup>15</sup> and his book, 'Eesti 20. sajandi arhitektuur' (Estonian 20th Century Architecture).<sup>16</sup> In both works, Kalm does not provide a complex structured definition of the Estonian post-war urban space. However, he does suggest that there are some similarities between the 1930s architecture of independent Estonia and the architecture of the post-war Stalinist period. Further, he makes a distinction between the local urban space (towns like Tallinn, Pärnu, and Tartu) and non-local urban space (such as Kohtla-Järve and Sillamäe). He defines the Estonian post-war urban space as consisting of familiar and un-familiar components - the first designed by local architects, the latter by non-local architects. Yet, simultaneously, the familiar architecture and urban space are defined as familiar because of their similarity to the practices developed during the 1930s. This topic is developed further in Kalm's articles, 'The Sovietization of Baltic Architecture',17 and, 'Perfect Representations of Soviet Planned Space. Mono-industrial towns in the Soviet Baltic Republics in the 1950s-1980s'.<sup>18</sup> Historian of architecture Krista Kodres also explores this topic, in her article, 'Sovietization of classical architecture: the case of Estonia'.19

Estonian Stalinist town planning and urban space are analysed in Siim Sultson's master thesis,<sup>20</sup> Maria Orlova's master thesis,<sup>21</sup> an article by Epp Lankots,<sup>22</sup> as well as a number of articles by Siim

<sup>&</sup>lt;sup>9</sup>Arman, Tuleviku-Tallinn.

<sup>&</sup>lt;sup>10</sup>Arman, "Voprosy Planirovki," 49–52.

<sup>&</sup>lt;sup>11</sup>Eesti arhitektuuri ajalugu.

<sup>&</sup>lt;sup>12</sup>Härmson, "Pärnu keskuse," 31–43.

<sup>&</sup>lt;sup>13</sup>Volkov, "Eesti Arhitektuurist," 183–213.

<sup>&</sup>lt;sup>14</sup>Bruns, *Tallinn: linnaehituslik*.

<sup>&</sup>lt;sup>15</sup>Kalm, Arhitekt Alar Kotli.

<sup>&</sup>lt;sup>16</sup>Kalm, Eesti 20. sajandi.

<sup>&</sup>lt;sup>17</sup>Kalm, "The Sovietization," 42–51.

<sup>&</sup>lt;sup>18</sup>Cinis et al., "Perfect Representations," 226-46.

<sup>&</sup>lt;sup>19</sup>Kodres, "Sovietization of Classical," 130–51.

<sup>&</sup>lt;sup>20</sup>Sultson, Staliniaegse esindusliku.

<sup>&</sup>lt;sup>21</sup>Orlova, Stalinistlik arhitektuurikorraldus.

<sup>&</sup>lt;sup>22</sup>Lankots, "Klassid klassideta," 11–41.

#### 388 👄 S. SULTSON

Sultson.<sup>23</sup> These texts consider Estonian post-war urban space as different from East Estonian Stalinist urban space. Sultson discusses similarities between the independent Estonian 1930s urban space design and the Estonian post-war Stalinist period design and, in his 2016 article, the author highlights a need to incorporate East Estonian industrial towns into research about Estonian post-war Stalinist urban space. Following this stance, this article analyses *similarity* and *continuity* in the urban space design of the post-war Stalinist period and that of the 1930s. In order to overcome stagnation in this field of research, the experience and ambitions of 1930s, independent Estonia urban space design are discussed and compared to practices developed in the post-war Stalinist period. It is argued that urban space practices developed in the period from 1944 to 1955 fused Soviet urban space paradigms with the local urban space design of the 1930s independence period.

# Urban space in 1930s independent Estonia: stately appearance as a functional path to embodied dignity

Although the Soviet regime's occupation caused serious damage in several Estonian cities (e.g. after the bombing of Tallinn, Tarty, Narva, and Pärnu in 1944) and is remembered as a period of terror (marked by deportations and massacres), Estonian architects did not perceive Stalinist town planning negatively, and it generally matched their own visions. As is revealed by comparing Estonian town planning from the 1930s with that of the Soviet period, Stalinist principles were similar to local ones, with some differences in building scale and construction materials used. Town planning ideas during the Soviet period are often characterized as megalomaniac. However, similarly to trends in other countries, architecture in the independent Republic of Estonia during the 1930s started to focus on stately urban ensembles as an architectural element, enabling the young country to develop its own stately veneer. This tendency increased as Estonia also became more authoritarian in the mid-1930s. The ambition to develop stately-looking urban environments depended on town planning, with which city spaces could be transformed. In order to achieve this vision, the town centres of Tallinn, Tartu, Pärnu, among others, needed to be redesigned.

President Konstantin Päts introduced this aim with a mandate passed on 27 May 1936. According to the decree, 'The Liberty Monument Erection Act', all façades in Tallinn Liberty Square district could be designed or redesigned with permission of the president only, and all buildings near the Liberty Square could be expropriated or demolished by government order.<sup>24</sup>

Liberty Square was an important symbol of independence; it was from this square that Estonian soldiers departed to fight during the War of Independence (1918–1920). Until the mid-1930s, several contests for the Liberty Monument were announced. The monument would be situated west of the square, on Harjumägi hill; nonetheless, due to badly designed entrances to the square and its irregular shape, the contests failed.

#### Tallinn Liberty Square: urban space and architectural content

In the mid-1930s, Liberty Square was surrounded, from the north, by the Tallinn Art Hall building and EEKS commercial and apartment building (under construction), from the east by St John's Church (1862–1867), from the south by the Gloria Dancing Palace and the insurance building

<sup>&</sup>lt;sup>23</sup>Sultson, "Ideoloogilised jõujooned," 98–109; Sultson, "Kuidas Eesti," 2248–77; Sultson, "Stalinization of Estonian," 368–84; Sultson, "Is Effective?," 14–25; Sultson, "The Stalinisation," 1–13; Sultson, "Alteration in the Awareness," 49–55; Sultson, "Replacement of Urban" 283–94.

<sup>&</sup>lt;sup>24</sup>Vabadussõja üleriikliku, 1028.



**Figure 1.** EEKS commercial and apartment building, 1936–1937, by Elmar Lohk; Tallinn Art Hall, 1933–1934, by Edgar Johan Kuusik and Anton Soans; Art Foundation building, 1948–1953, by Alar Kotli. Source: Photograph by Siim Sultson 2017.

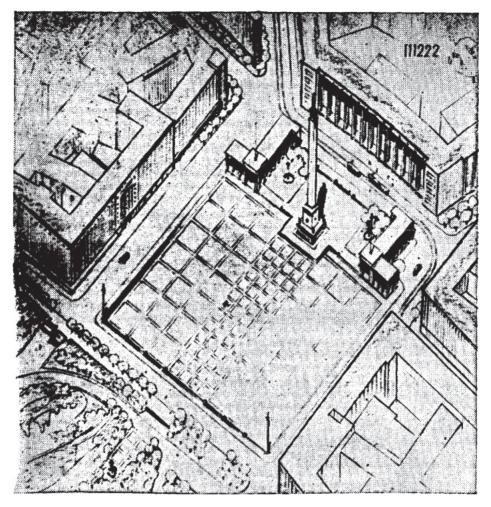
(EKA), and from the west by the Harjumägi Hill (former Inger bastion) and the green area of the Kaarli Esplanade (Figure 1).

The Estonian Ministry of Communications announced the Tallinn Liberty Square urban space architectural content contest on 20 November 1936. According to the contest terms, the Liberty Square city space was supposed to be changed into a larger scale, regular square, with the Liberty Monument as a crucial detail that would represent the state; it was suggested that St John's church should be removed. The contenders – appointed architects – had to put forth proposals that were as stately and realistic as possible.<sup>25</sup>

The first prize was given to Alar Kotli and Ernst Kesa's entry, which proposed an enclosure-like square surrounded by the administrative buildings, the Tallinn Art Hall building, and a large six-storeyed building instead of St John's church. President Konstantin Päts highly approved of this complex, who suggested to name it a palace of justice. For instance, one of the proposed multi-storeyed administrative buildings was intended to be a radio palace. In the winning entry, erecting a 67-metre high Liberty Monument in front of the court palace was proposed.<sup>26</sup> The second prize entry, put forth by Elmar Lohk, was similar to the winning entry in its composition, but differed by proposing that St John's Church should be replaced with a fairly functionalist Liberty Monument column. The

<sup>&</sup>lt;sup>25</sup>Bölau, "Tallinna Vabadusväljaku," 86–8.

<sup>&</sup>lt;sup>26</sup>ERA 2218.1.223, 34; "Vabadusväljak arhitektide."



**Figure 2.** Entry for Liberty Square in Tallinn, 1937, by Harald Arman, Salme Vahter-Liiver. Right: EEKS commercial and apartment building, Tallinn Art Hall. Right centre: Liberty War Memorial. Bottom left: Harjumägi hill. Source: Missugune kuju anda Vabadusplatsile? 1937.

third prize entry, designed by Anton Soans, suggested to lay an atrium-like arcade nearby the Tallinn Art Hall, and to replace the Church with the Liberty Monument, reminiscent of the Palace of the Soviets. Kotli and Kesa's winning entry became the basis of the construction project.

Ultimately, the jury decided to purchase Harald Arman's and Salme Vahter-Liiver's entry, which proposed to double the area of the square by demolishing St John's Church and a school building nearby. However, the jury considered Arman and Vahter-Liiver's entry too enormous and expensive (Figure 2).<sup>27</sup>

Unlike the three first entries, Arman and Vahter-Liiver's proposal did not include the redesigning of the Harjumägi hill, and paid particular attention to the east side of the square. The square's

<sup>&</sup>lt;sup>27</sup>Bölau, "Tallinna Vabadusväljaku," 86–7; ERA 2218.1.223, 34; "Vabadusväljak arhitektide."

entrance square would be prolonged to the east, doubling its dimensions; this would be achieved by demolishing both St John's Church and a grammar school behind it. The latter would be replaced with a monumental Liberty war memorial with a 12-column portico, similar to the Nazi-period *Königsplatz* in Munich. Although Arman and Vahter-Liiver's entry, comparable to the architectural style of Albert Speer, was considered too megalomaniac and unsuitable for the local context, it appealed both to the jury and the Chief Architect of Tallinn Edgar Johan Kuusik.<sup>28</sup> The Tallinn Liberty Square city space architectural contest defined new architectural and town planning aesthetics that followed neo-classicist tendencies. For instance, modernist art critic Rasmus Kangro-Pool admitted that the Liberty Square as a symbol of independence should look imposing and dignified.<sup>29</sup>

Ultimately, Kotli's construction project, based on his winning entry for the square, seems to have been inspired by Arman and Vahter-Liiver's entry. In order to make the square more spacious, the Liberty Monument was relocated in the plan to be closer to the Harjumägi hill and the court palace was made smaller.<sup>30</sup> Nonetheless, due to Soviet occupation and the outbreak of the Second World War, the construction was not started.

#### The new business and transport centre in Pärnu

In order to redesign the storehouse area between the local railway station and Endla Theatre, the Estonian Ministry of Communications announced a contest for Pärnu's new business and transport centre (also known as representative district) in December 1937; this is now known as Rüütli Square. According to the contest terms, the new centre should include a building for the Pärnu branch of the Bank of Estonia, a monument in honour of President Konstantin Päts, a railway station building, a bus terminal, a post office, and several administrative and governmental buildings. This area would be both the representative business centre and a functional junction for buses and trains (Figure 3).<sup>31</sup>

The first prize was given to Arman's entry because of its solid, representative appearance and functionality. Compared to other entries, the jury favoured its well-proportioned forms, which would already give the area a stately appearance by erecting even just a couple of houses.<sup>32</sup> One the one hand, Arman's proposal was similar to the one he submitted for the Tallinn Liberty Square, and was comparable to Tony Garnier's Cité Industrielle, and A. Speer's town planning design in Berlin. On the other hand, the proportions, forms, and city-space accents of this entry were later replicated in Arman's 1940s–1950s proposals and construction projects for the Tallinn Cultural Centre and the Pärnu Oblast Centre.

The second prize entry, by Manivald Loite and Elmar Lohk (the records of which have not been preserved) was commended for its well-positioned bus terminal. Johannes Ilmas' entry received the third prize for his design of the president's monument.<sup>33</sup> It is a prerogative of authoritarian states to erect monuments for incumbent rulers. Pärnu, with strong associations to President Päts, was envisioned to be Estonia's official tourist centre, under the control of the government. Consequently, the new centre was supposed to be both functional and representative. In 1939, the construction site for the new business and transport centre began to be built in a suburb on the outskirts of Pärnu.<sup>34</sup> Nevertheless, following the Soviet occupation and the beginning of the Second World War, the plan did not reach its end.

<sup>&</sup>lt;sup>28</sup>"Missugune kuju?"

<sup>&</sup>lt;sup>29</sup>Kangro-Pool, "Paleed ja mured," 370.

<sup>&</sup>lt;sup>30</sup>Kalm, Arhitekt Alar Kotli, 112–13.

<sup>&</sup>lt;sup>31</sup>Bölau, "Pärnu esindusliku," 57; ERA 3799.1.434, 1-3.

<sup>&</sup>lt;sup>32</sup>"Pärnu esinduslik"; ERA 3799.1.33, 1–3.

<sup>&</sup>lt;sup>33</sup>Bölau, "Pärnu esindusliku," 59.

<sup>&</sup>lt;sup>34</sup>ERA 3799.1.33, 3.



Figure 3. Pärnu branch of the Bank of Estonia, 1938–1940 by Alar Kotli and Anton Soans. Source: Photograph by Siim Sultson 2013.

# The new institutional ensemble in Tartu

During this time, a new institutional ensemble began to be built in Tartu's city centre, adjacent to the University of Tartu.<sup>35</sup> Unlike the rest of Estonian towns that did not have stately (emblematic) classicist administrative centres, Tartu was defined by the University of Tartu, founded in 1632. After a fire in 1775, Tartu was rebuilt with a neo-classicist gridline, including a central square (the Town Hall Square) and the emblematic appearance of the turn of the eighteenth and nineteenth centuries. The main building of the University was built in 1809 by Johann Wilhelm Krause, and continues to be a symbol of Tartu. The University had its own legislation until 1934, when Päts led a bloodless *coup d'etat*. According to the independent building policy, Paul Mielberg rebuilt the University's Student Club in 1925, erected a new library between 1927 and 1928, and a new gymnasium between 1928 and 1930. In 1934, the Estonian Ministry of Social Affairs and Education asked the University architect Harald Sultson later expressed, one of the crucial needs were buildings for the University institutes – for example, the University intended to build a new chemistry institute already in 1922.<sup>36</sup> In 1937, the University decided to bring the institutes together, as close to the main building as possible.<sup>37</sup>

In February 1938, Sultson presented a proposal to extend the University of Tartu. According to the design that was accepted by the Estonian Ministry of Communications, the new complex had to contain six groups of University institutes and institutions.<sup>38</sup> The first group, to be erected around the University's main building as an ensemble-like complex, had to look stately and functional, with strict gridline and oriented towards the main building. In order to emphasize the main building's dominating position, the surrounding institutes had to be three to four stories high. Buildings and sites that did not belong to the University would be expropriated. According to Sultson's plan, drafts and construction project, several demolitions needed to take place. This included several

<sup>&</sup>lt;sup>35</sup>EAA 2100.6.163.

<sup>&</sup>lt;sup>36</sup>EAA 2100.6.163, 47.

<sup>&</sup>lt;sup>37</sup>"Ülikooli laboratooriumihoonele," 7.

<sup>&</sup>lt;sup>38</sup>"Suurejoonelised kavad," 3.





**Figure 4.** Institutes building of Tartu University, 1939–1942 by Harald Sultson. Source: Photograph by Siim Sultson 2013.

eighteenth- and nineteenth-century buildings, and a barrier in that stood in front of the University on the east (Ülikooli street); these would be replaced by a stately square and a stairway.<sup>39</sup>

The institute buildings were designed south of the University's main premises, nearby Gustav Adolf Street (now Jakobi Street) (Figure 4). The existing houses were expropriated and demolished since, as Sultson stated, erecting the institutes 'near the University building, instead of old and ugly houses, makes the surrounding of the University and appearance of the central city more stately and monumental'.<sup>40</sup> The area north of the University's main building (Gildi street) was also supposed to be rebuilt: the existing houses and Munga street had to disappear and to be replaced with a massive block of institutes and institutions. The block had to be united with the existing University gymnasium (Ülikooli ümbruse uus pale 1938).<sup>41</sup> The houses on Toomemägi hill, behind the University's main building, would be demolished in order to create a panoramic view from the hill towards the University and vice versa.<sup>42</sup> While the south side institute buildings was planned to be erected within three to four years, the rest of the complex would be completed in 20 years.<sup>43</sup> Due to the Soviet occupation and the Second World War, only the south side of the institute complex was completed.

<sup>&</sup>lt;sup>39</sup>EAA 2100.6.163.

<sup>&</sup>lt;sup>40</sup>EAA 2100.6.163, 47.

<sup>41&</sup>quot;Ülikooli ümbruse," 3.

<sup>&</sup>lt;sup>42</sup>EAA 2100.6.163, plan; EAA 2100.6.163, 46, 47; "Tartu Ülikooli," 6.

<sup>43&</sup>quot;Ülikooli laiaulatuslik," 4.



**Figure 5.** Tallinn Officers' Council (completed as the Culture House for the Working People), 1939–1947 by Edgar Johan Kuusik. Source: Photograph by Siim Sultson 2014.

Unlike for Tallinn Liberty Square and the Pärnu new business and transport centre, one appointed architect, Sultson, designed the new institutional ensemble in Tartu. The state became more centralized: centrally commissioned urban ensembles enabled the young country to develop its own stately façade. Megalomaniac town planning and city space dreams, though expensive and unrealistic, still appealed both to the state and the architects. According to the global tendencies of the 1930s, local architects were interested in monumental and representative architecture. For instance, Kuusik's monumental administrative buildings matched future Soviet ideals (Figure 5).

# Urban space during the Estonian Stalinist period (1944–1955): theory and practice

After the Second World War, Estonian architecture and urban space experienced contradictory developments. Many local architects had escaped for the West, such as E. Kesa, E. Lohk, and H. Sultson. Others, like E. J. Kuusik and A. Soans, remained. Russian-born Estonian architects, such as Otto Keppe and Voldemar Meigas, came to Estonia in 1944. H. Arman left for the Soviet Union with the Red Army in 1941, and came back to Estonia in 1944. Local architectural organizations (such as The Union of Estonian Architects) were unified with their Soviet counterparts: the new executive architectural organization was the Department of Architecture of the Estonian SSR, a local branch of the USSR's State Committee of Architecture.

On the one hand, the urban space design of the Estonian post-war Stalinist period followed the Soviet doctrine in concept, forms and building materials (such as in Tallinn, Pärnu, Kohtla-Järve, Sillamäe): the most radical solutions involved the replacement of cities and its inhabitants (Narva is an example). One the other hand, there was some similarity and continuity inherited from urban space design practices developed during the 1930s (such as in Tallinn, Pärnu, Tartu, Kohtla-Järve).

Increasingly, architects were forced to abandon former city space centres (Tallinn, Pärnu), their projects to restore Narva's and Pärnu's wrecked city centres; they also had to stop using traditional materials in walls and on façades. Paradoxically, Stalinist stately urban ensembles in Estonia

provided architects with an opportunity to put some of their architectural ideas from the period of independence into practice. Compared to small independent Estonia, the Soviet Union, which encompassed one-sixth of the planet, had much larger resources to finance urban planning projects. The war had left large demolished areas that turned out to be practical playgrounds for architects in Tallinn, Pärnu, Tartu, Narva, and elsewhere in Estonia.

# Soviet urban space paradiams: the urban ensemble and new architectural policy in Estonia

Due to ideological reasons, private property was abolished in the Soviet Union, resulting in complete state ownership of the land. The question of ensemble in town planning and urban space was crucial to Soviet Stalinist architecture. A leading Soviet architects and theoreticians, Ivan Zholtovskij, emphasized the importance of composition in urban ensemble. In 1933, he defined five principles of Soviet urban ensemble: unity of different forms, tectonic accuracy of architectural forms, dynamics and organic growth of architectural forms, natural architectural organism, and unexpected compatibility of different elements of architectural forms.<sup>44</sup>

Seven years later, Zholtovskij stated that every architect should take ensemble as unity into account. According to socialist realism, architecture in a city space was supposed to be ensemblelike: every house had to be ruled by ensemble. This meant organizing cities according to a certain hierarchy, in which every component of the urban landscape had to abide by the principle of unity. In Zholtovskij's words, 'There is no architecture outside urban ensemble. The architect is responsible for one's people's architecture, the town's architecture, and street architecture whilst designing a house.'45

In 1943, during the Second World War, according to a plenary resolution of the USSR's Soviet Architect's Union, Soviet architects were expected to be ready to undertake what would be gigantic post-war restoration works.<sup>46</sup> The following instructions, given by the USSR's Council of People's Commissars and the Soviet Communist Party, compelled architects to design and restore wrecked towns in a grandiose manner, according to state ideology.<sup>47</sup>

Perhaps the greatest transformation of the Stalinist urban space and ensemble occurred in Stalingrad (Volgograd) during and after the Second World War, while architect Karo Alabyan developed new designs (1943).<sup>48</sup> Stalingrad, given its association to Stalin and being one of the most symbolic battlefields during the war, was rebuilt as a polygon for new ideas: other cities were being designed to have a similar shape, composition and principles. The gridline of new Soviet towns had to be more classicist, with axes, squares, forums, junctions, and the composition of urban ensembles more symmetrical, hierarchical, and dynamic. While cities like Rome, and Paris were still regarded as inevitable examples, Leningrad, Moscow and Stalingrad became mandatory models for other Soviet towns after the Second World War. The squares and streets needed to be much larger to enable mass processions.<sup>49</sup> These principles were complemented with a victory theme.

In 1944, the head of the USSR's State Committee of Architecture, Arkadi Mordvinov, formulated seven principles of Soviet post-war town planning that were compulsory for all architects: town

<sup>44</sup>Zholtovskij, "Printzip zodchestva."

 <sup>&</sup>lt;sup>45</sup>Zholtovskij, "Ancambl' v arhitekture."
 <sup>46</sup>"Plenum pravlenija" 1943.

<sup>47</sup> lz istorii, 94–102, 109.

<sup>48</sup> Iz istorii, 78, 142, 172.

<sup>49</sup>Barhhin, Gorod. Struktura, 127-8.

#### 396 😉 S. SULTSON

planning was supposed to be interrelated with the natural environment in order to expose its beauty; town plans needed a balanced compositional centre (for instance, centre – main street – railway station square); monumental public buildings had to be erected in junctions; house quarters had to be planned in complex ways and designed as one ensemble; all buildings had to be painted only in light colours (to echo the dream of a positive future); functionality and high quality of structures and infrastructures (electricity, water supply, etc.) were a priority; and thorough quality controls both of architecture of the Estonian SSR, the Latvian SSR, and the Lithuanian SSR needed aid from the USSR's State Committee of Architecture, in order to allow for the field of town planning methodology (based on Soviet experience and ideology) to flourish.<sup>51</sup> Arman, head of the Department of Architecture of the Estonian SSR, began to organize the restoration of Estonian towns already whilst based in the Soviet Union, in mid-1944.<sup>52</sup>

### New policy and practice in Tallinn

On the one hand, Estonian town planning in the mid-1940s was quite similar to the pre-war independence period, which disregarded the rest of the Soviet Union's architecture. For example, Ernst Ederberg tried to restore the old baroque style in Narva, and Endel Arman, together with architect A. Soans, designed a restoration project for Pärnu.<sup>53</sup> Both of the towns were in a generally good condition after the Second World War. On the other hand, some architects, such as V. Meigas and O. Keppe, proposed to restore Tallinn's city centre following Stalinist practice in Leningrad. While Arman tried to strike a balance between the two schools of practice, as executive of the Department of Architecture of the Estonian SSR, he dominated the local architectural life, and managed to protect local architecture and urban space practice from orthodox Stalinism.

In the 1940s, local Estonian architects designed administrative and apartment buildings following the 1930s style: granite wall coating, with modest or scarce ornaments (sometimes ground floors were ornamented). Only the roofs became more pitched, and some Soviet symbols were added. The new city centre in Tallinn consisted of the Tallinn Cultural Centre in front of Estonia Theatre, and the Central Square (now Viru Square) were designed under the guidance of Arman, following similar principles. The centre's design relied greatly on the 1945 masterplan of Tallinn (H. Arman, O. Keppe, A. Soans).<sup>54</sup>

# **The Central Square**

The USSR's State Committee of Architecture organized the Tallinn Central Square urban space architectural contest in 1945.<sup>55</sup> The Central Square consisted of a plaza and esplanade. The contenders – appointed architects – had to propose representative solutions for the future administrative large-scale, regular plaza and regular esplanade. According to the masterplan, the plaza of the Central Square was supposed to be designed in the junction of Pärnu Road, Tartu Road, Narva Road and Mere Boulevard, and flanked by the Second World War victory monument and esplanade. The latter would be built on the axis of Mere Boulevard, leading directly to the Gulf of Tallinn. The plaza would

<sup>&</sup>lt;sup>50</sup>Kosenkova, *Sovetskij gorod*, 42.

<sup>&</sup>lt;sup>51</sup>Iz istorii, 149.

<sup>&</sup>lt;sup>52</sup>Gorich, "V masterskoj," 4.

<sup>&</sup>lt;sup>53</sup>ERA R-1992.2.33, 88–92; Ederberg, "Narva vanalinna," 60–5; Volkov, "Eesti Arhitektuurist," 192; Parek, Pärnu sajandeis, 72.

<sup>&</sup>lt;sup>54</sup>EAM 10.1.46; EAM 18.5.14; Soans & Keppe, "Tallinna linna," 9–20.

<sup>&</sup>lt;sup>55</sup>EAM 18.5.2.



Figure 6. Entry for Central Square in Tallinn, 1945 by Harald Arman, Voldemar Meigas, Otto Keppe. Centre: the square with the Second World War Victory Monument. Source: EAM 18.4.8.

be surrounded from three sides by administrative buildings and a monumental multi-ministry building. Opposite the converging streets, there would be space for a green area on an esplanade between the plaza and national opera (the Estonia Theatre). There are a number of similarities between the Tallinn Central Square contest and that of the Liberty Square urban space architectural contest from 1936: administrative regular square (plaza), green area (esplanade included) with an adjacent monument, converging streets, buildings on three sides of the square, and a monumental administrative building. In comparison with the Liberty Square urban space architectural contest, the Central Square contest was more strictly regulated by the masterplan (gridline, composition of the square).

The winning entry by Keppe and Meigas proposed to build the square in a calm, functionalist manner, with modest, scarce ornament and moderately pitched roofs. The architects designed a simple six-storeyed multi-ministry building on the opposite of the column-like victory monument; the rest of the office buildings were intended to be five-storeyed houses. Keppe and Meigas' urban space design for the Central Square abided by 1930s local urban space practice, both in composition and appearance (Figure 6).<sup>56</sup> Voldemar Tippel and Peeter Tarvas' entry was rather similar to the winning entry in its composition: the buildings had a more classicist appearance, and additional office buildings, which flanked the multi-ministry house, enclosed the regular square.<sup>57</sup> Alekseij

<sup>&</sup>lt;sup>56</sup>EAM 18.4.8.

<sup>57</sup>TLM 12041 G 1468.

398 😉 S. SULTSON

Dmitrijev, who was working in Leningrad at the time, proposed to design the area in the style of St Petersburg's art nouveau. The central six-storeyed multi-ministry building, which looked similar to some of Tallinn's mediaeval churches, would be surrounded by several light-coated and pitched roofed four- or five-storeyed office buildings.<sup>58</sup>

# The Cultural Centre

Between 1945 and 1946, Arman designed the Cultural Centre, following the 1945 master plan of Tallinn.<sup>59</sup> The centre was intended to bring universities, libraries and other academic and cultural institutions together around the boulevard-like crossing axes in front of the Estonia Theatre: Estonian Red Riflemen Square (Theatre Square), Lenin Boulevard (Rävala Boulevard), and the Academy of Sciences of the Estonian SSR building came together at the junction, and on the axis of the theatre. The centre of the junction was marked by Lenin's statue (1950–1991). The academy building had to be flanked by apartment buildings (for instance, the Academic's House). The east side of Lenin Boulevard had to join the Central Square and Tartu Road; the west side would include a stately building on the axis of the boulevard. The whole complex was supposed to be as stately as possible.<sup>60</sup> Similarly to the Central Square, the architectural style of the Cultural Centre followed the 1930s tradition; the composition of the longitudinal axes was similar to Pärnu's new business and transport centre, designed by Arman (1938).<sup>61</sup> The longitudinal axes were prolonged towards Liivalaia Street. If the axes had been prolonged towards the Comsomol Arena and Ülemiste Lake, the composition would have been very similar to Moscow's south-east axes (1935 onwards) (Figures 7 and 8). Although the new centre was intended to embody Stalinist town planning principles, it received heavy criticism, for being too modest, Western-like, capitalist, modernist, and weak in its composition.<sup>62</sup> This disapproval was an expression of official attitude, following a doctrine that did not accept any deviation from the norm. Arman was thus compelled to obey the critics; he gave local architects specific instructions for town planning in Estonian SSR. The instructions followed the board resolution of the USSR's Soviet Architect's Union, passed on 24 October 1946, and the plenary resolution of the Soviet Architect's Union on 2 August 1947.<sup>63</sup> In his early 1946 article, 'Problems of architecture in Estonia', Arman declared that to ' ... [invent] genuine principles of Soviet Estonian town planning, local architects still need to study town planning as a discipline, to solve all engineering challenges concerning water supply ... ' in order ' ... to fulfil Stalin's five-year plan and to make towns in Soviet Estonia better and more beautiful ... '.64

On 23 October 1946, the USSR's Soviet Architect's Union urged '... all Soviet architects to deepen dedication to the Soviet ideology, to strengthen the fight for high architectural skills, ... on the behalf of the Soviet peoples ...  $.^{65}$ 

In late 1947, Arman declared three principles concerning town centre planning: a proper building plan, strict regulation regarding the order in which buildings are constructed, and a 'right' policy for town planning. According to the first principle, Arman suggested to not demolish any building. Since the future town centre had to be well connected with adjacent streets (radiant gridline), the

<sup>&</sup>lt;sup>58</sup>EAM 3.1.389.

<sup>&</sup>lt;sup>59</sup>Soans and Keppe, "Tallinna linna," 11; ERA R-1992.2.25

<sup>&</sup>lt;sup>60</sup>Arman, "Detailplaneerimise küsimusi," 10 –11; Arman, Tuleviku-Tallinn, 9–12.

<sup>&</sup>lt;sup>61</sup>EAM 3.1.31.

<sup>&</sup>lt;sup>62</sup>Shumovskij, "O nedostatkah."

<sup>&</sup>lt;sup>63</sup>Meigas, "Eesti NSV," 5–9; Arman, "Linnade planeerimise," 5–8; Arman, "Detailplaneerimise küsimusi," 10–17.

<sup>&</sup>lt;sup>64</sup>Arman, "Problemy architektury."

<sup>&</sup>lt;sup>65</sup>Tvorcheskie ... Materialy XII, 49–61; Meigas, "Eesti NSV," 5–7.



**Figure 7.** Estonia Boulevard administrative buildings opposite Estonia Theatre in Tallinn from the turn of 1940s and 1950s. City space of the Cultural Centre in Tallinn by Harald Arman, the front building, 1948–1953 by Enn Kaar. Source: Photograph by Siim Sultson 2017.

main square was supposed to be stately by its measurements and architectonical appearance. Administrative buildings, public buildings and cultural objects needed to be placed around the central square, and to be visible from every radiating street.<sup>66</sup> Unlike other masterplans and urban space solutions commonly designed in the Soviet Union during the 1940s that of Estonian tried to match with gridline and appearance of the existing town.<sup>67</sup>

So-called liberal Stalinism ended in 1949, while over 20,000 Estonians were deported to Siberia within one night. Political pressure from Moscow compelled local Estonian architects to design city spaces following the style of Leningrad and Stalingrad (now Volgograd) as models. Between 25 and 28 October 1950, the plenary session of the USSR's Soviet Architect's Union was dedicated to architects' creative tasks within 'the grandiose fifth Stalin five-year plan'. According to the resolution of this plenary, the Soviet architects were supposed to be more active, innovative, creative and ideologically aware. They were further compelled to follow socialist realism, and to use more classicist heritage.<sup>68</sup>

<sup>&</sup>lt;sup>66</sup>Arman, "Detailplaneerimise küsimusi," 10–17.

<sup>67</sup>ERA R-1992.2.33, 88-92.

<sup>68</sup> Tvorcheskie ... Materialy XIII, 5, 7-32, 108-17.



**Figure 8.** Design for the Cultural Centre in Tallinn, 1953 by Harald Arman. A version. Bottom right: Estonia Theatre near Estonia Boulevard. Centre: Academy of Sciences of Estonian SSR building near Lenin Boulevard. Source: EAM 3.1.32.

### The Central Square and the Cultural Centre after 1950

After the deportations and the plenary session, the Central Square and the Cultural Centre were redesigned following the resolutions and creative tasks stipulated above models. Following the centralization of the state and Stalin's 70th birthday, the Central Square was renamed Stalin Square.<sup>69</sup>

Keppe and Meigas redesigned the Square at the end of the 1940s and beginning of the 1950s. In contrast to the plan from 1946, the houses were given an ornamented classicist, Corinthian appearance, the multi-ministry building was replaced with the 7-storeyed House of Soviets, flanked by a 10-storeyed tower, and the rest of the buildings were designed to be 6-storeys high.<sup>70</sup> In 1953, Arman redesigned the Cultural Centre in a similar way; the four- and five-storeyed buildings with modest décor, would be replaced by five- and six-storeyed buildings with elaborate classicist ornaments. The Academy of Sciences of Estonian SSR was designed as a seven-storeyed classicist house.<sup>71</sup> However, none of these plans were put into practice: houses built in the early 1950s still followed the urban design practice of the independence period.

<sup>69#</sup>Pereimenovanie Central'noj."

<sup>&</sup>lt;sup>70</sup>EAM 18.4.89.

<sup>&</sup>lt;sup>71</sup>EAM 3.1.32.

### New policy and practice in Pärnu

One of the most ambitious town planning projects which took place in Estonia, was the redesign of Pärnu's city centre during the Stalin era. Between 1947 and 1948, Endel Arman (Harald Arman's younger brother) and A. Soans' Pärnu restoration project was accepted in the Department of Architecture of the Estonian SSR.<sup>72</sup> The project was also assessed by the Soviet Academy of Architecture. Igor Fomin, a consultant for the Estonian SSR, suggested to change the project: to make the pre-war business and transport centre smaller and to design a new stately square with administrative buildings, hotels and apartment buildings on the axes of bridge, which would connect the square with the main entrance road from Tallinn.<sup>73</sup> The Department of Architecture of the Estonian SSR merely accepted the Fomin's proposals in October 1949, and proposed to authorize E. Arman and A. Soans' master plan in June 1950.<sup>74</sup>

Meanwhile, the USSR's Soviet Architect's Union gave specific instructions to Soviet architects with regards to ensemble-like town planning. The board resolution of the Union framed the town planning practice of Moscow, Leningrad, Stalingrad, Kiev, Minsk as mandatory models for future Soviet cities.<sup>75</sup>

In the summer of 1952, H. Arman, alongside Grigory Schumovskiy and Mart Port, proposed a project for Pärnu centre. The partly realized Pärnu Oblast Centre complex project was designed following Fomin's suggestions, but, ultimately, E. Arman and A. Soans' project was rejected. The project design for the oblast centre complex had to concentrate the Oblast Centre building, the Palace of Culture, and the apartment buildings around the crossing axes of Central Square and Lenin Boulevard. The Pärnu Central Square included an esplanade, Vasa Park, flanked by three-storeyed apartment buildings, and a plaza between the Oblast Centre building and the esplanade. The construction of Lenin Boulevard (now Pikk Street), which was meant to cross the plaza, would come to an end together with the construction of the Palace of Culture, near the Oblast Centre building. The other side of the boulevard joined the former pre-war business and transport centre (Figures 9 and 10).

The business and transport centre, which served as the central square in the 1930s, was abandoned, and the town got a disproportionately large new axial centre. This centre was connected via bridge to the main entrance road from Tallinn. In order to get the necessary space for the centre, a third of the burnt, yet largely preserved, mediaeval old town quarters, and the ruins of the Teutonic Castle, were demolished, the fourteenth-century St Nicholas Church was demolished with explosives. These large-scale changes came as a result of the 1952 decision to declare Pärnu a future oblast capital; similarly to Tallinn and Tartu, Pärnu became an important urban space. As a result of administrative reform, the 15 traditional counties were replaced with three Soviet oblasts by Moscow. The reform was cancelled after Stalin's death in 1953.<sup>76</sup>

Because of Pärnu's new status as a future oblast capital, its axial centre plan was grandiose. While the Soviet architect's handbook suggested that a town of 50,000 inhabitants could have a one-hectare central square, Pärnu, with a population of 20,000 people, was designed to include a central square of 2.5 hectares.<sup>77</sup> The composition of the Oblast Centre complex is similar to that of St Petersburg, which contains

<sup>&</sup>lt;sup>72</sup>ERA R-1992.2.1, 45-8; ERA R-1992.2.33, 74-84.

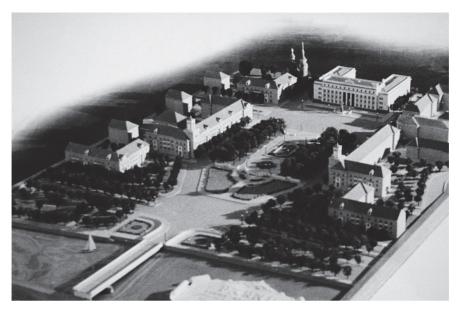
<sup>&</sup>lt;sup>73</sup>ERA R-1992.2.33, 139-42.

<sup>74</sup>ERA R-1992.2.33, 104-26.

<sup>&</sup>lt;sup>75</sup>"Hronika. XIV plenum," 31–3.

<sup>&</sup>lt;sup>76</sup>ERA R-1992.2.70, 47; ERA R-1992.2.33, 42–4; Parek, Pärnu sajandeis, 42–3; Shumovskij, "Budushhee goroda-kurorta"; Härmson, "Pärnu keskuse," 35–43.

<sup>&</sup>lt;sup>77</sup>Kratkij spravochnik, 20–1.



**Figure 9.** Pärnu oblast centre by Harald Arman, 1952–1955. Top right: the oblast centre building near crossing axes of park and Lenin Boulevard (Pikk Street). The complex is on the site of the demolished Old Town and ruins of Teutonic Castle. Source: EAM 3.1.323.

St Isaac's Cathedral – Senate Square – a demolished bridge on the axis of the cathedral, and Admiralteiskij Prospekt – the Palace Square. Simultaneously, the composition of the Pärnu complex also recalls that of the Cultural Centre in Tallinn. While the Oblast Centre building was designed in St Petersburg following a classicist style (by architect Dmitri Bruns and architect Olga Bruns), the other buildings followed the style of the independence period and the Tallinn Cultural Centre. The complex was built during the 1950s, with scarce ornament. The Oblast Centre building was not erected.



**Figure 10.** Pärnu oblast centre by Harald Arman, 1952–1955. View along Lenin Boulevard (Pikk Street) nowadays. Source: Photograph by Siim Sultson 2013.



**Figure 11.** Stalinist centre of Kohtla-Järve, early 1950s by Lengorstroyproyekt. Perspective view along the Victory Boulevard. Photo taken in 1950s. Source: RM f 87.70.

### Kohtla-Järve and Sillamäe: a question of familiarity in two industrial towns

Similarly to Pärnu, the city centres of Sillamäe and Kohtla-Järve were designed to be disproportionately big relative to their population size; the projects were led from a distance by Lengiproshacht and Lengorstroyproyekt, that were located in Leningrad. In comparison with other existing towns in Estonia, Sillamäe and Kohtla-Järve were designed to be new industrial cities between the 1940s and 1950s. However, they had a small and widely dispersed population size before Soviet times. Unlike the rest of Estonian towns, the inhabitants of Sillamäe and Kohtla-Järve, similarly to Narva, were immigrants from other regions of the vast Soviet Union. The main activity in Kohtla-Järve was oil-shale mining, whilst in closed Sillamäe it was the processing of uranium oxides. By the 1950s, both towns, with a population of 10,000 people, had stately centres as large as the one in Pärnu. Sillamäe's city centre consists of three main streets crossing the central square, and a recreational area. While the streets are situated on two coastal levels, the crossing and sea-oriented recreational area connects the levels with a staircase, similarly to Stalingrad.<sup>78</sup>

Kohtla-Järve's Stalinist city centre, named Victory Boulevard (now Kesk Boulevard), is 50 metres wide and connects the Palace of Culture with a park and the cinema building (*Pobeda*, 'Victory') (on the axis of the boulevard). The Victory Boulevard is crossed by the axis of Rahu (Peace) Square, which was intended to concentrate local government building and four-storeyed apartment buildings with colossal orders and avant-corpses. The rest of the houses on the crossing axes are two-to three-storeyed apartment buildings with pitched roofs (Figures 11 and 12).<sup>79</sup>

<sup>&</sup>lt;sup>78</sup>ERA R-1992.2.12.

<sup>79</sup>ERA R-1992.2.57; ERA R-1992.2.41.



**Figure 12.** Stalinist centre of Kohtla-Järve, early 1950s by Lengorstroyproyekt. Perspective view along the Victory Boulevard. Centre: one of the main crossing axes (Rahu Square) and apartment building with colossal order. Source: Photograph by Siim Sultson 2013.

Although East Estonian industrial towns were planned mostly by non-local architects, the Stalinist central gridline of Kohtla-Järve has much in common with the Stalinist central gridlines of Tallinn and Pärnu. It is a question of familiarity that needs to be clarified. Kohtla-Järve's city centre is compositionally similar to the Tallinn Cultural Centre and the Pärnu Oblast Centre complex. Indeed, whilst the project in Kohtla-Järve was designed by Lengiproshacht and Lengorstroyproyekt, it was Arman, as head of the Department of Architecture of the Estonian SSR, who processed the masterplans and construction plans in this city already in the mid-1940s.<sup>80</sup> The design of the four-storeyed houses at the crossing axes of Victory Boulevard and Rahu Square in Kohtla-Järve, allows us to speculate on how the centre of Tallinn could have looked like had it also been designed following orthodox Stalinist principles.

# New policy and memory

Both Tallinn and Pärnu are examples of the so-called memory shift or memory restart. Tallinn Liberty Square as a symbol of lost independence was a problem for the Soviet regime. In the 1920s and 1930s, during the square city space architectural contests, a monument commemorating the War of Independence had always been one of the crucial details. While in 1944 the Second World War

<sup>80</sup>ERA R-1992.2.12: 44–54; ERA R-1992.2.1; ERA R-1992.2.31; ERA R-1992.2.22; ERA R-1992.2.41.

monument contest for Liberty Square (Renamed 'Victory Square' during the Soviet occupation) failed, the Department of Architecture of the Estonian SSR decided organize the next monument contest for the Central Square that was under the construction.<sup>81</sup> The previous Liberty Square was considered too small to host the Soviet celebrations and meetings.<sup>82</sup> In 1950, Arman stated that the Liberty Square was not large enough for the Second World War monument, and ultimately considered it weak by its structural composition. Five years later, Arman considered that thorough reconstruction of the previous Liberty Square was inevitable in order to give landscape to the square, to turn it into a park, among other things.<sup>83</sup>

Pärnu's pre-war business and transport centre also needed to be landscaped.<sup>84</sup> On the one hand, it seemed to be characteristic of these times to erase the memories of lost independence through landscaping. On the other hand, landscaping may also be considered an act led by local architects to preserve memory icons from being rebuilt or destroyed by occupying regime. Similarly, renaming Tallinn's Central Square Stalin Square in 1949, and the 1952 administrative reform, are examples of how local identity was being erased, shifting memory.<sup>85</sup> Compared to the rest of Estonian towns, Narva experienced the most drastic redesign. While E. Ederberg and A. Soans made a proposal to restore the old baroque town in the 1940s,<sup>86</sup> after the 1949 deportations and the end of so-called liberal Stalinism, the fairly well preserved ruins were almost completely demolished, and subsequently substituted with a new gridline and houses: both the town and its population were replaced.

Stalinist architectural policy, which can be described as town planning as doctrine and paradigm, was productive, and efficiently framed by a number of resolutions and instructions. Town planning gave the totalitarian system an opportunity to 'correct' memory: to remove 'the wrong' and to replace it with 'the right'. In order to control memory, any structure that was reminiscent of old traditions was replaced by another which embodied the new ideology, in order to establish a heritage for the future. Town planning, especially the design of the stately city centre and the architectural system, was one of the most straight-forward ways for the state to 'correct' memory.

# Conclusion

Taking Tallinn, Pärnu and Tartu as examples, this paper has argued that urban space design during the Estonian post-war Stalinist period (1944–1955) had much in common with urban space design developed the independent Estonian period of the 1930s, due to political, administrative and compositional reasons. Indeed, Estonian 1930s urban space design ambitions in Tallinn, Pärnu and Tartu were put into practice during the local Stalinist period (1944–1955). Urban space ambitions for Tallinn's Liberty Square, Pärnu's new business and transport centre, and Tartu's new institutional ensemble, were implemented in Tallinn's Central Square, the Cultural Centre, and Pärnu's oblast centre. In these instances, one can see a transition from the independence period to Stalinist urban space design practice, both in appearance and composition. As Estonian 1930s architecture and urban space design practice carried forth architecture and urban space design practice carried forth architecture and urban space design practice carried forth architecture and urban space design practice of the late 1930s.

<sup>&</sup>lt;sup>81</sup>Tarvas, "Monumendid," 44-53.

<sup>&</sup>lt;sup>82</sup>Volkov, "Tuleviku Tallinna."

<sup>&</sup>lt;sup>83</sup>Arman, "Voprosy planirovki," 49.

<sup>84</sup>Linnakivi, "V novom oblastnom."

<sup>&</sup>lt;sup>85</sup>"Pereimenovanie Central'noj."

<sup>&</sup>lt;sup>86</sup>Ederberg, "Narva vanalinna," 60–5.

406 🖌 S. SULTSON

Despite attempts to shift local memory, the local urban space practice during the Soviet Stalinist period stubbornly remained similar to that of the 1930s. The ambitions were implemented in the appearance and composition of new locations, including Kohtla-Järve. The urban space practice during the Estonian Stalinist period (1944–1955) is as a synthesis of Soviet urban space paradigms and local 1930s independent period urban space design, as it follows independence period ambitions and were affected by Arman's contradictory personality. Urban space practice during these years shows a powerful reaction against orthodox Stalinist urban space, a reaction that incorporated and melted foreign ideology into local practice, making it familiar.

# **Disclosure statement**

No potential conflict of interest was reported by the author.

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Siim Sultson is a PhD student in Tallinn University of Technology. He has worked as a lecturer and an associate professor of Art History since 2000. His field of research and research interests are Estonian twentieth-century interwar, post-war architecture, urban planning, urban space; living space on the background of Soviet interwar and post-war urban planning and German interwar urban planning, Stalinist urban ensembles in north-eastern Estonian cities: determination, typology and potential as factors of the cities spatial development.

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408 🖌 S. SULTSON

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### **Publication 4**

# Replacement of Urban Space: Estonian Post-War Town Planning Principles and Local Stalinist Industrial Towns

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Urban design in the Baltics: studies, research and practice

### REPLACEMENT OF URBAN SPACE: ESTONIAN POST-WAR TOWN PLANNING PRINCIPLES AND LOCAL STALINIST INDUSTRIAL TOWNS

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Abstract. The presented paper focuses on Estonian urban space research concerning both replacement of urban heritage and establishment of new urban design within the period of mid 1940s and 1950s. On the one hand, Stalinist principles brought by Soviet occupation reminded independent Estonian 1930s town planning ambitions. On the other hand, the new principles formulated a new paradigm that was unfamiliar to local urban space tradition. Estonian urban space was compelled to follow the Soviet doctrine by concept, forms and building materials. Sometimes suffering irrational demolitions the towns got axially arranged representative, but perspective and functional plans. Some existing towns (for instance Tallinn, Pärnu, Narva) got new centres due to war wreckages and the ideological reasons. Meanwhile new industrial towns as examples of Stalinist utopia were built in East-Estonia during 1940s–1950s in order to exploit local mineral resources by the Soviet regime. In comparison with Tallinn and Pärnu urban space of East-Estonian industrial towns Kohtla-Järve and classified Sillamäe – designed in Leningrad (St. Petersburg) – still need to be researched. Though different from the rest of Estonian towns by details and materials of façades city-like centres of Sillamäe and Kohtla-Järve are rather similar to Tallinn and Pärnu by their composition.

Keywords: urban design research, architecture, production of space, urban space, town planning, representing the state, ideology, Stalinism.

#### Introduction

Town planning and city space within it may be taken somehow as information communication technology. There one can recognize information recording functions (materialized ideology), communicational functions (massive, seemingly for one purpose, a produced space) and procession functions (computing and again communicating ideology via material). Public architecture communicates with everyone, but especially via grandiose and ensemble-like buildings as memory or ideology carriers. Thus public architecture, e.g. city space has always been beloved by authoritarian and totalitarian systems in order to control citizens, their minds and memory.

According to the official Stalinist consideration the Soviet town planning and urban space was supposed to oppose the Western one, to demonstrate preferences of the socialist practice compared the capitalist one. Current Estonian Stalinist urban space research is either affected by the similar tendencies (though in much moderate way) or reduced to simple narration of the period. Current analysis of Estonian post-war city planning and urban space has mostly consisted of juxtaposition of graphic material, buildings without penetrating the issue - whence and why everything has come, what were the reasons, what was the context. Merely comparing projects and houses is not enough since the buildings trying to embody the ideology are still fragments of the wider paradigm. Due to the fact Sillamäe and Kohtla-Järve (in the first stage) are not planned by local architects (e.g. the documents are in Russian, many documents are presumably in Russia etc.), their appearance differ appearance of the rest of Estonian towns' Stalinist appearance the East-Estonian Stalinist industrial towns are still considered different, unfamiliar, exotic, as from parallel dimension in Estonia. Urban spaces of East-Estonian towns Sillamäe and Kohtla-Järve are under-researched.

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It is important to include and incorporate the East-Estonian industrial towns into research of Estonian post-war Stalinist urban space due to their location in the Republic of Estonia, thus the towns are a part of local urban space history. Regardless the above mentioned facts characterising so-called unfamiliarity of the East-Estonian towns Stalinist centres of Kohtla-Järve and Sillamäe have architectural and urban compositional similarities and connections with Stalinist centres of Tallinn and Pärnu. The Department of Architecture of the Estonian SSR and its head Harald Arman that processed masterplans and construction plans of all local towns were familiar with masterplans and construction plans of both industrial towns already in mid1940s (ERA.R-1992.2.12: 44-54; ERA.R-1992.2.1; ERA.R-1992.2.31; ERA.R-1992.2.22; ERA.R-1992.2.41). Research of Estonian post-war urban space is incomplete without related deeper and complex knowledge of the East-Estonian industrial towns that for instance helps to define post-war urban space of Tallinn and Pärnu more adequately. The Stalinist period is a part of Estonian history, deeper knowledge of the period helps to define the perspectives of the state and its inhabitants. Since urban space research is architectural issue as well as social issue (how to use and develop the urban heritage) deeper and complex knowledge of the East-Estonian industrial towns helps to integrate mostly Russian-speaking North-East Estonia into the entire state and support improvement of the area. The port of Sillamäe is being situated nearby border of the Russian Federation and is the easternmost commercial port of the European Union.

*Object of the presented paper* is research of Estonian post-war urban space and its approach to local Stalinist industrial towns.

*Methodology of the paper* is qualitative and it is focused on ideology of town planning.

*Objective of the paper* is to analyse research of Estonian post-war urban space from point of view of replacement of urban heritage and establishment of new urban design according to the ideology currently in force both taking Tallinn and Pärnu as examples and local Stalinist industrial towns (Sillamäe and Kohtla-Järve) within the period of mid 1940s and 1950s. The four towns are taken as examples since all of them have the most complex Stalinist urban centers.

*Tasks of the paper* are:

- to present the state of research of Estonian post-war urban space;
- to outline some contradictories and deficiencies in research of Estonian post-war urban space (familiar and/vs unfamiliar);
- to show formation of Estonian post-war Stalinist urban space on the one hand taking Tallinn and

Pärnu as examples and on the other hand in East-Estonian industrial towns;

- to outline similarities of Estonian post-war Stalinist urban space in Tallinn and Pärnu and in Sillamäe and Kohtla-Järve;
- to include and incorporate East-Estonian industrial towns into research of Estonian post-war Stalinist urban space as an inseparable issue of research.

## Present state of research of Estonian post-war urban space

While in 1940s–1950s, even later within the Soviet era simplified consideration of the issue may be regarded understandable, the similar consideration, though much more loose, up to nowadays is somehow still in use.

In literature overview concerning the topic one can define three periods: the contemporaneous Stalinst period (mid1940s–mid1950s), the post-Stalin Soviet period (mid1960s– 1980s) and the modern period (early1990s–nowadays).

In the contemporaneous Stalinist period within mid1940s-mid1950s current Soviet town planning and urban space were considered in professional periodical publications like "ENSV Arhitektide Almanahh" (1946, 1948, 1949, 1951). Those articles on the one hand were informative concerning ongoing town planning, on the other hand, while containing analyses of the issue, stately ideological. For instance one could follow articles concerning masterplans of existing and future towns, urban space, urban ensemble by the head of the Department of Architecture of the Estonian SSR and architect Harald Arman (Arman 1946, 1948, 1949), as well as by architects Ernst Ederberg (Ederberg 1946, 1948), Lorenz Haljak (Haljak 1949), Otto Keppe (Keppe 1951), Voldemar Meigas (Meigas 1948, 1949), Anton Soans (Soans, Keppe 1946; Soans 1949), Ivan Starostin (Arman, Starostin 1951). The similar conceives could be found Harald Arman's book "Tuleviku-Tallinn. Eesti NSV Poliitiliste ja Teadusalaste Teadmiste Levitamise Ühing 1 (45)" (Future Tallinn. Society for Spreading of Knowledge of Politics and Science 1 (45)) (Arman 1950) and article "Voprosy planirovki i zastrojki centra Tallina" (Questions concerning planning and building-up of Tallinn) (Arman 1955). One could find similar concepts from newspapers ("Sirp ja Vasar", "Sovetskaja Estonija", "Rahva Hääl", "Õhtuleht", "Postimees").

After Joseph Stalin's death the era urban space nor town planning seemed no popular. There are merely some attempts within general books in the post-Stalin Soviet period literature. For instance, in 1965 book "Eesti arhitektuuri ajalugu" (History of Estonian Architecture, edited by H. Arman *et al.*) (1965) the issue is considered in rather neutral, protocolling way. The same consideration is visible in architect Paul Härmsons article about Pärnu (1983).

Due to regained independence and opportunity to analyse the topic objectively one can see several representations in the modern period. Historian of architecture Leonid Volkov, contemporaneous of Stalin era, published an article "Eesti arhitektuurist aastail 1940-1954" (About Estonian architecture within 1940-1954) in 1991 (Volkov 1991). Former Chief Architect of Tallinn (1960-1980) Dmitri Bruns considered Stalinist town planning of Tallinn in his book "Tallinn: linnaehituslik kujunemine" (Tallinn: Urban Formation) in neutral protocolling manner (Bruns 1993). Historian of architecture Mart Kalm considered the issue as an architectural background in his monography "Alar Kotli" (Kalm 1994) and in his book "Eesti 20. sajandi arhitektuur" (Estonian 20th Century Architecture) (Kalm 2001, 2003). In both books M. Kalm centres onto architectural and architects' personal details without giving complex structured definition of the Estonian post-war urban space and separates so-called local urban space (Tallinn, Pärnu) and so-called non-local urban space (Kohtla-Järve, Sillamäe). The trend defines the Estonian post-war urban space as consisting of so-called familiar and so-called un-familiar issues. His articles "The Sovietization of Baltic Architecture" (Kalm 2003) and "Perfect Representations of Soviet Planned Space. Mono-industrial towns in the Soviet Baltic Republics in the 1950s-1980s" (Cinis et al. 2008) consider the Estonian post-war urban space similarly, but a more analytically. Estonian Stalinist town planning and urban space are considered in master thesis' of Siim Sultson (2002), Maria Orlova (2003) and Epp Lankots' article (2004) and S. Sultson's articles (Sultson 2003, 2013, 2014a, 2014b, 2015). However, the abovementioned texts, articles consider Estonian post-war urban space as an issue separated from East-Estonian Stalinist urban space.

In order to understand the fundamentals and mechanisms of the era, the town planning and urban space produced within the period it is inevitable to decode the latter one philosophically concerning relations between city space, power and representation. Only then it could be possible to define urban space both of the East-Estonian industrial towns and of the same area urban space in the rest of Estonia.

In order to analyse city planning of East-Estonian industrial towns, to define their typology, to discover and implement their potentiality in the field of urban space it is necessary to establish a theoretical basis for understanding urban space of the era. The theoretical basis is supposed to be integrated with sociology, symbolism of architecture, power and its necessity for representation.

Current Estonian research of Stalinist urban space tends to simplification, regarding the issue as something merely opposing to Western experience.

Regarding all those considerations it is possible to highlight that while Stalinist town planning and urban space of Tallinn and Pärnu are researched and documented quite well, the same issues of East-Estonian industrial towns Sillamäe and Kohtla-Järve have not met consideration in equal amount. One of the main reasons could be that all abovementioned considerations lack a philosophical approach for establishing a theoretical basis for understanding urban space of the era.

Consequently, as stated above, to analyse city planning of East-Estonian industrial towns, to define their typology, to discover and implement their potentiality in the field of urban space it is necessary to establish a theoretical basis for understanding urban space of the era. That theoretical basis encompassing urban space is supposed to be integrated with sociology, symbolism of architecture, power and its necessity for representation for instance via philosophical considerations written by Henry Lefebvre (Lefebvre 1991), Michael Foucault (Foucault 2000a, 2000b), Nelson Goodman (Goodman 1985) etc. The basis helps to define and position East-Estonian industrial towns as phenomena, as well in connection with the rest of Estonian Stalinist town planning and urban space. Moreover, that theoretical basis could help to redefine Estonian Stalinist town planning and urban space through East-Estonian industrial towns.

Historian of architecture Vladimir Paperny stated "... once Stalinist architecture becomes the centre of attention, however, the researcher no longer has the right to limit him- or herself to noting this or that borrowed element or echo of a European style; rather attention should be paid to how they are combined". It means the process of borrowing has always been important in Russian, as well as in Soviet culture, urban space included (Paperny 2002: xxi). The combination should be decoded via philosophy of space.

#### Estonian post-war town planning

In the 1930s similarly to global tendencies (new tradition based town planning), architecture in independent Estonia started to focus on stately urban ensembles as an architectural element enabling the young country to develop its own stately façade. In order to tackle the dream central city spaces of Tallinn, Tartu, Pärnu and other towns were intended to be redesigned. The tendency increased as even Estonia became more



Fig. 1. Winning entry for Liberty Square in Tallinn, 1937, by Alar Kotli (EAM 2.1.203)

authoritarian. For instance, according to the president Konstantin Päts's decree of May 27<sup>th</sup>, 1936 all façades in Tallinn Liberty Square district could be designed or redesigned with permission of the president only (Vabadussõja üleriikliku mälestusmonumendi püstitamise seadus 1936: 1028). The Tallinn Liberty Square city space architectural content was as an ebodyment of the new tendencies (Fig. 1).

The similar developments one can see both in the new business and transport centre of outskirt of Pärnu (started in 1939) (EAM 2.1.219) and in new institutional ensemble around the Tartu University in Tartu centre (started in 1939) (EAA 2100.6.163; Ülikooli ümbruse ... 1938). Neither of them had been finished due to beginning of Soviet occupation in 1940.

Stalinist principles brought by Soviet occupation since 1940 and again since 1944 seemed rather similar to local ones. But in in a couple of times Estonian architects and urban space practice faced quite unexpected instructions given by the occupying regime.

#### Soviet town planning, socialist realism

Due to ideological reasons private property was forbidden in the Soviet Union. Thus in comparison with other states it was easier to operate with town structure, to control society via urban space. It was especially crucial after World War II – necessity to restore wrecked towns gave a rare opportunity to celebrate victory of the regime and its ideology.

As stated the Communist Party of the Soviet Union's Central Committee's Plenum decided on June 15<sup>th</sup>, 1931 – town planning including both reconstruction and construction would be realized under the guidance of the state's central plan for the national economy (Bunin 1945: 290–291). Nearly a year later, in January 1932, the Soviet People's Commissar of Education Anatoly Lunacharskiy stated that a task of architecture is to integrate functionality and utility in a harmonized way into an ideological idea (Kosenkova 2009: 19–20). In February 1932 the Soviet Communist Party found a new ideological method – socialist realism; the method was supposed to "embody an absolute apocalyptical future where the difference between past and future abolishes significance." (Groys 1998: 859). The method had to embrace literature, music, art, architecture.

In 1934 Soviet Writer's Union of the USSR formulated socialist realism as a method that demands artist to depict reality faithfully, historical events in explicit way within revolutionary development. The depiction had to be in tight connection with educating workers (Soviet citizens) in socialist spirit. Socialist realism as evolving and ambient category was intended to provide artist vast opportunities to choose different forms, styles and genres (ENE VII 1975: 243).

The first Stately Union Congress of Soviet Architects held within the period of June 16<sup>th</sup> – June 26<sup>th</sup>, 1937, stated in the resolution that the principle method of Soviet architecture was socialist realism. According to the new method:

- Soviet architect was supposed to be able to produce, in the utmost rapid and industrialized way, architecture that was highly qualified both aesthetically and economically (Capenko 1952: 74–75);
- ii. It was imperative to create artistic image in order to educate and re-educate the masses. It was a synthesis of the arts under one architectural "roof" (Kodres 2008: 142);
- iii. Architecture in a city space was supposed to be ensemble-like, where every house had to be ruled by ensemble. That meant a certain hierarchy where every part had to obey the principle of unity (Zholtovskij 1940).

After the World War II socialist realism was complemented with victory theme.

## Stalinist stately urban ensembles in Estonia: new policy

In 1945 the head of the Stately Committee of Architecture of the USSR Arkadi Mordvinov formulated seven principle conditions of the Soviet post-war town planning that were compulsory for all architects:

- town planning was supposed to be in tight connection with natural environment in order to expose its beauty;
- town plan needed balanced compositional centre (for instance centre – main street – railway station square);
- monumental public buildings had to be erected in junctions;

- 4) quarters of dwelling houses had to be planned in complex way and designed in one ensemble;
- 5) all buildings had to be painted only in light colours (dream of positive future);
- 6) rationality and high quality of structures and infrastructures (electricity, water supply etc.) were must;
- 7) thorough quality survey both in architects' projects and building process was inevitable (Kosenkova 2009: 42).

During World War II according to plenary resolution of the Soviet Architect's Union of the USSR the soviet architects were supposed to be ready to the gigantic restoration works after the war (Plenum ... 1943). The head of the Department of Architecture of the Estonian SSR Harald Arman residing in the USSR started to organise restoration of Estonian towns already in mid-1944 (Gorich 1946).

H. Arman gave local architects rather certain instructions for town planning in Estonian SSR. The instructions followed the board resolution of the Soviet Architect's Union of the USSR made on October 24<sup>th</sup>, 1946 and the plenary resolution of the Soviet Architect's Union of the USSR made on August 2<sup>nd</sup> 1947. (Meigas 1948: 5–7; Arman 1946: 5–7; Tvorcheskie ... 1948: 49– 61; Arman 1948: 10–11).

In late 1947 H. Arman declared three principles concerning town centre planning:

- 1) proper town centre building plan;
- strict regulation which buildings are supposed to be erected first;
- 3) "right" policy of town planning.

According to first principle H. Arman suggested:

- not to demolish every building;
- meanwhile the future town centre had to have tight connection with streets (radiant gridline), the main square was supposed to look like dignified by its measurements and architectonical appearance, administrative buildings, public buildings;
- cultural objects had to be placed around central square and to be visible from every radiating street (Arman 1948: 10–11).

H. Armans principles were leaning on A. Mordvinovs seven principles and both of them were mandatory to be followed by local urban planners, architects.

#### Implementation of the new policy

#### The new policy in Tallinn and Pärnu

Stalinist stately urban ensembles in Estonia provided an opportunity for architects to carry out some of their megalomaniac architectural ideas from the period of independence. On the one hand, Estonian mid 1940s town planning was quite similar to the pre-war independence period disregarding the rest of the Soviet Union architecture (Fig. 2). On the other hand, some architects (Voldemar Meigas, Otto Keppe) proposed to restore Tallinn centre similarly to Stalinist practice in Leningrad (St. Petersburg). Architect H. Arman balanced between two tendencies. Meanwhile East Estonian industrial towns Sillamäe and Kohtla-Järve were designed mostly under the guidance of Leningrad construction departments.



Fig. 2. Entry for Central Square in Tallinn, 1945 by Harald Arman, Voldemar Meigas, Otto Keppe (EAM 18.4.8)



Fig. 3. Estonia Boulevard administrative buildings in Tallinn from the turn of 1940s and 1950s. City space by Harald Arman, the front building by Enn Kaar (Photo: Siim Sultson, 2014)

In 1940s local Estonian architects used to design administrative and apartment buildings in 1930s manner: granite wall coating, modest, scarce ornament, only roofs were a bit more pitched and some soviet symbols were added (Fig. 3)

For example, the new centre of Tallinn consisting of the Tallinn Cultural Centre in front of Estonia theatre and the Central Square was designed under the guidance of H. Arman in the quite same way. According to the masterplan of Tallinn (H. Arman) the Central Square was designed in the junction of Pärnu Road, Tartu Road, Narva Road and Mere Boulevard. On the opposite of the converging streets an esplanade was designed between the square and national opera (the Estonia theatre). The square itself was planned to be surrounded by several office and ministry buildings. The Cultural Centre was intended to concentrate universities, libraries and other both academic and cultural institutions together around the boulevard-like crossing axes in front of the Estonia theatre (Fig. 4). Whole the complex was supposed to be as representative as possible, as an example of implementation of Stalinist principles in town planning (Arman 1948: 10–11, 1950: 9–12).

However, unlike the rest of the Soviet Union Estonian 1940s masterplans tried to match with gridline and appearance of the existing town (ERA.R-1992.2.33: 88–92).

So-called liberal Stalinism ended in 1949 while approximately 20 000 inhabitants of Estonia were deported to Siberia within one night. Political pressure radiating from Moscow compelled local Estonian architects to design city space more similarly to the capital of USSR, Leningrad (St. Petersburg), Stalingrad (Volgograd). On October 25<sup>th</sup>–28<sup>th</sup>, 1950 the plenary session of the Soviet Architect's Union of the USSR was dedicated to architects' creative tasks within "the grandiose fifth Stalin five-year plan". According to the plenary session resolution the Soviet architects were supposed to be more active, creative and ideologically aware, dedicated to socialist realism, innovative and to use more classicist heritage (Tvorcheskie ... 1951: 5, 7-32, 108-117). According to the board resolution of the Soviet Architect's Union of the USSR made on June 5th, 1952 certain instructions in the field of ensemble-like town planning such as for Moscow,



Fig. 4. Entry for the Cultural Centre Square in Tallinn, 1947 by Harald Arman (EAM 3.1.164)



Fig. 5. Design for the Cultural Centre in Tallinn, 1953 by Harald Arman (EAM 3.1.32)

Leningrad, Stalingrad, Kiev, Minsk – those were model towns, e.g. set as an example to other towns all over the Soviet Union (Hronika. XIV plenum Pravlenija ... 1952: 31–33). Results of the increased politivcal pressure and the results can be seen in new design of Tallinn Cultural Centre (Fig. 5).

Perhaps one of the most Estonian enterprising town planning treatments took place in Pärnu. In 1947 and 1948 E. Arman's restoration project for Pärnu was accepted in the Department of Architecture of the Estonian SSR (ERA.R-1992.2.1: 45–8; ERA.R-1992.2.33: 74–84). At the same time the project passed by the expertise made by the consultant for the Estonian SSR of Soviet Academy of Architecture Igor Fomin to change the project (ERA.R-1992.2.33: 139–142). By the end of 1949 and the beginning of 1950 the Department of Architecture of the Estonian SSR merely accepted the consultant's proposals (ERA.R-1992.2.33: 104–126).

In summer 1952 H. Arman itself proposed (with Grigory Schumovskiy and Mart Port) a project for Pärnu. The partly realized town planning project followed I. Fomin's suggestions. E. Arman's project was rejected. According to H. Arman's project many quarters of the burnt but still preserved old town were demolished, the St. Nicholas Church (14th century) in the same condition was exploded. The central square from 1930s was abandoned, the town got for its measures enormous new axial centre. The new centre was orientated via bridge to main entrance road from Tallinn. In order to get necessary space for the centre 1/3 of mediaeval old town quarters and ruins of the Teutonic Castle were demolished. One of the reasons of such large-scale changes was caused by the fact that in 1952 Pärnu became a future oblast capital. Similarly, to Tallinn and Tartu importance of Pärnu increased. That was caused by replacement of fifteen traditional counties with three Soviet oblasts by Moscow (ERA.R-1992.2.70: 47; ERA.R-1992.2.33: 42-4).



Fig. 6. Pärnu oblast centre by Harald Arman, 1952–1955. On the site of the demolished Old Town and ruins of the Teutonic Castle (EAM 3.1.323)



Fig. 7. Pärnu oblast centre (Vasa park) nowadays (Photo: Siim Sultson, 2013)

Since Pärnu was regarded as a future oblast capital it got rather grandiose centre plan. While the soviet architect's handbook (1952) suggested to design a 1-hectare central square for the town with the population of 50 000, Pärnu with the population of 20 000 got a 2.5-hectare central square (Kratkij ... 1952: 20–21) (Figures 6, 7).

Both centres designed under the guidance of H. Arman have compositional similarities with Moscow southwest axis (Tallinn: if to prolong axis of the Cultural Centre to south), St. Petersburg Moscow Prospect (Tallinn, Pärnu), Kiev Kreshchatyk (Tallinn, Pärnu).

## The new policy and the Estonian Stalinist industrial towns Sillamäe and Kohtla-Järve

Rather similar anomalies between the amount of population and the area of town centre could be noticed in East Estonian industrial towns Sillamäe and Kohtla-Järve designed under the guidance of Lengiproshacht and Lengorstroyproyekt residing in Leningrad (St. Petersburg). In comparison with the rest of Estonian towns Sillamäe and Kohtla-Järve may be regarded as newly designed towns. Nevertheless, both of them had got small and widely dispersed settlement before the Soviet time. In 1940s–1950s Sillamäe and Kohtla-Järve were designed to be new industrial towns. Unlike the rest of Estonian towns inhabitants of Sillamäe and Kohtla-Järve were deported from the large Soviet Union. While Kohtla-Järve was regarded as oil-shale mining and processing complex, Sillamäe was classified town due to processing of uranium oxides. By 1950s both towns with the population of 10 000 got



Fig. 8. Design for Stalinist centre of Sillamäe, 1948 by Lengiproshacht (Sillamäe Muuseum)

practically as large representative centres as one may meet in Pärnu.

Representative centre of Sillamäe consists of three main streets crossing central square and recreational area. While the streets are being situated onto two coastal levels, the crossing and sea-orientated recreational area connects the levels with a staircase (à *la* Stalingrad) (ERA.R-1992.2.12) (Figs 8, 9).

In Kohtla-Järve the central boulevard that (50 meters wide) connects the house of culture and the central cinema is crossed by axis of complex of local government (ERA.R-1992.2.57; ERA.R-1992.2.41) (Figs 5, 11, 12, 13).

Although East Estonian industrial towns are planned mostly by non-local architects (especially Sillamäe), for instance Stalinist central gridline of Kohtla-Järve has much in common with Stalinist central gridlines of Tallinn and Pärnu. While the whole centre of Sillamäe (especially the part with staircase axis) has many compositional similarities with Stalingrad (for example staircase axis), the low level of the town (between sea and staircases) has some similarities with Tallinn and Pärnu Stalinist centres (Figs 10, 11, 12).



Fig. 9. Stalinist centre of Sillamäe, staircase, early 1950s by Lengiproshacht (Photo: Siim Sultson, 2013)



Fig. 11. Stalinist centre of Kohtla-Järve, early 1950s by Lengorstroyproyekt. Photo taken in 1950s (RM F 646.176)



Fig. 10. Stalinist centre of Sillamäe, staircase axis, early 1950s by Lengiproshacht (Photo: Siim Sultson, 2013)



Fig. 12. The Cultural Centre in Tallinn, early 1950s. Photo taken in 1961 (EFA 209.1–3509)



Fig.13. Pärnu oblast centre in mid1960s (EAM AM N 21975:1)

Kohtla-Järve centre (the boulevard and the crossing axis) is compositionally rather similar to the Tallinn Cultural Centre and Pärnu oblast centre (Figs 4, 13, 14, 15).

While in Kohtla-Järve and Sillamäe one can regard as new towns, established during Stalin era, the same attempts (to establish something new) may be seen both in Tallinn and Pärnu, as well. East Estonian industrial towns (Sillamäe and Kohtla-Järve) got axially arranged representative, perspective plans. Kohtla-Järve and Sillamäe one can regard as new towns, established during Stalin era, the same attempts may be seen both in Tallinn and Pärnu, as well.

#### Conclusions

According to the political (above stated principles), administrative (above mentioned activity of the Department of Architecture of the Estonian SSR) and compositional reasons under-researched East-Estonian Stalinist industrial towns Kohtla-Järve and Sillamäe have architectural and urban compositional similarities and connections with Stalinist centres of Tallinn and Pärnu.

On the basis of abovementioned architectural policy principles and urban compositional statements one can derive five principles characterising Estonian Post-War Town Planning Principles:

- 1. Unification of urban space. Abundance of traditional *locus*, rejection of any attempt to restore wrecked city centres, compel to follow the Soviet town planning doctrine by concept, forms and building materials, if necessary replacement of city and its inhabitants.
- 2. Strict urban gridline and urban space as an ideology support. Shift of functional



Fig. 14. The Cultural Centre in Tallinn, early 1950s. Photo taken in early 1950s (EFA 335.0–70335)



Fig. 15. Stalinist centre of Kohtla-Järve, early 1950s by Lengorstroyproyekt (Photo: Siim Sultson, 2013)

and ideological reason. Symbols. Stately urban ensemble has always been supposed to embody dignity, power, harmony of society, to monumentalize the latter one. See Henry Lefebvre's triad (Representational Space – Representation of Space – Spatial Practice) (How to perceive, how to concieve).

- **3. Intensifying of public city space.** The city space was supposed to be efficient, functional, strict, axial, perspective.
- **4. Dominant public space.** Stressed ideology, new memory. Cult of bright future.
- 5. Officially approved examples. Model towns, set as examples to other towns all over the Soviet Union (Moscow, Leningrad/ St. Petersburg, Stalingrad/Volgograd, Kiev, Minsk), Classicism (esp. Russian classicism), *Cinquecentto*, Roman antique.

Consequently, taking into account all abovementioned aspects of the current paper East-Estonian Stalinist industrial towns Sillamäe and Kohtla-Järve are supposed to be included and incorporated into research of Estonian post-war Stalinist urban space as inseparable issues of research.

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### **Publication 5**

### Alteration in the Awareness of Estonian City Space from Independence to Stalinism

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RESEARCH ARTICLE

Alteration in the Awareness of Estonian City Space from Independence to Stalinism

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#### Abstract

The presented research focuses on the alteration of Estonian city space awareness within the period of the mid-1940s and 1950s. Soviet occupation changed Estonian city space as the materialisation of ideology. Paradoxically, regardless of the war's destruction and occupying Soviet regime, Stalinist town planning principles generally matched with Estonian architects' city visions. Some existing towns (for instance Tallinn, Pärnu, Narva) gained new centres due to the damage from the war and for ideological reasons. Meanwhile, new industrial towns, as examples of Stalinist utopia, were built in East-Estonia during 1940s-1950s by the Soviet regime to exploit local mineral resources. While the Tallinn, Pärnu, Tartu new Stalinist centres were designed by local architects, the new industrial towns represented so-called imperial city space principles elaborated under the guidance of the Leningrad construction departments. Was there any difference between the pre-war independence period city space and the Stalinist period city space? Where lies the alteration of Estonian city space awareness from independence to Stalinism?

#### Keywords

city space, architecture, Stalinism, ideology

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#### **1** Introduction

Similarly, to interwar Italy and Germany, Soviet Stalinist town planning seemed anachronistic but paradoxically embodying harmony, functionality and effectiveness. While strict and radiant urban gridlines most strongly appeared in the states mentioned above, the new trend was quite similar both in authoritarian and democratic countries. Strictly organised, axial town planning, well known since Roman times via Renaissance and Classicism, in the 20th century is a rather functional approach to organising a town gridline. It was supposed to make the state more effective and enterprising. According to City Beautiful movement, a stately urban ensemble has always been supposed to embody dignity, power, a harmonious society, and to monumentalize the latter one. On the one hand, the dictatorial state tries to justify its ideology via traditional urban ensemble, whilst on the other, to see the same ensemble as trustworthy to crystallise the state's ideology. For instance, both Nazi Germany and Soviet Stalinist architecture and town planning are rather similar, with the differences existing mostly in details and sources (Kruft, 1994, p. 423).

After World War II, Estonian local architectural organisations (The Union of Estonian Architects, etc) were unified with the Soviet organisations. Estonian city space was compelled to follow the Soviet doctrine by concept, forms, and building materials. The most radical solution meant the replacement of the city and its inhabitants. The new principles both changed Estonian city space experience-based knowledge, and at the same time, provided an opportunity for architects to carry out some of their oversized dreams from the pre-war independence period.

## 2 Stately façade: inevitable prerequisite for a young country's identity

In the 1930s, similarly to global tendencies, the Republic of Estonia started to focus its architecture on stately urban ensembles as an architectural element, enabling the young country to develop its stately façade. This tendency increased even as Estonia became more authoritarian.

The young republic was interested in the state's representative façade being incarnated via town planning, and the city space. To tackle the dream, it was intended that the central city spaces of Tallinn, Tartu, Pärnu and other towns would be redesigned. According to President Konstantin Päts's decree of 27<sup>th</sup> May 1936, all the façades in the Tallinn Liberty Square district could be designed or redesigned only with permission of the president; all buildings nearby Liberty Square due to their representative appearance could be demolished by government order. ("Vabadussõja üleriikliku mälestusmonumendi püstitamise seadus", 1936, p. 1028)



Fig. 1 Pärnu Road apartment buildings nearby Liberty Square in Tallinn from the late 1930s. Photo source: Siim Sultson

Benchmarking independent Estonian 1930s town planning with Soviet period Estonian 1940s-1950s practice, Stalinist principles brought by Soviet occupation were rather similar to local ones differing mainly by quantity and methodology. For example, during the Tallinn Liberty Square city space architectural competition in 1937, one of the proposals (Harald Arman, Salme Vahter-Liiver) suggested doubling the area of the square by demolishing St John's church and a school building nearby. Though the contenders suggested removing the church (Bölau, 1937, p. 86-87), the jury regardless dismissed the Arman's and Vahter-Liiver's proposal as too enormous still decided to purchase the project. (ERA 2218.1.223, 34) In 1939, the new business and transport centre (H. Arman) was started in the storehouses' area in the suburb on the outskirts of Pärnu. The new centre was supposed to be as large as the old mediaeval town. (ERA 3799.1.33, 3)



Fig. 2 Winning entry for Liberty Square in Tallinn, 1937, by Alar Kotli Source: EAA.2111.1.15409,5

At the same time, the new institutional ensemble (Harald Sultson) was started in Tartu centre around the Tartu University. According to the project, the monumental ensemble would have replaced some quarters of 18<sup>th</sup>-19<sup>th</sup> century housing. (EAA 2100.6.163)

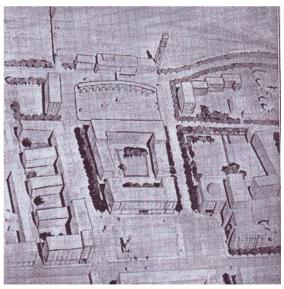


Fig. 3 Winning entry for the new business and transport centre in Pärnu, 1938 by Harald Arman. Source: ERA 3799.1.33,3

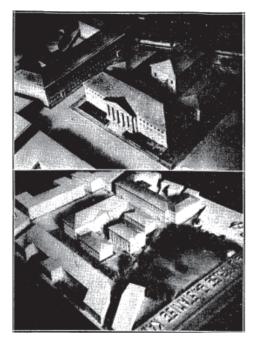


Fig. 4 Design for the new institutional ensemble around Tartu University, 1938 by Harald Sultson. Source: EAA 2100.6.163; Ülikooli ümbruse ..., 1938

Due to Soviet occupation and World War II neither of the plans were finished.

#### 3 Soviet Stalinist town planning and socialist realism

On 15th June 1931, the Communist Party of the Soviet Union's Central Committee's Plenum decided that town planning, including both reconstruction and construction, would be realised under the guidance of the state's central plan for the national economy. (Bunin, 1945, pp. 290, 291)

In January 1932, the Soviet People's Commissar of Education Anatoly Lunacharskiy stated that a task of architecture is to integrate functionality and utility in a harmonized way into an ideological idea (Kosenkova, 2009, pp. 19-20). In February 1932, the Soviet Communist Party found a new ideological method – socialist realism.

Partly reflecting Renee' Descartes's rationalist philosophy of method, socialist realism was intended to collect the best from both history and the contemporary. The new method, one of the important cornerstones of Soviet ideology, was supposed to lead society into an ideal future. Socialist realism was not intended to give up the cultural heritage, but to recycle, to synthesise it on behalf of a better tomorrow. Meanwhile, socialist realism handled culture, architecture, and heritage as a storeroom where one may take whatever and whenever one wants. This method was supposed to "embody an absolute apocalyptical future where the difference between past and future abolishes significance." (Groys, 1998a; 1998b, pp. 641–644, 859)

An indication of the state's increasing enterprising role was the decision of the Palace of the Soviets Construction Council made under the guidance of the Chairman of the Council of People's Commissars Vyacheslav Molotov on February 28th, 1932: according to the Palace of the Soviets, prescribed competitions compel all architects to follow requirements of simplicity, unity and elegance in architecture, and to follow the best example of Classicist architecture in one's creation (Capenko, 1952, p. 73). The Moscow Saviour Church was blown up in December 1931 in order to construct the Palace.

Parallel with the redesigning of Moscow's central structure, the first Stately Union Congress of Soviet Architects, held from 16th – 26th June 1937, stated in the resolution that the principle method of Soviet architecture was socialist realism. According to the new method, the Soviet architect was supposed to be able to produce, in the utmost rapid and industrialised way, architecture that was highly qualified both aesthetically and economically. (Capenko, 1952, pp. 74, 75)

As stated by the Soviet architect Ivan Zholtovskiy, architecture in a city space was supposed to be ensemble-like, where every house had to be ruled by the ensemble. That meant a certain hierarchy where every part had to obey the principle of unity. (Zholtovskij, 1940)

This was the way to generate a method for creating an artistic image to educate and re-educate the masses. "A synthesis of the arts – the bringing together of different forms of art under one architectural "roof." (Kodres, 2008, p. 142)

The new method was supposed to be a measure to solve all social problems in a complex way as effectively as possible. For instance, in the Soviet Union the main principle of Soviet town planning was the Stalinist care for people embodied in Moscow "that by its 800th anniversary had gained a new architectural appearance: axial town planning, well-equipped living quarters, parks, bridges and grandiose administrative buildings completed in accordance with the city reconstruction general plan" (*Sovetskaja arhitektura za XXX let RSFSR*, 1950, pp. 8, 9).

Due to ideological reasons, private property was forbidden in the Soviet Union. Thus, in comparison with other states, it was easier to operate with a town structure, to control society via the urban space. It was especially crucial after World War II – the necessity to restore wrecked towns gave a rare opportunity to celebrate the victory of the regime and its ideology.

## 4 Estonian Stalinist stately city space: old dreams, new principles

#### 4.1 The liberal Stalinist stately city space

The Head of the Department of Architecture of the Estonian SSR H. Arman, residing in the USSR, had already started to organise the restoration of Estonian towns in mid1944 (Gorich, 1946, p. 4). During World War II, according to a plenary resolution of the Soviet Architect's Union of the USSR, the Soviet architects were supposed to be ready for the gigantic restoration works after the war (Plenum pravlenija Sojuza arhitektrov, 1943). The following instructions given by the Council of People's Commissars of the USSR and the Soviet Communist Party compelled architects to design and restore wrecked towns more *grandiose* and according to the stately ideology (*Iz istorii sovetskoj arhitektury 1941-1945 gg. Dokumenty i materialy. Hronika voennyh let. Arhitekturnaja pechat.* 1978, pp. 94–102, 109).

In 1944, the Head of the Stately Committee of Architecture of the USSR Arkadi Mordvinov stated that the Departments of Architecture of the Estonian SSR, the Latvian SSR and Lithuanian SSR needed aid from the Stately Committee of Architecture of the USSR in the field of town planning methodology based on Soviet experience and ideology (*Iz istorii sovetskoj arhitektury 1941-1945 gg.* 1978, p. 149).

The following year, Mordvinov formulated the principles of the Soviet post-war town planning that were compulsory for all architects. The formulated principles consisted of seven conditions:

- town planning had to be in tight connection with natural environment in order to expose its beauty;
- town plan needed a balanced compositional centre (for instance centre – main street – railway station square);
- monumental public buildings had to be erected at junctions;
- quarters of dwelling houses had to be planned in a complex way and designed in one ensemble;
- all buildings had to be painted only in light colours (dream of positive future);
- rationality and high quality of structures and infrastructures (electricity, water supply etc) were essential;
- thorough quality surveys both in architects' projects and building process was inevitable. (Kosenkova, 2009, p. 42)

Arman gave local architects certain instructions for town planning in the Estonian SSR. The instructions followed the board resolution of the Soviet Architect's Union of the USSR made on 24<sup>th</sup> October 1946, and the plenary resolution of the Soviet Architect's Union of the USSR made on 2<sup>nd</sup> August 1947. (Meigas, 1948, pp. 5, 7; Arman, 1946, pp. 5 – 8; *Tvorcheskie zadachi sovetskih arhitektorov v pjatiletnem plane vosstanov-lenija i razvitija narodnogo hozjajstva. Materialy XII plenuma Sojuza sovetskih arhitektorov SSSR*, 1948, pp. 49–61)

While some architects (Voldemar Meigas, Otto Keppe) proposed to restore the centre of Tallinn similarly to Stalinist practice in Leningrad (St Petersburg), others used to design rather similarly to the pre-war independence period practice. For instance, architect Ernst Ederberg tried to restore the old Baroque Narva, and architect Endel Arman creted a restoration project for Pärnu. (ERA R-1992.2.33, 88–92; Ederberg, 1948, pp. 60 – 65; Volkov, 1991, p. 192; Parek, 1971, p. 72) Both of the towns were in quite a satisfactory condition after World War II.



Fig. 5 Entry for the Cultural Centre Square in Tallinn, 1946 by H. Arman. Source: EAM 3.1.31

Architect and the Head of the Department of Architecture of the Estonian SSR, H. Arman balanced between two tendencies. However, Estonian mid 1940s town planning was quite similar to the pre-war independence period disregarding the rest of the Soviet Union architecture. Estonian architects used to design administrative and apartment buildings in a 1930s manner: granite wall coating, modest, scarce ornamentation, only roofs were a slightly more pitched and some Soviet symbols were added. For example, the Tallinn Cultural Centre in front of Estonia theatre and its surroundings was designed under the guidance of H. Arman in the quite same way.



Fig. 6 Estonia Boulevard administrative buildings in Tallinn from the turn of the 1940s and 1950s. City space by H. Arman, the front building is by Enn Kaar. Photo source: Siim Sultson

Meanwhile East Estonian industrial towns Sillamäe, Kohtla-Järve, and since the late 1940s, Narva were designed under the guidance of the Leningrad construction departments – Lengorstroyproyekt and Lengiproshacht. In late 1947, H. Arman declared three principles concerning town centre planning: 1) proper town centre building plan, 2) strict regulation on which buildings were supposed to be erected first, 3) "right" policy of town planning.

According to first principle, H. Arman suggested not to demolish every building, but meanwhile, the future town centre had to have tight connection with the streets (radiant gridline); the main square was supposed to appear dignified from by its measurements and architectonical appearance; administrative buildings, public buildings and cultural objects had to be placed around the central square and to be visible from every radiating street (H. Arman, 1948, pp. 10, 11)

#### 4.2 The so-called orthodox Stalinist stately city space

The so-called liberal Stalinist period ended in 1949, with approximately 20,000 inhabitants of Estonia deported to Siberia within one night. Political pressure radiating from Moscow compelled local Estonian architects to design city space more similarly to the capital of USSR (Moscow), Leningrad (St. Petersburg), Stalingrad (Volgograd).

During the  $25^{\text{th}} - 28^{\text{th}}$  October 1950, the plenary session of the Soviet Architect's Union of the USSR was dedicated to architects' creative tasks within "the grandiose fifth Stalin fiveyear plan." According to the plenary session resolution, the Soviet architects were supposed to be more active, creative and ideologically aware, dedicated to socialist realism, innovative and use more classicist heritage. (*Tvorcheskie zadachi sovet-skih arhitektorov*, 1951, 5, pp. 7-32, 108-117)

Masterplans of Estonian towns were supposed to be orientated to a prosperous future: more ideologically aware, strictly regulated, and more similar to model cities in the USSR.



Fig. 7 Entry for the Cultural Centre Square in Tallinn, 1946 by H. Arman. Source: EAM 3.1.13, 32

In 1947 and 1948, E. Arman's restoration project for Pärnu was accepted in the Department of Architecture of the Estonian SSR (ERA R-1992.2.1, 45–48; ERA R-1992.2.33, 74–84). At the same time, the project was passed by the expert opinion of the consultant for the Estonian SSR of the Soviet Academy

of Architecture Igor Fomin, to change the project (ERA R-1992.2.33, 139–142). By the end of 1949 and the beginning of 1950, the Department of Architecture of the Estonian SSR merely accepted the consultant's proposals (ERA R-1992.2.33, 104–126). According to the board resolution of the Soviet Architect's Union of the USSR made on 5<sup>th</sup> June 1952, certain instructions were made in the field of ensemble-like town planning such as for Moscow, Leningrad, Stalingrad (Volgograd), Kiev, Minsk – these were model towns, e.g. set as an example to other towns all over the Soviet Union (*Hronika. XIV plenum Pravlenija Sojuza sovetskih arhitektrov*, 1952, pp. 31–33).

In summer 1952, H. Arman himself proposed (with Grigory Schumovskiy and Mart Port) a project for Pärnu. The partly realised town planning project followed Fomin's suggestions. According to the project, many quarters of the burnt but still preserved old town were demolished, the St Nicholas Church (XIV century) in the same condition was blown up. The central square from the 1930s was abandoned, and the town gained an oversized new axial centre instead of the demolished quarters of the old town. Meanwhile, the importance of Pärnu increased as a result of replacing traditional counties with Soviet oblasts by Moscow. (ERA R-1992.2.70, 47; ERA R-1992.2.33, 42–44; Parek, 1971: pp. 42–43; Shumovskij, 1953, p. 3; Härmson, 1983, pp. 35–43)



Fig. 8 Pärnu oblast centre by H. Arman, 1952-55. On the site of the demolished Old Town and ruins of the Teutonic Castle. Source: EAM 3.1.323

Since Pärnu was regarded as a future oblast capital, it received a rather grandiose centre plan. While the Soviet architect's handbook (*Kratkij spravochnik arhitektora*, 1952, pp. 20, 21) suggested the design of a 1 hectare central square for the town with the population of 50 000, Pärnu, with the population of 20 000, gained a 2.5-hectare central square. (*Ibid.*)

Similar anomalies between the size of the population and the area of the town centre could be noticed in the East Estonian industrial towns, Sillamäe, Kohtla-Järve and Narva, which were designed under the guidance of Lengiproshacht and Lengorstroyproyekt residing in Leningrad (St Petersburg).

In comparison to the rest of Estonian towns, Sillamäe and Kohtla-Järve may be regarded as newly designed towns. Nevertheless, both of them had small and widely dispersed settlements before the Soviet period. From the 1940s – 1950s, Sillamäe and Kohtla-Järve were designed to be new industrial towns. Unlike the rest of Estonian towns, inhabitants of Sillamäe and Kohtla-Järve were, similarly to Narva, deported from the greater Soviet Union.



Fig. 9 Stalinist centre of Sillamäe, the early 1950s by Lengiproshacht. Photo source: Siim Sultson.

While Kohtla-Järve was considered an oil-shale mining and processing complex, Sillamäe was a classified town due to the processing of uranium oxides. By the 1950s, both towns, with populations of 10 000, had practically as large representative centres as that seen Pärnu. The representative centre of Sillamäe consists of three main streets crossing a central square and recreational area; the streets are situated on two coastal levels, while the crossing and sea-orientated recreational area connect the levels with a staircase (*à la* Stalingrad) (ERA.R-1992.2.12).



Fig. 10 Stalinist centre of Kohtla-Järve early 1950s, by Lengorstroyproyekt. Photo taken in the 1950s. Source: a postcard

In Kohtla-Järve, the central boulevard that (50 meters wide) connects the house of culture and the central cinema, is crossed by an axis of a local government complex (ERA.R-1992.2.57; ERA.R-1992.2.41).

East Estonian industrial towns were planned mostly by nonlocal architects (especially Sillamäe), for instance, the Stalinist central grid line of Kohtla-Järve has much in common with the Stalinist central gridlines of Tallinn and Pärnu.

These East Estonian industrial towns (Sillamäe, Kohtla-Järve, Narva) received axially arranged representative, sometimes enormous, but generally well balanced and functional plans.

Although Kohtla-Järve and Sillamäe can be regarded as new towns, established during Stalin era, the same attempts (to establish something new) may also be seen both in Tallinn and Pärnu (memory shift, restart).



Fig. 11 New Narva plan by by Ernst Ederberg. 1945. Source: EAM 16.1.96

The most drastic restart took place in Narva. While in the 1940s, Ederberg and Anton Soans made a proposal to restore the old Baroque town (Ederberg 1946, pp. 60–65), after the 1949 deportations and the end of so-called liberal Stalinism, the fairly well-preserved ruins were almost completely demolished and replaced with new gridlines and houses.

#### **5** Conclusions

Two and a half years after Stalin's death (1953), Stalinist architectural doctrine was ended with the November 1955 resolution of the Communist Party of Soviet Union Central Committee concerning ending of exaggerations in architecture (*Ob ustranenii izlishestv v proektirovanii i stroitel'stve. Postanovlenie Central'nogo Komiteta KPSS i Soveta Ministrov SSSR 4 nojabrja 1955 goda*, 1955, pp. 8, 11, 13, 15).

It is paradoxical that the Stalinist stately urban ensembles in Estonia provided an opportunity for architects to carry out some of their architectural ideas from the period of independence that had remained on paper. Compared to small independent Estonia, the Soviet Union, encompassing 1/6th of the whole planet, provided significant finance to all larger (especially for towns) construction projects. Moreover, in the 1940s, private property had been abolished, resulting in complete state ownership of the land. In addition, the war had left largely demolished areas that turned out to be practical playgrounds for architects in Tallinn, Pärnu, Narva and elsewhere in Estonia.

Though suffering irrational demolitions (Narva, Pärnu), after World War II, Estonian towns gained axially arranged representative, sometimes oversized, but perspectively balanced and functional plans (Sillamäe, Kohtla-Järve).

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- Eesti Arhitektuurimuuseum (EAM) = Museum of Estonian Architecture fond 3 1940.-1950. aastate arhitektuur (Architecture of 1940s-1950s)

### **Publication 6.**

How the Estonian architect had to plan "correctly" and forget the "wrong": On planning the urban space of the Estonia from 1944–1955

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## KUIDAS EESTI ARHITEKTIL TULI PLANEERIDA "ÕIGESTI" JA UNUSTADA "VALE"

## Eesti linnaruumi kujundamisest aastail 1944–1955

### Siim Sultson

Eesti langemine nõukogude võimu alla tõi kaasa ka linnaruumi käsituse teisenemise. Kuigi algul näis, et võiks ehitada senises, 1930. aastate vaimus, selgus peagi, et see on taunitav. Pärast Teise maailmasõja lõppu tuli üsna peatselt hüljata senised märgilise tähendusega kohad, seejärel loobuda kohalikke olusid arvestavatest linnaruumi korrastuskavadest ning lõpuks ka harjumuspärasest materjalikäsitusest. Ühtsustamine ei tähendanud vaid üleliidulise eeskuju järgi ühtemoodi ehitamist. Nagu kohalikud arhitektuuriorganisatsioonid (ENSV Arhitektuuri Valitsus, Eesti Nõukogude Arhitektide Liit) pidid olema üleliiduliste organisatsioonide rakukesed, tuli ka siinne linnaruum nii kontseptsioonilt, vormikäsituselt kui ka materjalivalikult muuta üleliiduliste eeskujude sarnaseks. Äärmuslikul juhul võis see tähendada ka linnaruumi n-ö väljavahetamist.

Seniste oluliste linnaliste asukohtade hülgamine, senise linnaruumi taastamisest loobumine ning ka selle väljavahetamine näikse olevat katsed puhastada mälu. Arhitektuuril on avaliku mälu kandja, tõekspidamiste ainestaja roll. Teiste kunstiliikidega võrreldes on arhitektuuril see külg kõige enam n-ö kohal. Avaliku linnaruumi ja ehitiste kaudu saab kodanikku ka kontrollida ja suunata, mis on totalitaarsetele süsteemidele ikka oluline olnud. Nii läks ka Eestis pärast sõda põhienergia just tsentraalse, avaliku ja esindusliku hoonestuse rajamiseks või korrastamiseks. Selline linnaruum oli ideoloogiliselt tugevasti laetud, mistõttu tal oli valitseva ideoloogia kehastamisel oluline osa. Järelikult tuli seda ka ideoloogiliselt suunata.

Samas liitus sellega puhtfunktsionaalne külg: linnaruum pidi olema tõhus, otstarbekohane, korrapärane, tulevikku vaatav, s.t perspektiive arvestav. Korrapärane, teljeline linnaplaneering ei ole omane ainuüksi totalitaarsetele riikidele. Korrapära, hierarhiat ja selgust linna või asula tõhusa toimimise nimel nõuti juba Rooma sõjaväelaagri telklinnakus, rääkimata Kreeka agoraadest või Rooma foorumitest kui tänavavõrgu sõlmpunktidest. Selge planeeringuga asula on aluseks ka tõhusalt toimivale ühiskonnale. Antiigist lähtunud, renessansiajal kavandatud ning klassitsistlikul ajal enam rakendust leidnud tänavaplaneering rõhutab samuti süsteemset toimivust, otstarbekohasust, aga ka perspektiivitunnetusega edasiarendamisvõimalust. Sellist, tihti teljelist planeeringut pidid koos hoidma peamagistraalid ja sõlmhooned, viimaste alusel tuli aga luua kindlad, terviklikud hooneansamblid. Kvartalid tuli hoonestada perimetraalselt. Linnaruum pidi saama hierarhiline nii hoonete kõrguse, mahulise keerukuse kui ka fassaadi plastilise lahenduse poolest. Mida enam keskusest ääre poole, seda lihtsamaks muutus linnaruum. Perimetraalne hoonestusviis koos tihti korrapäraselt planeeritud parkidega muutis kujunevad linnaansamblid suurlinlikult õhurikkaks ja valgusküllaseks. Kõik need jooned olid tuntud juba 19. ja 20. sajandi vahetuse linaaplaneeringutes (Pariis, Washington, Chicago jm). Seega kujunes korrapärase linnaruumi taotlus pika aja jooksul ja see on olnud omane ka demokraatlikele riikidele.

Monumentaalsus, väärikus ja harmoonia koos juba nimetatud põhimõtetega peaksid linnaplaneeringu abil aitama kaasa harmoonilise ühiskonnakorralduse toimimisele. Totalitaarses linnaplaneeringus kasutati ajaproovile vastu pidanud põhimõtteid, kuid need pidid toetama ideoloogiat, veel enam — olema konkreetsest ideoloogiast võrsunud. Et ideoloogia vettpidavust tagada, oli vaja korrigeerida mälu, täita seda uute sümbolite, rajatiste, ruumiga. Tihti kaotas linnaplaneering kui funktsionaalne tegevus tähenduse, olulisemaks sai linnaplaneeringu ideoloogiline põhjendamine.

### Eesti linnaruumi kujundamisest aastail 1944–1955

Nii nagu teistes totalitaarsetes riikides oli linnaplaneerimine kui üks riigi tõhusa toimimise tagajatest ka Nõukogude Liidus erilise tähtsusega. Hoonest suuremat maa-ala hõivates võimaldas see saavutada suuremat ideoloogilist mõju, liiati puudus Nõukogude Liidus eraomand, mistõttu maaga oli lihtsam ümber käia, selle kasutamist kontrollida ja planeerida. Pärast Teist maailmasõda omandas linnaplaneerimine veelgi suurema tähenduse: tarvis oli taastada sõjas purustatud linnu, kuid ka tähistada võitu. Linnaplaneering oma ulatusega andis selleks hea võimaluse. Oluline oli aga seda teha "õigesti". Sestap oli riigi ideoloogiline kontroll institutsioonide kaudu linnaplaneerimise ja planeerijate üle vältimatu, eriti "uutes" liiduvabariikides.

Käesolevas artiklis on linnaplaneerija "ideoloogilise harimisega" seoses pööratud tähelepanu just kohalikele arhitektidele, sest mujalt Nõukogude Liidust saabunud arhitekte võis võim pidada usaldusväärsemaks. Seetõttu on linnaplaneeringu näidete puhul jäetud kõrvale üleliiduliste projekteerimisorganisatsioonide kavandatud liidulise tähtsusega tööstuspiirkonna linnad Narva, Kohtla-Järve ja Sillamäe ning käsitletud Tallinna ja Pärnut kui kohalike arhitektide muutusterohkeimalt planeeritud linnu. Tartul, Viljandil ja teistel linnadel nende positsiooni ja/või linnaruumilise lahenduse tõttu suurt rolli tollal ei olnud.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Olen seda teemat varem käsitlenud magistritöös "Staliniaegse esindusliku linnaansambli teostamine Eestis ja Harald Armani osa selles" (2002) ning kahes artiklis: "Ideoloogiline arhitektuur kui üks mälu kandjaid: Itaalia, Saksamaa, Nõukogude Liit" (2001), mis keskendub Eesti NSV Stalini-aegse linnaplaneeringu kujunemisele ning eelkõige selle suunajale, ENSV Arhitektuuri Valitsuse esimehele Harald Armanile, ja "Ideoloogilised jõujooned Eesti Stalini-aegses esinduslikus linnaansamblis" (2003). Eesti sõjajärgse linnaruumi planeerimise teemat käsitleb Andis Cinise, Marija Dremaite ja Mart Kalmu artikkel (2008), milles vaadeldakse nõukogudeaegsete monolinnade kujunemist ja nende eripära. Mart Kalm on sõjajärgsel linnaehitusel peatunud raamatus Eesti 20. sajandi arhitektuur (2001), avaldanud Baltikumi arhitektuuri üldist sovetiseerimist analüüsiva artikli "The Sovietization of Baltic architecture" (2003) ning andnud ülevaate 2001. aasta septembris Tallinna Linnaarhiivis toimunud VIII Kirde-Euroopa ajaloo ja kultuuri konverentsist teemal "Kirde-Euroopa sõjajärgsed linnasüdamed taastamise ja uuenemise vahel" (2012), arendades kirjutises edasi seal

Peale kaasaegse trükisõna on artiklis kasutatud Eesti NSV Ministrite Nõukogu juures asunud Riikliku Ehituskomitee linnaplaneerimise-alaseid arhiivimaterjale, sh 1940.–1950. aastate ENSV Arhitektuuri Valitsuse allikainest, samuti Eesti NSV Arhitektide Liidu sellealaseid dokumente. Vaatluse alt on jäetud välja tehnilist laadi dokumendid ning tähelepanu on pööratud linnaplaneerimise ideoloogilisele tahule, arhitekti kui linnaplaneerija "kasvatamisele".

\*

15.-18. augustini 1943 toimus Moskvas NSVL Arhitektide Liidu juhatuse XI pleenum, mille resolutsioonis kutsuti arhitekte üles muu hulgas olema valmis ka gigantseks ülesehitustööks pärast sõja võitmist hitlerlike anastajate üle (Plenum... 1943). Koos NSV Liidu Rahvakomissaride Nõukogu ja ÜK(b)P Keskkomitee otsusega 22. augustist 1943 "Viivitamatutest abinõudest majanduse ülesehitamiseks rajoonides, mis on vabastatud Saksa okupatsioonist" taheti käivitada laialdane ülesehitustöö kogu NSV Liidus (Arhitektura... 1987: 109). Et NSV Liidu Ehituse ja Arhitektuuri Akadeemia raames tegutsesid Teise maailmasõja ajal ehitiste taastamise töökojad, tuli linnade taastamise huvides need ühtse juhtimise alla koondada. NSV Liidu Rahvakomissaride Nõukogu ja ÜK(b)P Keskkomitee otsusega 29. septembrist 1943. aastal loodi NSV Liidu Rahvakomissaride Nõukogu juures asuv Arhitektuuri Komitee, mille põhiülesandeks sai taastatavate linnade projektide koostamine, et rahu saabudes kohe ehitama asuda. Komitee pidi kontrollima ka tehtavate planeerimisprojektide kvaliteeti ning nendes kavandatud esinduslike linnaansamblite vas-

konverentsil kõne alla võetud teemasid. Krista Kodreselt on ilmunud käsitlus Eesti iseseisvusaja ja Stalini-aegse klassitsistliku arhitektuuri kohta (2008). Maria Orlova magistritöö "Stalinistlik arhitektuurikorraldus Eestis 1944–1955" käsitleb tollase arhitektuurielu olmelist ja institutsionaalset külge (2003). Seda ajajärku käsitleb ka Epp Lankotsi artikkel "Klassid klassideta ühiskonnas: Elitaarne ruumimudel Eesti NSV-s ja nomenklatuursed korterelamud Tallinnas 1945–1955" (2004; vt ka 2008). Sõjajärgset arhitektuuri on sündmuste kaasaegne Leonid Volkov vaadelnud käsikirjas "Eesti arhitektuur 1940–1988" (1990).

tavust valitsevale ideoloogiale. See pidi käima käsikäes purustatud linnade senisest suurejoonelisemaks muutmise ning vana, säilinud hoonestu restaureerimisega. Uue organisatsiooni koosseisus tuli Moskvas, Leningradis ja Kiievis luua liiduvabariikide ning autonoomsete piirkondade jaoks samasugused, aga kohalike rahvakomissaride nõukogude juures asuvad arhitektuurivalitsused (*Iz istorii*... 1978: 94–102).

Nii sai NSV Liidu Rahvakomissaride Nõukogu juures asuva Riikliku Arhitektuuri Komitee vabariiklik organ, Eesti NSV Rahvakomissaride Nõukogu juures asuv Arhitektuuri Valitsus ülesandeks suunata Eesti arhitektuuri (samas). Selle valitsuse juhatajaks määrati Nõukogude tagalas Jaroslavlis viibinud Harald Arman.<sup>2</sup> Tema asetäitjateks said Ivan Starostin ja Voldemar Meigas. Aastatel 1944–1955 juhatas Arman koos asetäitja Starostiniga sama organisatsiooni, mis 15. märtsil 1946 reorganiseeriti Eesti NSV Ministrite Nõukogu juures asuvaks Arhitektuuri Valitsuseks, millest 1950. aastate teisel poolel kasvas omakorda välja ENSV Ministrite Nõukogu Riiklik Ehituskomitee.<sup>3</sup>

Koos Voldemar Tippeli ja Albrecht Kõutsiga moodustas Harald Arman 1944. aasta algul Nõukogude tagalas ka Eesti Nõukogude Arhitektide Liidu algatusrühma, mille alusel loodi 1945. aastal Tallinnas Eesti arhitektide samanimeline loominguline organisatsioon (1956. aastast Eesti NSV Arhitektide Liit) (Volkov 1991: 191). Algatusrühmaga liitusid Lorenz Haljak ja Grigori Jomm ning 1945. aasta 10. aprillil valiti Arhitektide Liidu kahekümne kuue osalejaga I kongressil liidu esimeheks Alar Kotli,<sup>4</sup> kes jäi sellesse ametisse kuni 1950. aastani (samas).

Ehkki nii Eesti Nõukogude Arhitektide Liit kui ka ENSV Arhitektuuri Valitsus olid mõlemad NSV Liidu kohapealsed esindused, püüdis Arhitektide Liit osalt tegevust jätkata ka kui iseseisvusaegse Eesti Arhitektide Ühingu pärija. Loomingulise liiduna jäi tema osa linnaplaneerimisel väikseks, kuid ENSV Arhitektuuri Valitsus seevastu kujunes linnaplaneerimise suunajaks ning püüdis säilitada ka arhitektuuri senist ilmet eelkõige oma esimehe isiku kaudu. ENSV Arhitektuuri Valitsuse esimees Harald Arman

<sup>&</sup>lt;sup>2</sup>Vestlus Mart Pordiga 31. X 2001.

<sup>&</sup>lt;sup>3</sup>Riigiarhiiv (= ERA), f R-1992, n 2, ajalooline õiend.

<sup>&</sup>lt;sup>4</sup>ERA, f R-1951, n 1, s 2, 1 1.

korraldas 1944. aastal hoonete tüüpprojektide koostamist sõjas purustatud Eesti linnadele, lastes ise veel Leningradis olles oma alluvatel koguda vajalikku materjali mõne linna kohta. Näiteks liikus Armani ülesandel 1944. aasta juulis Narva lahingute ajal rühm arhitekte Nõukogude poolel ringi Jaanilinna (Ivangorodi) kandis, et tutvuda olukorraga Narvas. 1944. aasta suvel saabus ta koos Ernst Ederbergi ja Igor Fominiga Sinimägede lahingute ajal Eestisse, et asuda taastama Narvat sellisena, nagu see varem oli olnud (Goritš 1946). NSV Liidu Teaduste Akadeemia korrespondentliige Fomin, kes elas Leningradis, oli määratud NSV Liidu Arhitektuuri Akadeemia konsultandiks Eesti NSV osas.<sup>5</sup> Nii hangitud andmeid kasutati Arhitektuuri Valitsuses hiljem mitme Eesti linna generaalplaani koostamiseks (Volkov 1991: 186).

1944. aastal loodi ENSV Arhitektuuri Valitsuse juurde Arhitektuurse Projekteerimise ja Planeerimise Keskus ning Eesti NSV Ehituse ja Ehitusmaterjalide Rahvakomissariaadi juurde Ehituse Projekteerimise Instituut. Nende ühendamisel 1949. aastal moodustati ENSV Arhitektuuri Valitsuse Vabariiklik Projekteerimise Trust Estonprojekt, mille põhiülesandeks sai linnaehituskavade koostamine. Tuntumatest arhitektidest töötasid Estonprojektis Anton Soans, Peeter Tarvas, Alar Kotli, Johan(n) Ostrat ja August Volberg. NSV Liidust saabusid Otto Keppe ja Grigori Šumovski. 1950. aastate algul lisandusid äsja hariduse saanud Mart Port, Paul Härmson jt (samas: 187).

Hakati korraldama arvukaid arhitektuurivõistlusi. Need hõlmasid nii üksikhooneid, monumente kui ka esinduslikke linnaansambleid ja koguni terveid linnaplaneeringuid (Volkov 1991: 191). Veel valitsenud suhtelise loomisvabaduse tingimustes kasutati võistlustöödes, ent ka valmivates ehitistes 1930. aastate vormivõtteid: kõrged kelpkatused, terrasiitkrohv, tagasihoidlik, nüüd vahest veidi reljeefsem dekoor, kuhu justkui möödaminnes on lisatud uue riigikorraga seostuvat emblemaatikat ning võidusümboolikat (näiteks Peeter Tarva ja August Volbergi projekteeritud ENSV Riikliku Avaliku Raamatukogu võistlustöö Tallinnasse Estonia puiesteele, 1946; Enn Kaare projekteeritud Põllumajanduslike Ühistute Keskliidu hoone Estonia teatri lähedal, 1947–1953; Harald Armani ja Edgar Velbri projekteeritud kolme-

<sup>&</sup>lt;sup>5</sup>Vestlus Dmitri Brunsiga 25. V 2001.

osaline Teadlaste Maja hoonestik Tallinnas Lenini (nüüd Rävala) puiesteel, 1947–1954).

Esimestel sõjajärgsetel aastatel kulus põhienergia siiski sõjas purustatud linnade "taastamisele", eeskätt ühiskondlike keskuste rajamisele. Viimased aga püüti lahendada uue võimu eripära ja ideoloogilisi nõudeid silmas pidades. Selle kõrval jäi elamuehitus neil aastatel kesiseks: riiklik elamuehitustempo jäi linnade kasvu omast maha, aastas suudeti umbes tuhande elaniku kohta ehitada kolm korterit. Nii kahanes korterite üldpind inimese kohta kolmeteistkümnelt ruutmeetrilt 1945. aastal üheksale ruutmeetrile 1949. aastal (Lankots 2004: 17).

Seega läks vahetult pärast sõda taastatavates või tihti isegi ümber ehitatavates linnakeskustes põhienergia esinduslike ansamblite kui uue linnaruumi suunajate rajamisele. Erinevalt keskustesse kerkivatest, nõukogude ühiskonna väljavalituile mõeldud korterelamutest olid esinduslikud ansamblilised linnakeskused avalik ruum. Ühiskondlike hoonete kaudu eelisarendatud linnaplaneerimine pidi aitama kehastada totalitaarse riigi ideoloogiat, selle toimivust ja tõhusust. Järelikult tuli "tõsta" ka linnaplaneerijate ideoloogilist teadlikkust. Selleks ei piisanud ainult ajalooliselt kujunenud korrapärase linnaruumi rajamise võtete õpetamisest. Neidki oli vaja esitada kehtiva ideoloogiaga seotult, justkui oleksid need selle ideoloogia loodud. Üheks võimaluseks oli ideoloogiasümbolite kasutamine. Kuna Nõukogude Liit püüdis luua tulevikuühiskonda, tuli jätta kõrvale kõik vanaga seonduv ning hakata ehitama nii, et vanu mälukandjaid segamas ei oleks.

Seega vajas linnaplaneerimine "õigeks" teostamiseks ideoloogilisi juhtnööre. 1943. aasta augustis Moskvas NSVL Arhitektide Liidu juhatuse XI pleenumil vaeti linnaehituse sõjaeelsete näidete (Moskva) pompoossuse ning tulevikus tehtava massehituse häid ja halbu külgi (Plenum... 1943; Kossenkova 2009: 41–42). 1944. aasta detsembris toimunud üleliidulisel arhitektuurivalitsuste juhtivtöötajate kogunemisel ütles linnade planeerimise ja ehitamise komitee juhataja V. Baburov, et angloameerika arhitektuuri kunstipärase linnaplaneerimise probleem ei huvita, aga nõukogude arhitektid seevastu juhinduvad eelkõige linnaehituse monumentaalsetest ülesannetest, mida peavad kandma eeskätt ühiskondlikud hooned (Kossenkova 2009: 42). Nii kadusid arutelud otstarbekohasest linnaplaneeringust kiiresti. 18. detsembril 1944. aastal ütles NSV Liidu Rahvakomissaride Nõukogu juures asuva Riikliku Arhitektuuri Komitee esimees Arkadi Mordvinov linnade planeerimise ja ehitamise kohta käivas ettekandes "NSV Liidu Rahvakomissaride Nõukogu juures asuva Riikliku Arhitektuuri Komitee järjekordsed ülesanded" muu hulgas, et Eesti, Läti ja Leedu NSV arhitektuurivalitsustele, kes olid juba organiseerinud kohalike suuremate linnade planeerimistööd, tuleb selles "osutada igakülgset abi ja tagada konsultatsioonid planeerimistööde metodoloogia kohta, lähtudes nõukogude linnaehituse kogemustest" (*Iz istorii*... 1978: 149).

1945. aasta juulis toimunud üleliidulisel linnade peaarhitektide kogunemisel esitas Mordvinov linnade planeerimise ja ehitamise kohta käivas ettekandes seitse linnaplaneerimise tingimust: seotus looduskeskkonnaga, selle ilu avamine; selge kompositsioonilise keskme olemasolu (näiteks keskus — peatänav — raudteejaama väljak); suurte ühiskondlike ja kõrgekompositsiooniliste hoonete paigutamine linna sõlmpunktidesse; elamukvartalite ja elutänavate ansambliline ning terviklik kavandamine; hoonete värvimine heledates toonides; linna insenertehnilise varustuse ratsionaalne projekteerimine ja terviklik rajamine; pidev võitlus projekteerimise ja ehitamise kõrge kvaliteedi eest (Kossenkova 2009: 42).

1944. aasta sügisel hakati Eestiski siinseid kunstnikke ja arhitekte tutvustama kunstielu nõukogulike põhimõtetega (nt Semper 1944). Järgmise aasta jaanuaris toimunud ENSV intelligentsi esimesel kongressil rääkis EK(b)P Keskkomitee esimene sekretär Nikolai Karotamm muu hulgas vajadusest luua Eesti arhitektuuris eesti rahvuspärane ehitusstiil (Intelligentsi... 1945). Üldsõnaliste kunsti- ja arhitektuurisuuniseid andvate artiklite kõrval ilmus 1945. aasta märtsi algul ajalehes Sirp ja Vasar ENSV Rahvakomissaride Nõukogu ja EK(b)P Keskkomitee määrus 3. märtsist "Kunsti arenemisest ja ülesannetest Eesti Nõukogude Sotsialistlikus Vabariigis". Selles heidetakse ette kohalike kunstitegelaste ja kunstiasutuste passiivsust. Nii pannakse paika, et Nõukogude Eesti kunstitegelaste tähtsaimaks ülesandeks tuleb pidada "eesti rahva kasvatamist nõukogude vaimus, leninliku-stalinliku rahvaste sõpruse ja nõukogude patriotismi, sotsialistliku suhtumise vaimus töösse". Lisaks pidid kunstitegelased "vormilt rahvuslikes ja sisult sotsialistlikes kunstiteostes kajastama meie kodumaa rahvaste sõprust" (Eesti NSV... 1945).

1946. aasta aprillis avaldas Harald Arman ajalehes *Sovetskaja Estonija* programmilise artikli "Arhitektuuriprobleemid Eestis", milles ENSV Arhitektuuri Valitsuse esimees leiab muu hulgas, et kohalikel arhitektidel alles tuleb sügavamalt tundma õppida "linnaehituse stiili, leida peamised Nõukogude Eesti linnade iseloomulikud planeerimisprintsiibid, näha nendes ette kõik sanitaartehnilised mugavused". Uurida tuli Eesti vanade linnade (Tallinn, Narva jt) iseärasusi, et "uute linnajagude planeerimisel saavutada uute ja vanade vormide ühtesulamine harmooniliseks tervikuks". Ühtlasi kinnitas 1946. aastast ENSV Teaduste Akadeemia korrespondentliikmeks olev Arman, et Teaduste Akadeemia teadusliku uurimistöö abil "suudame täita ülesanded, mis on meie ette asetanud viisaastak, ehitame üles ja teeme Nõukogude Eesti linnad veelgi paremaks ja ilusamaks" (Arman 1946b).

Arhitektuuri, linnaehituse ja linnaansambli uute, nõukogulike printsiipide omaksvõtt on näha juba 1945. aastast, kui Nõukogude Liidus hariduse saanud Voldemar Meigase ja Otto Keppe võistlustöö Tallinna Keskväljaku / Stalini väljaku teemal joondub erinevalt kohalike arhitektide töödest tugevasti Leningradi arhitektuuri järgi. Samuti valmisid Eesti jaoks uues linnaehituse põhimõttestikus NSV Liidu Põlevkivitööstuse Ministeeriumi projekteerimistrusti Leningradi osakonna Giprošaht juhtimisel Ahtme ja Sompa generaalplaanid (1945–1947) ning riikliku projekteerimisinstituudi Lengorstroiprojekt tööna Kohtla-Järve keskosa planeering (teostatud alates 1948. aastast), hiljem ka Sillamäe planeering.

Eesti linnaplaneeringus tuli nüüd joonduda vaid nõukogulikest linnakavandamise põhimõtetest, mis olid teostatud 1930. aastate Moskva ja Leningradi uusplaneeringutes ning millele nüüd lisandus sõjas saavutatud võidu kajastamine. Võiduteema väljendamisel lähtuti sotsialistliku realismi vaimus kolmest põhieeskujust linnakujunduses: 19. sajandi alguse Peterburi klassitsismist, Itaalia kõrgrenessansist ning Vana-Roomast. Eesti senine linnakujundus oli lähtunud põhiliselt saksa eeskujudest, mis uuemas osas oli kohati mõjutatud Hitleri-aegsest arhitektuurist ning Weimari-aegsest uusasjalikkusest. Kõrvale ei saa jätta ka Eliel Saarise 1913. aasta Suur-Tallinna võidutööd, mis osaliselt tõi Tallinna arhitektuuri ka Peterburi jooni.

ÜK(b)P Keskkomitee otsustest<sup>6</sup> lähtudes otsustas NSVL Arhitektide Liidu juhatus juba 23. oktoobril 1946. aastal nõuda arhitektide liidult sügavamat pühendumist ideoloogiale, tugevdatud võitlust kõrge ideelise taseme eest nõukogude arhitektuuris ning igakülgset arhitektuurse meisterlikkuse tõstmist. Lisaks nõudis juhatus arhitektidelt, et nende töö "peab olema läbi imbunud sügavast ideelisusest, tõelisest huvist sotsialistliku ülesehituse vastu, peab tihedalt seotud olema elunõuetega ning nõukogude rahvaste huvidega". Selle ülesande tõstis Voldemar Meigas esile ENSV arhitektide almanahhis 1948. aastal ilmunud programmilises artiklis kui lipukiria Eesti arhitektidele, kellel olevat palju õppida vennasvabariikide kolleegidelt, sest osa arhitekte (Peeter Tarvas, Anton Soans) ei suhtuvat töösse tõsiselt ja Eesti Nõukogude Arhitektide Liit tundvat vähe huvi loominguliste, sõjajärgse viisaastaku ning noorte arhitektide kasvatamise küsimuste vastu (Meigas 1948: 5–7).

<sup>&</sup>lt;sup>6</sup>1946. aastast kuni 1948. aastani võttis ÜK(b)P Keskkomitee vastu mitu nõukogude kultuurielu suunavat ja määravat otsust. Ilmselt oli kohe sõja järel hakanud nii kultuuriliselt kui ka poliitiliselt maad võtma vabameelsemad protsessid. 14. augusti 1946. aasta otsuses ajakirjade Zvezda ja Leningrad kohta nõudis partei keskkomitee nende ajakirjade sisu tagasiviimist sotsialistliku realismi rööbastele ning vahepeal neis avalduma hakanud apoliitilise lähenemise likvideerimist (vt Ajakirjadest... 1946). Samasugune lähenemine sai 26. augustil 1946 osaks ka draamateatrite repertuaarile (ÜK(b)P Keskkomitee... 1953: 8–13). Juba 14. septembril 1946 järgnes kinofilmi Suur elu kohta tehtud ÜK(b)P Keskkomitee otsus, milles leiti, et Donbassi elu ning sõjahaavade taastumist kujutav film on "ideelis-poliitiliselt ekslik ja kunstiliselt äärmiselt nõrk" ning moonutab nõukogude tegelikkust, mistõttu film keelati (samas: 14–18). Paar aastat hiljem, 10. veebruaril 1948 võttis ÜK(b)P Keskkomitee vastu uue otsuse "V. Muradeli ooperist "Suur sõprus"", milles leiti, et Moskva Suures Teatris oktoobripöörde 30. aastapäevaks lavastatud ooper on "nii süžee kui muusika suhtes väär ning mittekunstipärane", mistõttu otsustati "hukka mõista formalistlik suund nõukogude muusikas kui rahvavastane ja tegelikult muusika likvideerimisele viiv" ning nõuda tehtud vigade kõrvaldamist (V. Muradeli... 1948).

#### Eesti linnaruumi kujundamisest aastail 1944–1955

Harald Arman oli juba 1946. aasta ENSV arhitektide almanahhi artiklis "Linnade planeerimise küsimusi ENSV-s" kirjutanud: "Nõukogude linnadel on arhitektooniline külg üks tähtsamaid [---]. Nõukogude linna siluett saab ühe tähtsama koha arhitektoonilises lahenduses. Olemasolevatel linnadel on siluett juba määratud ja ülesanne seisab selle täiendamises ja parandamises" (1946a: 5). Ta rõhutab, et linnaplaneerimisel on tähtsaim linna keskuse loomine ja vormimine esinduslike ansamblite abil, mis peab käima koos süüvimisega linna iseärasustesse ning arvestama selle pinnatektoonilisi tunnuseid. Iga tänav pidi pakkuma arhitektuuriliselt täisväärtuslikku elamust; "iga niisuguse tähtsama tänava kujundus peab olema lahendatud mitte staatiliselt, vaid a j a l i s e l t, kus rahulikud tasakaalus olevad tänavafrondid vahelduvad rütmiliselt ja kaalutud vaheaegadel üksikute esilekerkivate arthitektooniliste elementidega nii nagu sümfoonia oma tõusude ja mõõnadega, mis alles linna südames leiab oma lõppakordi". Arman tõtab esile linnaruumi vertikaalsuuna tähtsuse, sest "linn ilma kõrgendike, kõrgemate majade või muude vertikaalideta on lame ja iseloomutu. Vertikaalid tuleb kujundada mitte üksi linna keskusse, vaid samuti ka ääreosadesse, et nad toetaksid linna üldsiluetti. Vertikaalid peavad andma linna sissesõitjaile orientiiri ning linna elanikele orienteerumistunnet" (samas: 7).

ENSV arhitektide almanahhi 1947. aasta numbris tõi Arman välja kolm põhimõtet linnakeskuse kavandamisel: õigesti koostatud linnatsentri planeerimise kava; hoonete ehitamise õigesti määratud järjekord; linna õige ehituspoliitiline suund. Esimesest põhimõttest lähtudes ei soovitanud Arman läbi viia liiga Detailplaneerimise juures tuli arvestada suuri lammutustöid. järgmisi nõudeid: linna keskusel olgu küllalt avar side magistraalide võrguga, mis peab koonduma linna keskuse suunas; linna keskus peaplatsi või esindusansamblite kujul olgu küllalt väärikas nii mõõtmetelt kui ka arhitektoonilise kuju poolest; linna keskuses paiknegu vajalikud haldushooned (näiteks täitevkomitee), ühiskondlikud hooned (postkontorid, pangad jt) ja kultuuriasutused (näiteks teatrid, kinod, õppeasutused, raamatukogud); linna keskus kujunegu arhitektuuriliselt kõige esiletõstetumaks linnaosaks, mille saavutamiseks peaksid peaplatsi või ansamblit piiravate hoonete esilekerkivad osad olema nähtavad linna tähtsamatelt magistraalidelt. Selliste võtetega pidi Armani sõnul saavutatama

"otsene side linna kõigi osade ja tema keskuse vahel" (1948: 10–11).

30. juulist kuni 2. augustini 1947. aastal toimus Moskvas NSVL Arhitektide Liidu juhatuse XII pleenum teemal "Nõukogude arhitektide loomingulised ülesanded rahvamajanduse taastamise ja arendamise viisaastaku plaanis". Pleenumil vastu võetud otsuses märgitakse, et "nõukogude arhitektide liidu tähtsaimaks ülesandeks on arhitekti loomingulise töö muutmine lähtuvalt selle töö maksimaalsest lähendamisest tegelikule ehitusele ja tihedaimast projekteerimise seosest tegeliku ehitamisega". Lisaks tuli nii üleliidulises Arhitektide Liidus kui ka kohalikes arhitektide liitudes tegelda "projektide ja ehitiste kõigekülgse ja sügavalt printsipiaalse kriitikaga". See kriitika pidi kompromissitult võitlema "kõigi formalismi ilmingute, põhimõttelageda näidiste jäljendamise, ideetuse ning madalakvaliteedilise käsitöölikkusega arhitektuurses töös" (*Tvortšeskije*... 1948: 49–61).

NSVL Arhitektide Liidu juhatuse XII pleenumi otsusele reageeris Eesti Nõukogude Arhitektide Liit ajalehes *Sirp ja Vasar* rubriigiga "Arhitektid kodumaa ülesehitamisel", mis erinevalt Moskvast tulevatest rangetest juhtnööridest kajastab pigem kohaliku arhitektuuri ja linnakujunduse hetkeolukorda. Samas avaldati just siin Alar Kotli ülevaade kaasaegsest nõukogude arhitektuurist (1947). Sama kirjutis ilmus sissejuhatava artiklina *ENSV arhitektide almanahhi* 3. kogumikus 1949. aastal (Kotli 1949: 5–12).

Eestis lähtuti 1940. aastate teise poole linnaplaneerimises siiski põhiliselt alahoidlikust ja mõistuspärasest vaatenurgast ning arvestati senist linnakudet. See eristab siinseid linnaplaane mujal Nõukogude Liidus loodust.<sup>7</sup> Näiteks Narva puhul püüdis arhitekt Ernst Ederberg Anton Soansi plaani põhjal ennistada vana barokset ilmet kas kannatada saanud hoonestuse taastamise teel või täielikult purustatud majade asemele uusi ehitades. Pärnus kavandas insener Endel Arman linnale uut ilmet, mis püüdis järgida senist hoonestust ja tänavavõrgustikku ning jätkata iseseisvusaegset esinduslinnajao väljaarendamist (nüüdse bussijaama ja pangamaja ümbrus) (Ederberg 1948; Volkov 1991: 192; Parek 1971: 72).

<sup>&</sup>lt;sup>7</sup>ERA, f R-1992, n 2, s 33, 1 88–92).

#### Eesti linnaruumi kujundamisest aastail 1944–1955

1948. aasta märtsis avati Tallinna Kunstihoones arhitektuurinäitus, kus peale Pärnu, Viljandi, Tallinna ja Leningradi Giprošahti arhitektuuribüroode maja- ja monumendiprojektide oli väljas ka Harald Armani Tallinna Kultuurikeskuse projekt (Tallinna... 1948). Hoolimata Moskva, Leningradi ja Stalingradi eeskujude kaugusest jäi Armani esindusliku linnaansambli idee ajakirjanduse huviorbiiti (nt Tippel 1948; Volkov 1949; Viljaranna 1949).

Tallinnasse nüüdse Tammsaare pargi ja osalt Viru Keskuse kohale kavandatud Keskväljakuga (1949. aastast Stalini väljak) oli seotud nn Kultuurikeskus — Estonia puiestee teatriesise esplanaadi (Teatri väljaku) ja Võidu allee (Rävala puiestee) alusel ristuvatest telgedest moodustuv linnaansambel. Ansambli teljeline kompositsioon pidi algama Estonia teatri eest, kulgema piki teatriesist esplanaadi, hakkama Võidu alleega ristumise kohalt hargnema ja liikuma kaheharuliselt lõuna poole, üle Kingissepa (Liivalaia) tänava Ülemiste järve sihil. Nii Keskväljak/Stalini väljak kui ka Kultuurikeskus põhinesid Anton Soansi, Otto Keppe ja Harald Armani Tallinna generaalplaanil, mille koostamist oli alustatud 1945. aastal.

1940. aastate lõpul süvenes "kodanliku natsionalismi ilmingute väljajuurimise" kampaania, mis jõudis haripunkti 1950. aasta märtsis toimunud EK(b)P Keskkomitee VIII pleenumiga. 14. septembril 1949 oli ENSV Arhitektuuri Valitsus korraldanud Tallinna arhitektuuriala töötajate aktiivi nõupidamise. Ettekandes ideoloogilistest küsimustest Eesti arhitektide loomingus andis Harald Arman ülevaate NSV Liidu ja Eesti NSV arhitektuuri arengust. Peale saavutuste loetles ta hulga puudusi ning heitis Tallinna Polütehnilisele Instituudile ja Tallinna Riiklikule Tarbekunstiinstituudile ette arhitektide nõrka ettevalmistamist, millest tulenevad ka ideoloogiliselt väärad kontseptsioonid. Nõupidamise käigus leidis Arman, et iga-aastane ENSV arhitektide almanahh käsitleb ebapiisavalt arhitektuurikriitika küsimusi. Veel tõi ta välja Eesti Nõukogude Arhitektide Liidu tegematajätmise "arhitektide ideoloogilise ja professionaalse meisterlikkuse kasvatamise alal" (Meigas 1949).

Seni võrdlemisi tasakaalukat joont ajanud *ENSV arhitektide almanahhis* ilmus selle viimaseks jäänud neljandas numbris 1951. aastal ENSV Arhitektuuri Valitsuse esimehe Harald Armani ja tema teise asetäitja Ivan Starostini artikkel "Arhitektuurialastest saavutustest ja ülesannetest Nõukogude Eestis". Selles toonitatakse, et uute linnade planeerimise ja vanade rekonstrueerimise alusel teostatud ansamblid ei lahenda mitte ainult linnamaianduse funktsioonilist ja insener-tehnilist ülesannet, vaid on seadnud eesmärgiks "luua nõukogude inimestele parimaid elamistingimusi ja kultuurilise teenindamise võimalusi". See suundumus lähtuvat "stalinlikust hoolitsusest inimese eest", mis pidi olema täidetud "sügavast patriotismitundest meie sotsialistliku kodumaa vastu, piiritu armastusega südames bolševike partei ja eesti rahva parima sõbra ning õpetaja, seltsimees Stalini vastu" (Arman, Starostin 1951: 7-8). Autorid pidasid oluliseks võitlust "kodanlike iganditega arhitektuuris — konstruktivismi, funktsionalismi it. formalistlike kallakutega" (samas: 14). Nimelt oli arhitekt Peeter Tarvas 1949. aastal kavandanud Piritale Kalevi jahtklubi puidust hoone funktsionalistlikus stiilis, millega seoses ta sattus terava kriitika alla nii ajakirjanduses kui ka Eesti Nõukogude Arhitektide Liidus. Sellisele "ilmingule" olevat olnud vasturohuks Eesti arhitektide ekskursioonid Moskva kõrgehitistele, "tõelistele kommunistlikele suurehitistele", mis innustanud meie arhitekte "väsimatule otsingule parimate lahenduste leidmiseks oma loomingulises töös ja avanud nii mõnegi veel lääne manduva arhitektuuri igandite kammitsais oleva arhitekti silmad tõelise, nõukoguliku arhitektuuri kui kunstiteose nägemiseks" (samas: 15).

EK(b)P Keskkomitee VIII pleenumi õhkkonnas püüti arhitektuuris ja linnaplaneerimises "välja juurida kodanlikku natsionalismi" ja harida siinseid arhitekte nõukogude arhitektuuri vaimus. 1950. aasta mais ilmus ajalehes *Sirp ja Vasar* H. Laugi artikkel "EN Arhitektide Liit on irdunud elust", mille autor süüdistab Arhitektide Liidu juhatust (sellesse kuulus ka Arman, esimeheks Alar Kotli) ideoloogilistes moonutamistes arhitektuuris. Lisasüüdistusena toob ta välja, et "osa juhtivaid arhitekte, nagu Kotli ja Aarman, kuhjavad enda kätte liiga palju loomingulisi ülesandeid ning tegelevad peamiselt nendega, unustades oma otsesed asutuste juhatajate kohustused". Veel heidab Laug Arhitektide Liidule ette vähest koosolekutest osavõtmist ning ettevalmistuste tegemata jätmist ENSV 10. aastapäeva tähistamiseks, mille puhul pidi välja antama *ENSV arhitektide almanahhi* uus number. Peale Arhitektide Liidus valitseva sõbramehelikkuse taunib autor ka seda, et Arhitektuuri Valitsus "ei juhi vajalikul määral oma alluvaid asutusi, ei osuta veel kaugeltki rahuldavat hoolitsust nende asutuste õige loomingulise suuna kättevõitmise eest" (Laug 1950).

Eesti Nõukogude Arhitektide Liit reageeris artiklile kiiresti ning saatis 31. mail 1950 toimetusele vastava seletuse, milles peale kriitika omaksvõtmist tuuakse esile Laugi artiklis leiduvad faktilised ebatäpsused ja alusetud süüdistused.<sup>8</sup> 3. juunil 1950. aastal ilmus ajalehes Sirp ja Vasar artikkel "Veel kord EN Arhitektide Liidu tööst", milles käsitletakse 31. mail Arhitektide Liidus toimunud koosolekut. Ehkki Arhitektide Liidu esimees Alar Kotli oli peatunud põhjalikult Eesti arhitektide ideoloogilise kasvatamise küsimusel, heitnud ette ENSV arhitektide almanahhi seniste numbrite madalat taset, osutanud noorte arhitektide nõrgale ettevalmistusele Tallinna Polütehnilises Instituudis ja Tallinna Riiklikus Tarbekunstiinstituudis, süüdistati ajaleheartiklis teda ikkagi üldsõnalisuses. Ühtlasi heideti Kotlile ette "apoliitilisust, sõbramehelikkust, sallivust ebanõukogulike, nende hulgas ka kodanlik-natsionalistlike nähtuste vastu arhitektuurialases töös, tegelikku kaasaaitamist kodanliku natsionalismi püsimisele Arhitektide Liidus". Koosolekul osalenud Tallinna Polütehnilise Instituudi üliõpilane Heino Reissar (Kalm 1994: 143) oli samal koosolekul süüdistanud Armanit selles, et ta "võttis endale õiguse tulla ettekandele ettevalmistamatult. Käsitledes formalismi nähtusi arhitektuuris ta ei osanud tuua näiteid. Konkreetselt oli juttu vaid Eiffeli tornist, näited ENSV arhitektide töödest puudusid". Armani esinemine Arhitektide Liidu koosolekul olevat jäänud sama üldsõnaliseks kui Kotli oma (Veel kord... 1950).

25.–28. oktoobrini 1950 toimus Moskvas NSVL Arhitektide Liidu juhatuse XIII pleenum, mis oli pühendatud "nõukogude arhitektide loomingulistele ülesannetele üleminekuperioodiks sõjajärgselt rahvamajanduse ülesehitustöölt ja arengult grandioossele viienda viisaastaku ülesehitavale tööle". Sellel kõneles liidu juhatuse vastutav sekretär Sergei Tšernõšev ning kakskümmend viis arhitekti kõikjalt Nõukogude Liidust, kes analüüsisid olukorda nõukogude arhitektuuris ja nõudsid üleliidulise Arhitektide Liidu juhatuselt suuremat loomingulist aktiivsust (*Tvortšeskije*... 1951: 5, 7–32).

<sup>&</sup>lt;sup>8</sup>ERA, f R-1951, n 1, s 40, 1 3.

Teiste hulgas esines pleenumil ka Alar Kotli, kes andis ülevaate arhitektuuri olukorrast Eestis ja valgustas ka sündmusi Eesti Nõukogude Arhitektide Liidus sama aasta mais. Ta palus puuduste kõrvaldamiseks osutada Eesti arhitektidele ideoloogilist abi, sh teemadel nagu "sotsialistliku realismi probleem arhitektuuris" ja "klassitsistliku pärandi omandamine". Tuues esile arhitektuurse projekteerimise ja ehitamise valulisi seoseid ning Eesti arhitektide edusamme nõukoguliku projekteerimise alal, palus Kotli lõpetuseks NSVL Arhitektide Liidu juhatust "abistada märksa tõhusamalt Eesti ehitusmeistreid kommunismi ehitamisel" (samas: 69–71). Sama aasta lõpul taandus Kotli Eesti Nõukogude Arhitektide Liidu esimehe kohalt ja tema asemele tuli nn liidueestlane Otto Keppe (Volkov 1991: 198).

XIII pleenumil vastu võetud resolutsioonis märgitakse, et NSVL Arhitektide Liit "on viimastel aastatel maha jäänud elu nõuetest, ülesannetest, mis on arhitektide ette asetatud partei ja valitsuse poolt". Selline "mahajäämus" avalduvat ka loomingulise kriitika ja loominguliste vaidluste puhul "oskamatuses mobiliseerida Liidu liikmeid üldiseks koostegutsemiseks massilise ehitamise ja linnade rekonstrueerimise jaoks". Tähtsaimate abinõudena probleemide lahendamiseks tulevat puudutada "nõukogude arhitektuuri teooria ja praktika aktuaalseid probleeme — sotsialistliku realismi kui nõukogude arhitektuuri loomingulise meetodi probleem, elamute massehituse küsimus, kolhoosiasula arhitektuur, Moskva rekonstrueerimine, nõukogude linnade, sealhulgas kangelaslinnade taastamine ja rekonstrueerimine, tööstuslik arhitektuur". Peale vajaduse juurutada eesrindlikku ehitustehnikat ja -võtteid rõhutati resolutsioonis veel kord möödapääsmatut vajadust "arendada loomingulist kriitikat ja kaasata sellesse ehitusala spetsialiste" (Tvortšeskije... 1951: 108–117).

1950. aasta sügisel toimus Moskvas NSVL Arhitektide Liidu üleliiduline pleenum, millest võtsid osa kõigi liiduvabariikide esindajad. Pleenumil analüüsiti nõukogude arhitektuuri olukorda ja toodi esile rida puudusi, millest peamine olevat olnud üleliidulise Arhitektide Liidu mahajäämus Nõukogudemaa "tormilisest sotsialistliku majanduse ja ehitustehnika arengust". Moskvas toimunud pleenumile järgnes 1950. aasta detsembris Eesti Nõukogude Arhitektide Liidu konverents, mis EK(b)P KK VIII pleenumi otsustest ja Moskva NSVL Arhitektide Liidu pleenumist lähtudes pööras tähelepanu mõnede Eesti arhitektide loomingus esinevatele puudustele ning "kodanlike igandite kummardamisele". Et kaasata Eesti arhitekte rohkem ülesehitavasse töösse, soovitati suunata paremaid nende seast NSV Liidu Arhitektuuri Akadeemia aspirantuuri, lähetada arhitekte süstemaatiliselt loomingulistele komandeeringutele, et tutvuda "eesrindlike ehitistega nii meie kui vennasvabariikides, kuulata pärast nende aruandeid ja korraldada arutelusid". Muu hulgas tehti etteheiteid Tallinna rekonstrueerimise kohta vastavalt 1940. aastate generaalplaanile, sest erinevalt plaanis lubatud tänavate hoonestamisest kvartalite kaupa oli hakatud tegelema vaid üksikute hoonetega Samuti olevat Tallinna detailplaneerimine jäänud ajast eraldi. maha, ja "esmajärjekorras J. V. Stalini nimelise keskväljaku ja peamagistraalide — Narva, Tartu ja Pärnu maantee — ehitamise osas" (Keppe 1951).

EK(b)P Keskkomitee VIII pleenumile järgnenud muudatusterohkes õhkkonnas kerkis esile uute arhitektide koolitamise küsimus, s.t arhitektide ettevalmistamine senisest veelgi ideoloogilisemal alusel. Seni oli üldsõnaliselt kõneldud noorte arhitektide nõrgast ettevalmistusest, ent 1951. aastal osutas noor arhitekt Mart Port selle konkreetsetele tahkudele. Kui Tallinna Polütehnilises Instituudis pandi tema meelest liialt rõhku tehnilistele teadmistele, milles olevat eelkõige süüdi endine ehitusteaduskonna dekaan professor Ottomar Maddison, siis Tallinna Riiklikus Tarbekunstiinstituudis (TRTI) vastupidi "endise direktori formalist Adamson-Ericu mõjutusel kujunes aga heast graafilisest esitusviisist omamoodi pidur üldisele õppetegevusele", mis tähendas "reaalelust eemaldumise tendentsi ja piirdumist puht vormiküsimuste lahendamisega, mis oli omaseks saanud TRTI arhitektuuriharude üliõpilastele ja prof. Ed. Kuusiku väära juhtimise ja suunamise tagajärjena". Tuginedes ÜK(b)P Keskkomitee 1946. ja 1948. a otsustele kirjanduse, draamateatrite repertuaari ja muusika kohta, pakkus autor välja muuta õpetamine "elulähedasemaks", harjutada üliõpilasi varakult "hindama kriitika, enesekriitika ja kollektiivsuse tähtsust loomingulises töös". Veel soovitas Port asendada senine perspektiivvaadete ja detailijooniste kujunduslik akvarellimine tušitehnikaga ("otmõvka"), tutvuda rohkem NSV Liidus välja antud arhitektuurikirjandusega ning viibida rohkem ehitustel, mis "peale väärtuslike kutsealaste kogemuste ammutamise

võimaldab suurendada ka vene keele oskust, ilma milleta ei ole mõeldav kaasaegse arhitektina tegutsemine" (Port 1951).

Kohaliku arhitektuuri ühte rütmi viimise kõrval üleliidulise arhitektuuriga püüti Harald Armani algatusel samal ajal luua siiski ka Eestis rahvuslikku ehitusstiili (Volkov 1991: 206). Juba 28. jaanuaril 1945. aastal toimunud ENSV intelligentsi esimesel kongressil oli EK(b)P Keskkomitee sekretär Nikolai Karotamm rõhutanud vajadust tõsiselt töötada eesti rahvuspärase ehitusstiili ja arhitektuuri loomise heaks (Intelligentsi... 1945). Sisuliselt tähendas see juba 1930. aastatel NSV Liidus laialt levinud põhimõtte "sisult sotsialistlik, vormilt rahvuslik" rakendamist. 1951. aastal leidsid Arman ja Starostin, et "kuni käesoleva ajani on meil liiga vähe tegeldud rahvuslike pärandite tundmaõppimisega ja rahvuslike vormide otsingul arhitektuuris, samuti pööratakse klassikaliste vormide kasutamisel veel vähe tähelepanu meile lähedase vene klassikalise arhitektuuri parimatele saavutustele" (1951: 16). Otto Keppe omakorda väitis, et Eesti Nõukogude Arhitektide Liit "ei ole küllaldasel määral tegelnud meie rahvuslike kultuuripärandite tundmaõppimisega ega ole järeldusena suunanud arhitektide loomingulist tegevust vormilt rahvusliku ja sisult sotsialistliku arhitektuuri vaimus" (1951: 67). Näitena rahvusliku stiili loomise katsetest Eestis võib tuua 1955. aastal valminud Sõpruse kino hoone Tallinnas (arhitektid August Volberg ja Peeter Tarvas) ning 1954. aastal Moskvas NSV Liidu põllumajandussaavutuste näituse jaoks valminud Eesti NSV paviljoni (arhitektid Harald Arman, August Volberg ja Peeter Tarvas).

EK(b)P VIII pleenumi järgses Eesti arhitektuurielus kõlas 1950. aastate algul järjest teravamalt nõue viia linnaehitus, eriti aga esinduslike linnaansamblite rajamine ühtsetele alustele ülejäänud NSV Liiduga. 1951. a augustis rõhutab Harald Arman veel kord nõukogude linnaehituse eripära, kus "linnade terviklik lahendus komplekssete ansamblite printsiibil, ühendatult ühtse põhiidee alusel on tähtis ja printsipiaalselt uus panus maailma kultuurisalve. Nõukogude linnaehitus areneb kahe põhimõtte alusel — stalinlikul hoolitsusel inimese eest ja leninlikul ideel vastuolude kaotamisest linna ja maa vahel" (Arman 1951).

1952. aasta veebruaris kirjutab Estonprojekti 2. arhitektuuritöökoja juhataja Grigori Šumovski, et NSV Liidus on linnaehi-

tuses juurdunud printsiibid, mis võimaldavad "äärmiselt lühikese ajaga luua tänavate, väljakute, terviklike linnarajoonide ja kvartaalide suurepäraseid, kunstiliselt kõrgetasemelisi ansambleid". Kasuks tulevat ka loobumine väikesekorruselistest ehitistest, sest nii välditaks linna otstarbetut laienemist. Ehitamine pidi nüüd keskenduma linna magistraalidele ja väljakutele, Eesti arhitektid aga ei olevat seni asunud "linnade, esmajoones vabariigi pealinna Tallinna peamagistraalide intensiivsele komplekssele ehitamisele", vaid tegelesid põhiliselt äärerajoonide hoonestamisega. Pealegi kasutatavat palju ""tükikaupa" projekteerimist, mille halvad tagajärjed on juba ette teada". Näiteks toob Šumovski Tallinna Kultuurikeskuse, "mis ei moodusta ühtset tervikut, kuna hooned on ehitatud erinevates stiilides, kusjuures madala ideeliskunstilise tasemega teostatud fassaadid kahandavad veelgi säärase "ansambli" väärtust. Linna kultuurilise keskuse hästi kavandatud plaani rikuvad märgatavalt hooned, mis on projekteeritud ilma vajaliku erialase meisterlikkuseta, olles ilmseks näiteks, et nõukogude linnaehituse printsiipidest pole õigesti aru saadud" (Šumovski 1952).

2.-5. juunini 1952. a toimus Moskvas NSVL Arhitektide Liidu juhatuse XIV pleenum teemal "Arhitektuuriline ansambel linnaehituses". Vastuvõetud otsuses nimetati mitut organisatsioonilist abinõu "tõstmaks otsustavalt projekteerimise ja arhitektuurilise meisterlikkuse kvaliteeti" ning suurendamaks arhitektuurilise ansambli osatähtsust linnaehituses. Paljude saavutuste kõrval esindusliku linnaansambli loomisel nenditakse otsuses "viimaste aastate arhitektuuripraktikas selliseid negatiivseid nähtusi nagu liigne pinnapealne ilustamine ja põhjendamatu kõige erinevamate dekoratiivsete motiivide kasutamine, mis väga tihti iseenesest vähendavad ehitise kompositsioonilist loogikat ning tõelist ilu, suure hulga keskpäraste hallide elu- ja ühiskondlike hoonete projektide olemasolu, madala maitse ja vähese nõudlikkuse ilmutamist arhitektide poolt enese suhtes". Väga oluliseks peetakse "võitlust kõrge kunstilise kvaliteedi eest, mis on lahutamatu võitlusest ehituse ökonoomsuse ja maksumuse langetamise eest". Peale üldsõnaliste suuniste anti esinduslike linnaansamblite ehitamiseks konkreetseid suuniseid Moskvale, Leningradile, Kiievile,

Minskile ja Stalingradile (Hronika... 1952). Tegemist oli n-ö eeskujulinnadega, mille järgi pidid joonduma ka Eesti omad.

1952. aasta oktoobris toimunud NLKP XIX kongressil nõuti jõuliselt arhitektuuri ja linnakavandamise ideelist ning kunstilist arendamist. Tõusvas kritiseerimislaines heitis arhitekt Paula Koido vanadest formalistlikest iganditest kinnihoidmist ette Tallinna Lembitu ja Kaupmehe elamukvartalite puhul (arhitekt Erika Nõva) ning Kultuurikeskuse raames valminud ENSV Teaduste Akadeemia instituutide hoonele (arhitekt Enn Kaar), milles olevat ikkagi süüdi Eesti Nõukogude Arhitektide Liit (Koido 1952).

Tallinna Kultuurikeskuse puhul hakatigi just nüüd EK(b)P KK VIII pleenumi ning NSVL Arhitektide Liidu juhatuse XIV pleenumi ja NLKP XIX kongressi otsuste põhjal osutama senise Stalini-aegse Eesti esindusliku linnaansambli haakumatusele ülejäänud NSV Liidu vastavate põhimõtetega.

Nii leidis Grigori Šumovski 1953. aastal, et ENSV Teaduste Akadeemia instituutidehoone "on oma olemuselt kuiv ja konstruktivistlik", "modernistlik, moonutavalt tõlgenduslike detailidega, võltsi ja mitte kuhugi viiva peasissekäigu portaaliga, mis faktiliselt projekteerituna külgfassaadile läheb ilmselgelt vastuollu nõukogude arhitektuuri printsiipidega ja ei väljenda ühskondlikteadusliku ehitise olemust". Sama häda olevat tema sõnul ka Lenini puiestee Teadlaste Majaga, mis "kujutab endast erinevate epohhide ja stiilide arhitektuursete elementide eklektilist segu", samuti puuduvat ehitisel harmooniline seos mahtude vahel. Autor taunis ka halli terrasiitkrohvi kasutamist, mida mujal NSV Liidus (v.a Läti) ei kasutatud, sest "nende hoonete fassaadide hall krohv kroonib mulje rõõmutust" (Šumovski 1953b).

Tallinna Kultuurikeskust peeti nõrgaks ka seetõttu, et sealne hoonestus olevat liigselt monotoonne, vähe kasutatavat arhitektoonikas vertikaale ning see olevat "üldse oma meeleolult hall", mille puhul mõjuvat imelikult kõrged katused, "mis justkui rõhusid hooneid". Lisaks olevat Kultuurikeskuse ja ka Stalini väljakule kerkivate hoonete puuduseks "lamedus, ilmetus", mille põhjuseks olevat skulptuursetest kaunistustest hoidumine (Roos, Mölder 1953).

Ka ei haakunud Kultuurikeskuse ansambel üleliiduliste arusaamadega kompositsioonist, sest Moskvast Eesti arhitektuurielu reguleerima määratud ENSV Arhitektuuri Valitsuse juhtivametnik Vsevolod Tihhomirov leidis, et Estonia teatri esise esplanaadi "pikiteljeks on "Estonia" teatri- ja kontserdisaali ehitise kompleksi fiktiivne sümmeetriatelg", mistõttu "esplanaadi "telg" sumbub teatri hoovi taras" (1954). Arhitektid Harald Arman ja Otto Keppe töötasid Tallinna keskosa detailplaneeringu koos Kultuurikeskusega veel kord läbi.

Ühes arhitektuurimaastiku ideoloogilise muutumisega ning suureneva survega Nõukogude Liidust teisenes ka senise arhitektuuri, eriti linnaruumi roll, selle märgiline tähendus. Pelgalt hinnanguist teljel positiivne-negatiivne jäi väheks, hoopis suurem probleem oli mälu: mida mäletati, mida võis mäletada, mida sobis mäletada, mida ei tohtinud mäletada. Et nõukogude ideoloogiat ja kultuuri vormiv sotsialistlik realism vaatas futurismist johtuva meetodina rõhutatult tulevikku (oli positiivne), siis minevik mälu — ja ka kaasaeg kätkesid endas nii negatiivset kui ka positiivset. Nn helge tuleviku lubamine (pealesurumine) oli silmitsi mälu kontrollimatusega, mis aga sisendab kontrollida tahtjale hirmu. Mäletamise probleemsusega püüdis okupatsioonirežiim juba varakult tegelda.

Näiteks tähendas Tallinna keskuse esindusliku raskuspunkti rajamine praeguse Tammsaare pargi ja Viru Keskuse alale ruumilist nihestumist ka poliitilisel tasandil. Tallinna senine moodsaim esinduskeskus Vabaduse väljak oli okupeeritud ja hukkamõistetud riigi vabaduse ning iseolemise sümbol. Kui veel 1944. aasta hilissügisel valmistati ENSV Arhitektuuri Valitsuse eestvõttel ette nn suure isamaasõja monumendi üldkavandite konkurssi, oli selle asukohaks nagu 1930. aastatelgi Vabadussõja monumendi puhul Võidu väljak (nüüd ja enne sõda Vabaduse väljak) koos Harjumäega. 1944. aasta konkursil jäeti I ja II auhind välja andmata, sest peale selle, et monumentide kavandid sarnanesid 1930. aastate omadega, olevat selle põhjuseks olnud Võidu väljaku vähene sobivus monumendi soodsaks paigutamiseks. Seetõttu otsustati "suurmonumendile leida väärikam asukoht uue, loodava keskväljaku äärde, kus ta tuleb lahendamisele koos platsi üldansambliga" (Tarvas 1948: 45).

Lisaks oli Harald Armani sõnul Võidu väljaku halvaks küljeks arhitektuurilise terviklikkuse puudumine, väljakut ääristavate hoonete eriilmelisus ning kompositsiooni rikkus veelgi "nõrk Jaani kirik; pealegi on kõnealune väljak liiga väike tulevasele Tallinnale, mistõttu viiakse Tallinna uus keskväljak Stalini väljakule" (1950: 11). Kui 1950. aastal pakkus Arman Võidu väljaku ilme päästmiseks vaid osa hoonete ümberkorraldamist (Kunstihoonele tiiva ja ühe korruse juurdeehitamine) ning Harjumägi oleks skulptuuride ja monumentidega (Viktor Kingissepa kuju) kaunistatud terrassnõlvak (samas), siis viis aastat hiljem pidas ENSV Arhitektuuri Valitsuse esimees vajalikuks koos Jaani kiriku kõrvaldamisega kogu väljaku hoonestu ("eeskätt konstruktivistlikus stiilis Kunstihoone") rekonstrueerimist, Harjumäe kõrgendamist 30 meetrini ning paraadide ja demonstratsioonide ülekolimist Stalini väljakule Võidu väljaku katmist skvääriga (Arman 1955: 94). Tuli ju "luua uus Keskväljak, kuna Võidu väljak on peoplatsiks väike" (Volkov 1949). Paraade ja miitinguid peeti siiski ka edaspidi Võidu väljakul.

Selletaolise olukorraga oli silmitsi ka näiteks Pärnu. Ka siin on tuntav mälu korrigeerimine linnaplaneeringu abil. 1940. aastate teisel poolel, kui päevakorras oli sõjas tugevasti põlenud Pärnu taastamine, koostas linnaarhitekt Endel Arman Anton Soansi generaalplaani alusel detailse linnakeskuse väljaehitamise kava. Endel Arman püüdis säilitada Pärnut võimalikult endisena ja kaasajastada hoonestust, jättes linna peaväljaku sinna, kuhu iseseisvusajal oli hakatud rajama esinduslinnajagu (Soans 1949).

Et Pärnu oli oluline suvituslinn Eestis ja NSV Liidus ning paiknes Tallinna-Riia maanteel, suhtuti Eesti NSV Arhitektuuri Valitsuses selle taastamise kavadesse suure tähelepanuga, mida kinnitab ENSV Arhitektuuri Valitsuse Arhitektuuri Nõukogu protokoll 8. oktoobrist 1947.<sup>9</sup> 1948. aasta oktoobris ja novembris vaadati ENSV Arhitektuuri Valitsuses ekspertiisikorras läbi ja kiideti heaks Pärnu vanalinna taastamise detailprojekt, mille oli Pärnu linna Peaarhitekti Valitsuse Projekteerimise-Geodeetilise Büroo nimel koostanud Endel Arman.<sup>10</sup>

Selle kõrval anti Anton Soansi koostatud Pärnu linna generaalplaan ekspertiisiks NSV Liidu Arhitektuuri Akadeemia korrespondentliikmele professor Igor Fominile. Fomin on oma arvamuses 4. veebruarist 1948 generaalplaaniga üldiselt rahul, kuid

<sup>&</sup>lt;sup>9</sup>ERA, f R-1992, n 2, s 1, 1 45–48.

<sup>&</sup>lt;sup>10</sup>ERA, f R-1992, n 2, s 33, 1 74–84.

#### Eesti linnaruumi kujundamisest aastail 1944–1955

väljakuid puudutavas alajaotises leiab ta, et  $100 \times 150$  m suurusega Raudtee väljak (praegune Pärnu bussijaama ala) tuleks väiksemaks teha ning "suurt kahtlust kutsub esile turuväljaku paigutamine silla ette. Kujutan ette, et õigem oleks Tallinna poolt sissesõidule rajada paraadne sillaesine väljak, aga mitte turuplats. Selle väljaku võiksid vormida hotellid ja ühiskondlikud hooned või isegi elumajad, aga mitte suletud turg selle kõrval oleva lasipuudega platsikesega turule tulnud talupoegade jaoks".<sup>11</sup> Sisuliselt tähendas see ettepanekut hüljata iseseisvusaegne esinduslinnajagu, kuid jalgu jäi ka osa sõjast säilinud vanalinnast.

31. oktoobril 1949. aastal otsustas ENSV Arhitektuuri Valitsuse ekspertiisibüroo "lugeda ekspert prof. I. Fomini seisukohas toodud märkmed põhiliselt õigeks ja pidada vajalikuks nende arvesse võtmist generaalplaani lõplikul vormistamisel pärast kinnitamist".<sup>12</sup>

Ilmselt võeti Fomini ettepanekud Pärnu uue peaväljaku kohta vaid teadmiseks. ENSV Arhitektuuri Valitsuse ekspertiisibüroo protokollides 14. novembrist 1949, 3. veebruarist 1950 ja 19. juunist 1950 pööratakse peatähelepanu hoopis Pärnu kui kalatööstuslinna arendamisele ja kuurordi heakorrastamisele. 23. juunil 1950. aastal palus Harald Arman ENSV Arhitektuuri Valitsuse juhatajana ENSV Ministrite Nõukogul Anton Soansi koostatud Pärnu generaalplaan kinnitada.<sup>13</sup>

Harald Arman võttis osa pidevatest aruteludest Pärnu linna keskuse üle 1940. aastate lõpul ja 1950. aastate algul. 1952. aasta keskel esitas ta ise koos Grigori Šumovskiga ja äsja arhitektidiplomi saanud Mart Pordiga Pärnu uue linnakeskuse lahenduse ettepaneku, milles on tunda paljude Ivan Fomini soovide arvestamist.<sup>14</sup> Harald Armani sekkumisel Pärnu linna kavandamisse oli kindlasti oma osa ka NSV Liidu haldusjaotuse muutmise kaval 1952. aasta maist, kuid samuti ka 1950. aasta VIII pleenumil, mille järel oli ilmselt "tungivalt soovitatav" akadeemik Fomini ettepanekuid võtta arvesse. Uue haldusjaotuse järgi pidid liiduva-

<sup>&</sup>lt;sup>11</sup>Samas, 1 139–142.

<sup>&</sup>lt;sup>12</sup>Samas, 1 126.

<sup>&</sup>lt;sup>13</sup>Samas, 1 104–126.

<sup>&</sup>lt;sup>14</sup>ERA, f R-1992, n 2, s 70, 1 47.

bariigid jagunema oblastiteks. Eestis oleks moodustatud Tallinna, Tartu ja Pärnu oblast. Kuna Pärnust pidi saama Pärnu oblasti keskus, muutus Pärnu kesklinna kavandamine koos uue peaväljaku Keskväljakuga ilmselt senisest vastutusrikkamaks ülesandeks.<sup>15</sup>

Harald Armani kavandatud uus Pärnu Keskväljak oli orienteeritud otse põhjast tulevale Tallinna maanteele nii, et vastu Pärnu jõe lõunakallast moodustus 50-hektariline plats, mille raskuskese — Pärnu oblastikomitee hoone (nüüdse Pärnu Endla teatri asemel) — pidi paiknema täpselt Tallinna maantee ja Pärnu silla teljel. Uue plaani järgi pidi Tallinnast tulija läbima algul 150 meetri laiuse ja siis 110 meetri laiuse ning 250 meetri pikkuse väljaku (nüüdse Akadeemia tänava ja Vee tänava kahel pool Vasa parki), mida ääristavad vaid kolmekorruselised hooned (need on praegugi alles). Teekonna jätkamiseks Riia poole tuli paraadlikul väljakul teha täisnurkne pööre vasakule (nagu ka praegu). Edasine teekond jätkus piki 60 meetri laiust Lenini alleed (nüüd Pikk tänav), mis suundus mööda iseseisvusaegsest Pärnu esinduslinnajaost. Sealsamas Lenini allee teljel pidi Tallinna poolt vaadatuna asuma Keskväljaku paremas servas nn Kultuuripalee. Selle palee suunas piki Lenini alleed oleksid ilmselt marssinud demonstrandid, et jõuda Pärnu oblastikomitee ette pühade puhuks paigutatud tribüüni juurde. Uue Keskväljaku rajamiseks lammutati sõjas põlenud Pärnu ordulossi varemed, lasti õhku tühjaks põlenud 14. sajandist pärinev Pärnu Nikolai kirik (Parek 1971: 42-43) ja likvideeriti mitme kvartali jagu vana kesklinna hoonestust Malmi tänava piirkonnas. Rajati ka Lenini allee laia koridorina läbi jõeäärse hoonestuse. Lõpuks maapind tasandati ja varustati vee-, gaasi- ja elektritrassidega (Šumovski 1953a; Härmson 1983).

Informatsiooni Pärnu linnastruktuuris kavandatavatest muutustest jõudis 1950. aastate alguse ajakirjandusse vähe. Infopuudusest uue Keskväljaku planeeringu kohta annab tunnistust ka Pärnu linnaarhitekti Jakob Linnakivi artikkel, mis ilmus 20. juunil 1952. aastal ajalehes *Sovetskaja Estonija* pealkirja all "Uues oblastikeskuses: Pärnu linna arenguperspektiivid". Kõnealuses artiklis annab linnaarhitekt ülevaate sellest, kuidas oblastikeskuseks saanud Pärnu peaks hakkama senisest kiiremini arenema; eraldi peatutakse kavatsusel paigutada Kalevi (Rüütli) ja Revolut-

<sup>&</sup>lt;sup>15</sup>ERA, f R-1992, n 2, s 33, 1 42–44.

siooni (Vanapargi) tänava ristmikule Stalini monument ning suletud ja asfalteeritud turuplatsi rajamisel Malmi (Malmö) ja Põhja tänava vahel. Artikkel lõpeb linna elamurajoonide ja kuurordi arenguperspektiivide tutvustamisega (Linnakivi 1952)

Pärnu Võidu (Vabaduse) parki kavandatava Stalini monumendi üle peetud aruteludel Pärnu Linna TSN Täitevkomitees nimetati linna peaväljakuks veel 1951. aasta detsembris Revolutsiooni ja Kalevi tänava ristumiskohta,<sup>16</sup> mille vaimus jätkusid arutelud ENSV Arhitektuuri Valitsuse esindajate osavõtul kuni 25. maini 1952. aastal.<sup>17</sup>

NSV Liidu Arhitektuuri Akadeemia 1952. aastal välja antud *Arhitekti lühike reeglistik* soovitas kuni 50 000 elanikuga linnale peaväljaku suuruseks kuni ühe hektari — Pärnu puhul oleks see näitaja uue Keskväljaku korral toonase 30 000 elaniku kohta olnud 2,5 ha. Seega oli verivärske oblastilinna keskväljak mõeldud 125 000 elanikuga linna jaoks. Samas mahuvad liiga madalana mõjuvad väljaku hooned enam-vähem reeglistiku soovituslikesse raamidesse, s.o hoonete kõrgus väjaku servas pidi moodustama ligikaudu 1/3–1/6 väljaku laiusest või pikkusest (*Kratki*... 1952: 20–21). Väidetavalt olevat Harald Armanit kannustanud nii suurejoonelist ideed teostama soov saada Stalini preemia (Härmson 1994: 54; Kalm 2001: 261).<sup>18</sup>

Siiski järgib Pärnu linna keskuse tollane planeering kohalike arhitektide loomingus kõige rohkem suurriiklikku planeerimisideoloogiat, pakkudes võrdväärset konkurentsi Leningradi kontrolli all planeeritud Ida-Eesti tööstuslinnadele — ainult et viimased valmisid algusest peale ideoloogiliselt "õigemini". Pärnu on näide, kuidas nõukogude ideoloogiaga "relvastatult" saab ka kohalik arhitekt planeerida "õigesti", heita kõrvale ja unustada "vale" mälukandjana senised lahendused ja kohad, et rajada helget homset. Linnaplaneering pakkus nõukogude võimule võimaluse erinevalt üksikhooneist tõhusamalt ideoloogiat kehastada ja mälu korrigeerida. Samas on linnaplaneeringu tehnilised võtted (teljed,

<sup>&</sup>lt;sup>16</sup>ERA, f R-1992, n 2, s 70, 1 104.

<sup>&</sup>lt;sup>17</sup>Samas, 1 86–105.

<sup>&</sup>lt;sup>18</sup>Seda ei kinnita siiski vestlused kaasaegsetega (M. Pordiga 30. X 2001; D. Brunsi ja O. Brunsiga 25. V 2001) ning Harald Armani poja Harald Arman nooremaga (21. X 2001).

väljakud jne) ajaloos seni tõhususe ja otstarbekuse kaudu ennast tõestanud. Seega jäi üle uue ideoloogia õigustamiseks hüljata linnaruumiline järjepidevus ja kasutada uue võimu sümboolikat.

N-ö mälu nihestamine jätkus ka pärast NLKP KK 1955. aasta 4. novembri otsuses "Liialduste kõrvaldamisest projekteerimisel ja ehitamisel" leiduvat nõuet juhinduda linnaehituses lihtsusest ja ökonoomsusest (Ob ustranenii... 1955: 8, 11, 13, 15). Paradoksaalselt on Stalini-aegsed poliitilisest ideoloogiast laetud linnaplaneeringud paljuski puhttehniliselt tulevikku vaatavate lahendustega, mida väike riik ei oleks oma jõuga suutnud ellu viia.

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Eesti linnaruumi kujundamisest aastail 1944–1955

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- Т v o r t š e s k i j e... 1948 = Творческие задачи советских архитекторов в пятилетнем плане восстановления и развития народного хозяйства: Материалы XII пленума Союза советских архитекторов СССР. Москва: Государственное издательство архитектуры и градостроительства
- T v o r t š e s k i j e... 1951 = Творческие задачи советских архитекторов: Материалы XIII пленума Правления Союза советских архитекторов СССР. Москва: Государственное издательство архитектуры и градостроительства
- V. Muradeli ooperist "Suur sõprus": ÜK(b)P KK otsus 10. veebruarist 1948. a. 1948 *Postimees*, nr 37, 14. II, lk 1
- Veel kord EN Arhitektide Liidu tööst. 1950. *Sirp ja Vasar*, nr 22, 3. VI, lk 7
- Viljaranna, E. 1949. Tuleviku Tallinn. *Pilt ja Sõna*, nr 1, [lk 10–11]
- Volkov, Leonid 1949. Tuleviku Tallinna keskus. *Sirp ja Vasar*, nr 30, 23. VII, lk 4
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- ÜK(b)P Keskkomitee otsused "Ajakirjadest "Zvezda" ja "Leningrad"", "Draamateatrite repertuaarist ja abinõudest selle parandamiseks", "Kinofilmist "Suur elu"" ja "V. Muradeli ooperist "Suur sõprus"". 1953. Tallinn: Eesti Riiklik Kirjastus

SIIM SULTSON (sünd. 1972) on õppinud Tallinna Tehnikaülikoolis tsiviilehitust 1991–1993, omandanud Eesti Kunstiakadeemias bakalaureusekraadi kunstiteaduses 1999; magistrikraad kunstiteaduses Tallinna Ülikoolist 2002; Tallinna Tehnikaülikooli doktorant a-st 2013. Tallinna Linnaarhiivi arhivaar 1993–1995, Tallinna Ülikooli kunstiajaloo õpetaja ja lektor 2000–2005, AS Äripäev toimetaja 2006–2010, Eesti Ettevõtluskõrgkooli Mainor lektor 2010–2012, kunstiteaduste dotsent ja loomemajanduse õppetooli juhataja a-st 2012.

## SIIM SULTSON. How the Estonian architect had to plan "correctly" and forget the "wrong": On planning the urban space of the Estonia from 1944–1955

The Soviet occupation began to change the treatment urban space in Estonia. After the end of World War II, a number of places of special significance, regulation plans and traditional treatment of materials had to be abandoned. Local architectural organisations and the treatment of form and material by Estonian architecture and urban planning were subjugated to the norms of the Soviet Union. If necessary, the urban space had to be changed, the memory purified.

Architecture as the carrier of public memory, willingly or unwillingly, speaks to nearly everyone, and so the totalitarian system can control the citizen. On the other hand, the urban space had to be efficient, functional, regular and have future prospects. Regular urban planning based on axes is not characteristic of present-day totalitarian states only. Regularity, hierarchy and clarity for the sake of functioning of a town or a settlement has been appreciated since ancient times. The striving for regular urban space has developed historically and is characteristic of democratic states as well. The ideology, efficiency and harmony of the society has often drawn on the monumentality and harmony of urban planning, in the totalitarian society sometimes at the expense of purifying the memory.

The article concentrates on the Soviet ideological indoctrination of Estonian architects and urban planners; architects who had arrived from elsewhere in the Soviet Union were considered more trustworthy. Therefore, the examples in the article do not include Narva, Kohtla-Järve and Sillamäe which were planned by all-Union architectural design bureaus as industrial towns significant for the whole Soviet Union. The author concentrates on Tallinn and Pärnu as the towns where the greatest changes were introduced by local architects.

The totalitarian Soviet regime required ideological awareness from urban planners. Paradoxically, the historically tried-out means in combination with ideological symbols had to create the impression of innovations. As the Soviet Union attempted to create a society of the future, everything old had to be abandoned and, if possible, new history planned from the scratch. The "correct" urban planning needed ideolog-

#### Abstracts

ical guidance: plenary meetings, congresses, directives, propaganda. The training of young architects also had to be ideologically controlled.

The norm of Soviet urban planning in the spirit of socialist realism required the glorification of the Victory; for that three models were used: early 19th-century Neoclassicism of St Petersburg, Italian High Renaissance and Ancient Rome. Until then, Estonian urban planning had taken example from contemporary Europe.

Paradoxically, from the purely technical viewpoint, the urban plans of the Stalin era are solutions looking into the future, which the small state would not have been able to realise with its own resources. (Auth.)

#### TÕNN SARV. On the past and on the future

There need not be anything bad in longing for the past. However, the past can also start haunting us, thus hindering progress and development. In the years of the occupation, remembering the past gave strength and inspiration. We once had our independent Republic of Estonia, consequently such times can return. Memories were honoured, books were written on ancient times in the life of our people, and old folk songs were admired. All of this gave support.

After the restoration of independence, however, this goal was lost and nothing new could be created. Even worse lacking a vision of the future, we have been clinging to the past. This is particularly evident in the activities of the institutions dealing with heritage protection. Naturally, cultural heritage has to be protected and events of the past have to be remembered. However, the relation between protection and development has gone out of proportion. The organs of heritage protection have acquired an almost unlimited power; they ban and restrict too much; it is very difficult if not impossible to challenge their decisions. The past is impeding the future and hindering the progress.

The things are even worse because of the established opinion that most innovations are dubious, as if preservation and conservatism were always better than change and development. We have accepted the opinion that, in the past, everything was right, and now everything is much worse. We search

# **Curriculum Vitae**

#### Personal data

Name: Siim Sultson Date of birth: 08.12.1972 Place of birth: Tallinn Citizenship: Estonia

#### **Contact data**

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#### Education

2013–2019 Tallinn University of Technology, doctoral studies – PhD 1999–2002 Tallinn University – MA in art history 1995–1999 Estonian Academy of Arts – BA in art history 1991–1993 Tallinn University of Technology, civil engineering (unfinished) 1980–1991 Tallinn Secondary School of Science

#### Language competence

Estonian: Native English: Fluent Russian: Intermediate Finnish: Intermediate German: Initial

## **Professional employment**

2015–2018 Estonian Entrepreneurship University of Applied Sciences, Visiting Lecturer 2017–2018 Tallinn University of Technology, School of Engineering, Department of Civil Engineering and Architecture, Visiting Lecturer

2014–2015 Tallinn University of Technology, Faculty of Civil Engineering, Department of Architecture and Urban Studies, Visiting Lecturer

2012–2015 Estonian Entrepreneurship University of Applied Sciences, Associate Professor in History of Art

2010–2012 Estonian Entrepreneurship University of Applied Sciences, Lecturer in History of Architecture

2008–2010 Estonian Entrepreneurship University of Applied Sciences, Visiting Lecturer

2003–2005 Tallinn University, Lecturer in History of Art

2000–2003 Tallinn University, Teacher in History of Art

1993–1995 TLA, Tallinn City Archives, Archivist

## **R&D** related managerial and administrative work

2017-... EAUH - European Association for Urban History, member
2016-... SAH - Society of Architectural Historians (USA), member
2014-... UEDXX - Urbanism of European Dictatorships during the XX<sup>th</sup> Century Scientific
Network, member
2018–2018 Tallinn University of Technology, Innovation and Business Centre, Manager of the
School of Technology

2014–2015 Estonian Entrepreneurship University of Applied Sciences; Head of The Department of Creative Industries

2012–2014 Estonian Entrepreneurship University of Applied Sciences; Head of The Chair of Creative Industries

2011–2012 Estonian Entrepreneurship University of Applied Sciences; Head of The Chair of Design

2006–2010 AS Äripäev Ltd, Editor of sections, special publications, magazines

#### **Field of research**

FIELD OF RESEARCH: 2. Culture and Society; 2.5. Aesthetics and Arts Research; CERCS SPECIALTY: H310 Art history; SPECIALITY: Estonian 20th century architecture, urban planning, urban space; living space., Estonian 20th century architecture, urban planning, urban space; living space

#### Honours & awards

2018, Siim Sultson, Lecturer of the Year, nominee (TALTECH (Tallinn University of Technology)) 2017, Siim Sultson, Lecturer of the Year, nominee (Estonian Entrepreneurship University of Applied Sciences)

2016, Siim Sultson, Lecturer of the Year, nominee (Estonian Entrepreneurship University of Applied Sciences)

2012, Siim Sultson, Lecturer of the Year, nominee (Estonian Entrepreneurship University of Applied Sciences)

# Elulookirjeldus

#### Isikuandmed

Nimi: Siim Sultson Sünniaeg: 08.12.1972 Sünnikoht: Tallinn Kodakondsus: Eesti

## Kontaktandmed

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## Hariduskäik

2013–2019 Tallinna Tehnikaülikool, doktoriõpe – PhD 1999–2002 Tallinna Ülikool – MA kunstiajaloos 1995–1999 Eesti Kunstiakadeemia – BA kunstiajaloos 1991–1993 Tallinna Tehnikaülikool, tsiviilehitus (lõpetamata) 1980–1991 Tallinna Reaalkool, keskharidus

## Keelteoskus

Eesti keel: emakeel Inglise keel: kõrgtase Vene keel: kesktase Soome keel: kesktase Saksa keel: algtase

## Teenistuskäik

2015–2018 Eesti Ettevõtluskõrgkool Mainor, külalislektor

2017–2018 Tallinna Tehnikaülikool, Inseneriteaduskond, Ehituse ja arhitektuuri instituut, külalislektor

2014–2015 Tallinna Tehnikaülikool, Ehitusteaduskond, Arhitektuuri- ja urbanistikainstituut, külalislektor

2012–2015 Eesti Ettevõtlukõrgkool Mainor, kunstiteaduste dotsent

2010–2012 Eesti Ettevõtluskõrgkool Mainor, arhitektuuriajaloo lektor

2008–2010 Eesti Ettevõtluskõrgkool Mainor, külalislektor

2003–2005 Tallinna Ülikool, kunstiajaloo lektor

2000–2003 Tallinna Ülikool, kunstiajaloo õpetaja

1993–1995 Tallinna Linnaarhiiv, arhivaar

## Teadusorganisatsiooniline ja -administratiivne tegevus

2017-... EAUH - European Association for Urban History (Euroopa Linnaajaloo Assotsiatsioon), liige

2016–... SAH - Society of Architectural Historians (Arhitektuuriajaloolaste Ühing, USA), liige 2014–... UEDXX - Euroopa XX sajandi diktatuuride linnaplaneerimise teadusliku uurimise võrgustik, liige

2018–2018 Tallinna Tehnikaülikool, Innovatsiooni- ja ettevõtluskeskus, tehnoloogiakooli juht 2014–2015 Eesti Ettevõtluskõrgkool Mainor; Loomemajanduse õppesuuna juht

2012–2014 Eesti Ettevõtluskõrgkool Mainor; Loomemajanduse õppetooli juhataja

2011–2012 Eesti Ettevõtluskõrgkool Mainor; Disaini õppetooli juhataja

2006–2010 AS Äripäev, rubriikide, erilehtede, kuukirja Oma Maja, online-rubriikide toimetaja

#### Teadustöö põhisuunad

VALDKOND: 2. Ühiskonnateadused ja kultuur; 2.5. Kunstiteadus; CERCS ERIALA: H310 Kunstiajalugu; PÕHISUUND: Eesti 20. sajandi ahitektuur, linnaplaneering, linnaruum; elukeskkond., Eesti 20. sajandi ahitektuur, linnaplaneering, linnaruum; elukeskkond

#### Teaduspreemiad ja tunnustused

2018, Siim Sultson, Aasta Õppejõud, nominent (TALTECH (TTÜ))
2017, Siim Sultson, Aasta Õppejõud, nominent (Eesti Ettevõtluskõrgkool Mainor)
2016, Siim Sultson, Aasta Õppejõud, nominent (Eesti Ettevõtluskõrgkool Mainor)
2012, Siim Sultson, Aasta Õppejõud, nominent (Eesti Ettevõtluskõrgkool Mainor)

## **Publications**

**1.1.** Scholarly articles indexed by Web of Science Science Citation Index Expanded, Social Sciences Citation Index, Arts & Humanities Citation Index and/or indexed by Scopus (excluding chapters in books)

Sultson, Siim. (2017). Estonian Urbanism 1935-1955: the Soviet-era implementation of pre-war ambitions. Planning Perspectives, 385–409.10.1080/02665433.2017.1348977.

**Sultson, Siim**. (2016). Replacement of Urban Space: Estonian Post-War Town Planning Principles and Stalinist Industrial Towns. Journal of Architecture and Urbanism, 40 (4), 283 –294.10.3846/20297955.2016.1247999.

**1.2.** Peer-reviewed articles in other international research journals with an ISSN code and international editorial board, which are circulated internationally and open to international contributions

**Sultson, Siim**. (2016). Alteration in The Awareness of Estonian City Space from Independence to Stalinism. Periodica Polytechnica Architecture, 49–55.10.3311/PPar.9557.

**1.3.** Scholarly articles in Estonian and other peer-reviewed research journals with a local editorial board; peer-reviewed scientific articles in journals important for Estonian culture or scholarly articles in Akadeemia, Looming, Vikerkaar

**Sultson, Siim**. (2013). Kuidas Eesti arhitektil tuli planeerida "õigesti" ja unustada "vale". Eesti linnaruumi kujundamisest aastail 1944–1955. Akadeemia, 12, 2248–2277.

## Other publications

Sultson, Siim. (2015). The Stalinisation of Estonian town planning: visions and heritage. *Urban Design for Mussolini, Stalin, Salazar, Hitler and Franco During the Interwar Period: Cities in Europe, Cities in the world - 12th International Conference on Urban History. Portugal, Lisbon, 3-6 September 2014*. Ed. C. von Oppen, H. Bodenschatz, P. Sassi, M. Welch Guerra. Bauhaus-Universität Weimar, 1–13.

**Sultson, Siim.** (2014). Is effective and enterprising state democratic? Town planning as an indicator of social effectiveness. In: Krista Tuulik, Regitze Kristensen, Eija Källström, Neringa Ivanauskiene, Danute Rasimaviciene (Ed.). 2nd Annual Entrepreneurship Conference Innovation and Entrepreneurship: New Ways of Thinking. Conference Proceedings (14). Eesti Ettevõtluskõrgkool Mainor.

**Sultson, Siim.** (2003). Ideoloogilised jõujooned Eesti Stalini-aegses esinduslikus linnaansamblis. Aeg ja lugu: Esseid eesti kultuuriloost / Scripta ethnologica, 5 (98–109). Tallinn: Ajaloo Instituut.

**Sultson, Siim.** (2001). Ideoloogiline arhitektuur kui üks mälu kandjaid: Itaalia, Saksamaa, Nõukogude Liit. Kultuur ja mälu : konverentsi materjale / Studia Ethnologica Tartuensia 4=Tartu Ülikooli etnoloogia õppetool (lk. 111-123). Tartu: Tartu Ülikooli Kirjastus,: /.../.

**Sultson, Siim.** (2014). Stalinization of Estonian city space: development, typology and perspectives. In: Paolo Marcolin, Joaquim Flores (Ed.). 20th Century New Towns. Archetypes and Uncertainties. Conference Proceedings (368–384). Escola Superior Artística do Porto.

Sultson, Siim. (2000). Eesti 1930. aastate väljak - Tartu, Pärnu ja Viljandi. Pedagoogikaülikool, lk. 12.

**Sultson, Siim.** (2015). Alteration In The Awareness Of Estonian City Space From Independence To Stalinism. In: Melinda Benkő (Ed.). Facing Post-War Urban Heritage in Central-Eastern Europe. Book of Abstracts (54–55). Budapest: Budapest University of Technology and Economics.

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**Sultson, Siim.** (2009). Arhitektuur. Tea Entsüklopeedia (329–337) A chapter in encycopaedia. TEA Kirjastus.

**Sultson, Siim.** (1998). AS Ärimaja büroohoone. Pärnu mnt. 105, Tallinn. Maja: Eesti arhitektuuri ajakiri = Estonian architectural review, 4, 32–35.

**Sultson, Siim**; Lindpere, Piret. (1998). Kiasma. Mannerheiminaukio 2, Helsinki. Maja: Eesti arhitektuuri ajakiri = Estonian architectural review, 4, 62–67.

**Sultson, Siim.** (1998). Pärnu sanatooriumi 'Tervis' kultuurikompleks. Pärnu, Seedri 6. Maja: Eesti arhitektuuri ajakiri = Estonian architectural review, 3, 64–67.

**Sultson, Siim.** (1998). Wermo mööblisalong. Tartu mnt 63, Tallinn. Maja: Eesti arhitektuuri ajakiri = Estonian architectural review, 3, 68–68.

Sultson, Siim. (2011). Intarsia - Eesti luksmööbli lemmik. Oma Maja, juuli, 26–29.

Sultson, Siim. (2011). Keeruline aeg mõjutab mööbli nägu. Oma Maja, mai, 32–36.

Sultson, Siim. (2011). Rahvuslik muster tikub mööblile. Oma Maja, juuni, 18–21.

Sultson, Siim. (2006). Aastad 1980-1990: läbi mineviku tulevikku. Oma Maja, detsember, 28–31.

Sultson, Siim. (2006). 1970-1980: modernismist postmodernismi. Oma Maja, november, 62–64.

Sultson, Siim. (2006). 1960-1970: optimistlikud modernkatsetused. Oma Maja, oktoober, 32–35.

Sultson, Siim. (2006). Stalinismi triumf ja langus 1950-1960. Oma Maja, september, 34–37.

Sultson, Siim. (2006). Aastad 1940-1950: võõrvõimude vahel. Oma Maja, august, 54–56.

Sultson, Siim. (2006). Sajand arhitektuuris: napi vormi triumf 1930-1940. Oma Maja, juuni, 38–39.

Sultson, Siim. (2006). Sajand eesti arhitektuuris - eneseotsingud 1920-1930. Oma Maja, 46–48.

#### **Conference presentations**

**Sultson Siim**. Architectural Urbanity and Memory: Architectural Policy in Estonia in 1940s and 1950s. Svensk Urbanitet – Conference of the Institute of Urban History, Stockholm University, Sweden, Stockholm, 19 May 2016, oral presentation.

**Sultson, Siim**. Replacement of Urban Space: Estonian Post-War Town Planning Principles and Stalinist Industrial Towns. Urban Design in the Baltics: Studies, Design and Practice – Conference of Faculty of Architecture, Vilnius Gediminas Technical University, Lithuania, Vilnius, 6 November 2015, oral presentation.

**Sultson, Siim**. Alteration In The Awareness Of Estonian City Space From Independence To Stalinism. Facing Post-War Urban Heritage in Central-Eastern Europe - Conference of Budapest University of Technology and Economics, Hungary, Budapest, 9 October 2015, oral presentation.

**Sultson, Siim**. The Stalinisation of Estonian town planning: visions and heritage. Urban Design for Mussolini, Stalin, Salazar, Hitler and Franco During the Interwar Period: Cities in Europe, Cities in the world - 12th International Conference on Urban History. Portugal, Lisbon, 3–6 September 2014, oral presentation

**Sultson, Siim**. Stalinization of Estonian city space: development, typology and perspectives. 20th Century New Towns. Archetypes and Uncertainties - Conference of Escola Superior Artística do Porto, Portugal, Porto, May 2014, oral presentation.

**Sultson, Siim**. Is effective and enterprising state democratic? Town planning as an indicator of social effectiveness. 2nd Annual Entrepreneurship Conference Innovation and Entrepreneurship: New Ways of Thinking (Eesti Ettevõtluskõrgkool Mainor), Estonia, Tallinn, November 2013, oral presentation.

**Sultson, Siim**. Ideoloogilised jõujooned Eesti Stalini-aegses esinduslikus linnaansamblis. Tallinna Ülikooli Ajaloo Instituudi konverents Aeg ja lugu, Estonia, Tallinn, November 2002, oral presentation.

**Sultson, Siim**. Ideoloogiline arhitektuur kui üks mälu kandjaid: Itaalia, Saksamaa, Nõukogude Liit. Tartu Ülikooli Etnoloogia Õppetooli konverents Kultuur ja mälu, Estonia, Tartu, October 2000, oral presentation.

**Sultson, Siim**. Eesti 1930. aastate väljak - Tartu, Pärnu ja Viljandi. Tallinna Pedagoogikaülikooli Kultuuriteaduskonna magistrikonverents, Estonia, Tallinn, February 2000, oral presentation.