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Alvar Aalto and the industrial origins of Finnish 1940s community planning

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Abstract

In Finland the construction of post-war neighbourhoods started in 1950, but its ideological background was in the planning of the 1940s. As has been shown, the principles of Anglo-American neighbourhood unit planning and regional planning influence the structural principles that were adopted for neighbourhood units. This paper presents another narrative for the period by analysing the work of the architect Alvar Aalto, who was a pioneer of Finnish regional planning and was significantly active in community planning. After having established good relations with Finnish industry, he got the chance to develop his own community planning principles. They became close to the principles of neighbourhood unit planning but, at the same time, were personal and extended beyond them. This paper examines in closer detail three of Aalto's plans and the way he combined planning and building design. In this way it is possible to better understand the ideas of the 1940s and the importance of Finnish industry during this time. Aalto's activity during the 1940s also explains his success in later decades.

Keywords: regional planning; neighbourhood planning; Alvar Aalto; 1940s; industry

Introduction

In Finland, urbanisation began relatively late from a European perspective and coincided with the construction of the first post-war neighbourhood units around 1950. Regional planning, on the other hand, had been introduced in Finland during the Second World War. Its primary scope was the economic and urban development of mostly rural areas. Neighbourhood units belonged to the later phase of regional and master planning around cities. Hence, the regional planning of the 1940s and the construction of neighbourhoods appear to be relatively separate issues.

Alvar Aalto was a pioneer of Finnish regional planning and a multitalented designer. He was interested in combining regional planning, detailed town planning and building design in his work. Aalto operated on many levels of planning and, in doing so, developed a neighbourhood-like community concept. This paper analyses Aalto's work through three cases that all took place in an industrial context. It clarifies the mutual relationship between his regional and community planning, which has been studied little up to now. It also discusses the character of Aalto's plans and his later influence in Finnish planning.

Between 1936 and 1950, Aalto had a significant number of industrial commissions, but his early career had little to do with industry. After having designed several buildings in the spirit of classicism, he became one of the leading Finnish modernists. The Paimio tuberculosis sanatorium (1928–33) and the final version of Viipuri Library (1933–35) are the best known examples from this period. In 1930 Aalto got his first significant industrial commission in the shape of the Toppila pulp plant in Oulu. Otherwise he had difficulties in finding new projects. When the economic recession ceased towards the end of the decade, industry again started to invest in new production plants. This was one reason for Aalto's success; another was that in 1935 he got to know Harry Gullichsen, who was ready to support Aalto's modernist tendencies. He was given the planning and design task for the new Sunila sulphate cellulose mill.¹

At the beginning of the Sunila project Aalto did not have much of a background in town planning. That he could serve industry so well was partly based on the breadth of architectural education. Town planning was introduced in the education of Finnish architects at the beginning of the 20th century, aligned with the ideals of Camillo Sitte. It was further refined during the 1920s and 30s.² Naturally, architects had to specialise, but it was possible for them to work both as town planners and building designers. Aalto could practise his planning abilities in the often lengthy projects for industry.³ Over

the course of time his role grew to be exceptionally diverse, reaching from the urban scale to buildings and particular details.

Several previous studies and writings analyse Aalto's relations with Finnish industry. Pekka Korvenmaa has studied the planning of Kauttua and Sunila and Aalto's industrial planning context in general, including that carried out during wartime.⁴ The most important single study of Aalto's regional planning and the role of industry is Terttu Nupponen's *Arkkitehdit, sota ja yhdyskuntasuhteiden hallinta* (Architects, war, and the governance of socio-spatial relationships in localities, 2000). It focuses on the Kokemäenjoki River Valley planning process. Nupponen examines the programmes, rationalities, technologies, norms and forms of Finnish regulation of space from historical and sociological viewpoints.⁵ One chapter of Eeva Liisa Pelkonen's *Alvar Aalto: Architecture, Modernity and Geopolitics* (2009) is dedicated to Aalto's regional plans, including the Kokemäenjoki River Valley plan and the general town plan of Imatra. However, she describes Aalto's 'regionalism' mainly from the broad vernacular and geopolitical point of view, and describes individual plans briefly and without paying much attention to the chronology of events.⁶ Several authors discuss Aalto's regional planning and 'regionalism' in the anthology *Aalto and America* (2012).⁷ It is also worth mentioning Riitta Nikula's 'The city in the writings of Alvar Aalto' (1998)⁸ and Eric Mumford's recent article 'Alvar Aalto's urban planning and CIAM urbanism' (2014).⁹

An authoritative introduction to the beginnings of Finnish neighbourhood unit planning after the Second World War, including the international background, was presented by Riitta Hurme in 1991 in her study *Suomalainen lähiö Tapiolasta Pihlajamäkeen* (The Finnish neighbourhood unit from Tapiola to Pihlajamäki). The time span of the book extends from the 1940s to the 1960s.¹⁰ Another important book, even if it is outside the scope of this paper, is Johanna Hankonen's *Lähiöt ja tehokkuuden yhteiskunta* (New suburbs and the society of efficiency) from 1994. Her study analyses the development between 1951 and 1973 and especially the period 1958–1968.¹¹ These studies are partly overlapping, but the former is concerned with the international and domestic background of neighbourhood unit planning, whereas the latter focuses on the ideological background to later development.

The main goal in this paper is to clarify how Aalto developed his community planning with respect to regional planning. As a lot happened in the 1940s, the order of events becomes important in this analysis. This general question leads to three other problems: how did Aalto explain the structural relations between regional planning, community planning and his individual building projects? What influences can be suggested concerning each of these three 'levels' of planning and design? Finally, what was the legacy and importance of Aalto's plans with regard to later neighbourhood and community planning?

The two following sections present a general description of Aalto's planning environment in the 1940s and the main influences concerning neighbourhood planning. Aalto's planning work between 1936 and 1951 is then briefly summarised. The next three sections present the planning cases of the Kokemäenjoki River Valley regional plan (1940–1942), the Säynätsalo industrial community (ca 1942–1952), and the general town plan of Imatra (ca 1947–52). The concluding section summarises the main observations.

Finland and planning in the 1940s

The first half of the 1940s was wartime in Finland, but the war also accelerated changes in the Finnish planning system throughout the decade. Neighbourhood unit planning, regional planning and the even more centralised national planning were all, more or less, introduced in Finland during the 1940s. They were not simultaneous or even strongly related processes. Regional planning came first in a pioneering planning effort, coordinated by Alvar Aalto. Neighbourhood unit planning was another, relatively simultaneous idea. That was introduced by Otto-Iivari Meurman (1890–1994), who was a renowned town and region planner and an influential educator.

Overall the Finnish war history from 1939 to 1945 can be divided into three phases: the Winter War, the Continuation War and the Lapland War (Fig. 1). The Winter War broke on 30 November 1939 and ended on 13 March 1940. Finland remained independent and unoccupied, but lost important eastern regions, including Viipuri, its second largest city. The population of these areas was evacuated. Furthermore, much of Finnish industry had to be urgently rearranged and necessary provisions ensured. Both planning and housing production were needed. A specific Rapid Settlement Act was passed to provide homes for the mainly Karelian evacuees.

During the following brief period of peace, the European theatre of war changed along with Germany's successes. Finland's position became unfavourable. Various motives, including hopes to redress the former peace terms, led Finland to cooperate with Germany and to allow German troops in Lapland. New war operations began in the summer 1941. The situation soon turned into relatively stable trench warfare. This lasted until summer 1944, when a massive Soviet attack on the Karelian isthmus forced the troops to retreat. The subsequent peace negotiations led to an armistice, which obliged Finland to expel the remaining German troops. This last phase, the Lapland War, ended in April 1945. The territorial losses, around one-tenth of the 1939 area, were much the same as in the Winter War, but included parts of Lapland. As a consequence, a total of 0.4 million people had to be relocated to other parts of Finland. The Association of Architects regained a role in the organisation of reconstruction tasks, and Aalto played an important part in the Reconstruction Bureau.¹²

Industry and especially forest industries had become very important to the Finnish economy during the 1940s. The Finnish forest industry had developed rapidly between 1890 and 1945, admittedly not so much because of technological superiority than forest reserves and export opportunities.¹³ Gradually industry gained power in society. The relative social and economic weakness of the state, stable societal conditions and the ample supply of workforce as preconditions for industrial production were important factors.¹⁴ Consequently, industry started to establish and plan industrial communities during the 1920s and 30s.¹⁵ This led Aalto and other architects to winning planning commissions. The wartime further strengthened Aalto's links with industry.

Two major companies can be specifically mentioned for this paper. The history of A. Ahlström dates back to the 1850s, when Antti Ahlström (1827–1896) started a shipping business in the Pori region. The company became firmly established in the sawmill industry at the end of the 19th century. Next, during the era of Antti's eldest son Walter Ahlström (1875–1931), the business was extended to a broader combination of forest industries and glass production. Harry Gullichsen, Walter's son-in-law, was appointed as board chairman and managing director in 1932 and held this position until his death in 1954. During his time the company was further enlarged and modernised. A partnership with the Sunila sulphate cellulose mill made it possible to process pinewood.¹⁶

The Enso-Gutzeit Corporation started as a Norwegian-owned business at the beginning of the 1870s. At first W. Gutzeit & Comp. had two sawmills by the Kymi river, but before the First World War it was already the second largest sawmill company in Finland. Due to the turbulent times, all the stocks were sold to the Finnish state in 1918. Enso-Gutzeit Corporation was born in 1927 from the merger of Gutzeit and its indebted affiliate Enso Aktiebolag. The company expanded notably before the Second World War. One of the new investments was the Kaukopää sulphate cellulose mill in Imatra. The mill was constructed in 1934–35, and the participation of architect Väinö Vähäkallio in its design was one example of the roles that architects could achieve in the service of Finnish industry.¹⁷

Unlike in many other countries, the Finnish region-level administration was relatively weak, particularly before the 1960s, compared to the strong hold of state and municipal-level administration. This partly explains the role of industry in these early planning processes. Only after wartime did regional planning slowly gain more strength and become more city-centric.¹⁸ The Helsinki Regional Planning Association (Aluesuunnitelmaliiitto) was established in July 1946, initially on voluntary basis.¹⁹ Neighbourhood unit planning was partly related to regional planning, but was introduced in the town planning context. In January 1940 Meurman was appointed professor of town planning at the

University of Technology, and in 1949 head of the Department of Architecture. He began to prepare a textbook about town planning. According to him, the work *Asemakaavaoppi* was finished already in 1943 but was not published before 1947.²⁰

National planning (valtakunnansuunnittelu) was an even later phenomenon. The idea was recognised by the government in spring 1947, and the first report was published in 1948, including a short memorandum by Meurman. The National Planning Office (Valtakunnansuunnittelutoimisto) was founded in 1956. Aalto also wrote about the subject: his article in 1949 was based on his speech for the 10th anniversary of the Finnish Cultural Foundation.²¹ National planning became significant during the following decades but it was marginal with respect to Aalto's regional plans in the 1940s.

Neighbourhood unit planning and the problem of Aalto's influences

When Meurman wrote his earlier mentioned textbook *Asemakaavaoppi*, he presented the general European background to modern town planning but also discussed the importance of Ebenezer Howard and the garden cities of Letchworth and Welwyn, Hampstead Garden Suburb and recent British planning. Equally he pointed to German examples and authors, as well as French sources. He also referred to Lewis Mumford's book *The Culture of Cities* (1938) and to *The City* (1943), a book by the American-resident Finnish architect Eliel Saarinen.²² Meurman based his guidelines for town planning on the principle of decentralisation and presented a list of ten town planning principles.²³ One of the illustrations reproduced a schematic diagram of an ideal community unit, taken from the County of London plan by J. H. Forshaw and Patrick Abercrombie.²⁴ Meurman applied his principles to several municipal master plans. His plan for Hagalund (1945), an area which soon became Tapiola, essentially followed the British structural model.²⁵

The concept of neighbourhood unit is attributed to Clarence Arthur Perry.²⁶ Perry's monograph was not very influential in Finland. In a later interview Meurman said that he actually did not know it, but was familiar with Radburn.²⁷ The work of the MARS group probably did not influence Meurman either. In his article about Maxwell Fry's *Fine Building* he complained about the lack of English literature during the war.²⁸

In Sweden, the discussion about neighbourhood unit planning had started around 1942 and was active throughout the decade. New ideas were accepted in Stockholm, where new housing had been built mostly in the inner city. The year 1941 was a tipping point, when suburban areas began to dominate. This also led to a discussion about the character of new suburban units.²⁹ The British model was influential in Sweden and was partly conveyed there by Danneskiold-Samsøe's book, *Nutida engelsk samhällsplanering* ('Current English community planning', 1945).³⁰ Swedish planners also discussed the issue of community centres and the need for small cultural centres, partly on the basis of the report of Flora and Gordon Stephenson.³¹ Heikki von Hertzen, who strongly influenced the later planning and construction of Tapiola, acknowledged the influence of the Swedish neighbourhoods, but also mentioned Lewis Mumford in particular, Radburn, the American greenbelt cities and Howard. Von Hertzen's well-known pamphlet *Koti vaiko kasarmi lapsille?* ('Home or barracks for our children?') was published in 1946. The new plan for Tapiola differed from that of Meurman's Hagalund, but he was appointed chair of the planning committee in 1951.³²

Aalto's first regional planning project started as early as in 1940. For this reason, and considering the war, British influence seems unlikely. American influence coincides better with the chronology of Aalto's plans. Several writers have emphasised the importance of Aalto's American relations.³³ Between 1938 and 1967 he visited America fifteen times altogether.³⁴ Furthermore, it has been suggested that Aalto met Lewis Mumford in 1939, during the second visit, which Alvar and Aino Aalto made together. Such a meeting was on the agenda for the third visit in 1940.³⁵ Also the wording of two letters from Sophia Mumford to Aino Aalto in the spring of 1940 points in this direction.³⁶

In the United States of the 1930s, the primary interest of regional planning was directed at physical resources, which led to a series of river valley projects. The entire concept of the planning region started to mean watersheds and the idea of the metropolitan area as a logical unit of planning was suspended, especially in the south.³⁷ Aalto's Kokemäenjoki River Valley plan can be seen as a small-scale equivalent of the planning for the Tennessee Valley. Aalto's interest in American building was demonstrated by an exhibition in Helsinki after the war, in January 1945. Aalto was the initiator of the exhibition and had also written the introductory text for the catalogue.³⁸

Aalto was also an active member of the CIAM (Les congrès internationaux d'architecture moderne). Eric Mumford has analysed the relationship between Aalto's urban planning and CIAM urbanism. He supports the idea of the American influence on Aalto and his advancement beyond the earlier CIAM ideas. Still, Aalto's CIAM activity does not consistently explain his works. As Mumford remarks, 'none of his extensive work in urbanism seems to have been part of post-war CIAM deliberations, and his involvement with CIAM in those years was very limited'.³⁹

Aalto's planning work between 1936 and 1951

This paper mostly discusses the period 1940–1950, but it starts somewhat earlier for planning projects of interest.⁴⁰ The resulting list is shown in Table 1. The start year of the table is 1936, which brought Aalto new relationships with industry, and the end year is 1951. For each project the industrial connection, if any, is shown in the column furthest to the right.⁴¹

Table 1. Aalto's planning projects in approximate chronological order according to the start year. (Entries in bold text are analysed separately.)

<i>Title</i>	<i>Industrial connection</i>
1 Master plan for Varkaus, 1936	A. Ahlström
2 Master plan for Sunila, 1936 (changes in the 1940s and 1950s)	Principally A. Ahlström, Enso-Gutzeit, Kymi, Tampella and Yhtyneet Paperitehtaat
3 Master plan for the Karhula industrial community, 1936–1937	A. Ahlström
4 Inkeroinen master plan, 1937–1939	Tampella industrial group
5 Master plan for Kauttua, Eura, 1938	Ahlström
6 The MIT experimental town ('An American Town in Finland'), 1940–1941	
7 Regional plan for the Kokemäenjoki River Valley, 1940–1942	(Several, through project participation)
8 Outline plan for Noormarkku, 1941	A. Ahlström
9 Master plan for the Kymijoki river valley, 1942, 1945	Ahlström, Kymmene, Sunila
10 Master plan and low-rise housing development for the industrial community of Säynätsalo, 1942–1947, and the related town hall and cultural centre projects, 1949 and 1950	Parviainen (Enso-Gutzeit)
11 Town plan for Oulu riverside, known as the 'River Rapids Centre', 1943	
12 Master plan for Nynäshamn, Sweden, 1943 (start year), with architect Albin Stark, and the related town hall competition entry, 1945	
13 Town plan for Rieskala, Pihlava, Pori, 1943	A. Ahlström
14 Town plan and housing for the Strömberg Co., Vaasa, 1943	Strömberg Corporation
15 Area plan for the Strömberg Co. in Pitäjänmäki, 1943	Strömberg Corporation

- 16 **Master plan of Avesta, Sweden, with architect Albin Stark, and the related town centre competition entry, 1944**
- 17 Reconstruction Plan for Rovaniemi
Master plan for Rovaniemi, known as the Reindeer Horn, 1944
- 18 Town plan for Huvudsta and Alby in Solna, Sweden, 1945 to the end of the 1950s (Indirectly the Wallenberg family)
- 19 Master plan for Iittala industrial community (1945?) A. Ahlström
- 20 Town plan for Yhteis-Sisu Co., Hämeenlinna, 1945 Yhteis-Sisu Co.
- 21 Master plan for Tornio, 1945
- 22 Master plan for Ruotsinpyhtää factory, 1946
- 23 **General town plan of Imatra (1947–53), and the related town centre design (1949)** Enso-Gutzeit Corporation
- 24 Town planning competition and town plan for Otaniemi, 1949
- 25 Area plan for Viikki, near Helsinki, c. 1950
- 26 Regional plan for Lapland, ca 1951–1957
- 27 Area plan for Typpi Co., Oulu, 1951 Typpi Corporation
- 28 Jyväskylän Institute of Pedagogics, 1951 (competition entry)

Three of these projects have been selected for closer analysis: the regional plan for Kokemäenjoki River Valley, Aalto's planning and design projects for Säynätsalo, and the General Town Plan of Imatra, including the town centre design. Furthermore, the proposals for the Swedish towns of Avesta and Nynäshamn are briefly presented in connection with the Säynätsalo case. These five entries were selected because of their timing, importance and topical coverage.

The Kokemäenjoki River Valley regional plan

The Kokemäenjoki River Valley regional plan is presented here as a background to Aalto's community ideas. The Kokemäenjoki is a river in south-west Finland. At the mouth of the river sits the city of Pori and the Mäntyluoto export harbour. The river basin had important sawmill, paper and other industries. Discussions about the planning task were held in winter 1940–41 and the planning committee, summoned by Harry Gullichsen and the Pori Chamber of Commerce, commissioned the plan from Aalto in May 1941. In the situation after the Winter War and the regional cessations in the east, it was assumed that the importance of the Kokemäenjoki region would increase. For the greatest advantage, it was essential to rearrange the physical structure – industry, agriculture, transportation and habitation. Regional planning, in both economic and urban terms, was the answer to this demand and propounded new practices for spatial regulation. The plan was the first full-scale regional plan in Finland. Few modest efforts at regional planning had been made before. The plan also differed from Swedish city-centred planning, even though the preface mentioned the plans for Gothenburg and Stockholm.⁴²

The description of the plan, with a small-scale reproduction of the original map, was published in 1942 (Fig. 2). The map covered around 70 kilometres (40 miles) of river valley. Starting from the village of Kokemäki in the direction of the Gulf of Bothnia, next was the village of Harjavalta with its hydropower plant (Fig. 3), the small hamlet of Nakkila, the medieval town of Ulvila, the city of Pori, and Mäntyluoto harbour. Thematically the plan was divided into separate issues concerning railways, roads, the arrangement of production, housing, schools, and sports, leisure and hiking terrains. The river valley had existing railway and road connections. Both were to be developed, including new transversal connections to other places. New industrial areas were planned, such as to the harbour area and near the villages of Nakkila and Harjavalta. Aalto's idea was to disperse residential areas between farmland, forests and parks, in accordance with the traditional landscape of the region.⁴³

A clearly important aspect in Aalto's plan was his definition of the 'dynamics', so to speak, of urban development, and the relationship between the city and the countryside. Two of Aalto's texts for the *Arkkitehti* journal are closely related to the Kokemäenjoki plan: his writing about building for the countryside in 1941, and his general description of the plan in 1943.⁴⁴ In his 1941 article Aalto explained that the essential role of the countryside was *to give birth* to new towns and smaller places; it was the 'wellspring of everything.' The spontaneous emergence of habitation and towns had its roots in Finnish geography, but industry also had an important role. Rural areas were more attractive for industry in Finland than elsewhere, and the countryside was 'full of scattered production plants of all scales.' The process anticipated a new phase in the structure of society, the merging of the countryside and the city, and the 'ruralisation' of older cities.⁴⁵ According to Aalto, in the Kokemäenjoki River Valley *'a totally new stage of community is evidently emerging, higher than the concept of city, as a widespread combination of industrial, agrarian, transportation and cultural activities – –.'* He repeated this expression in the plan document itself in 1942, and again in *Arkkitehti* a year later.⁴⁶

We need not take Aalto's definition as a conscious programme for the future. Whether it was or not, it joined together the regional and the urban level and, in this way, made room for Aalto's later community considerations.

Säynätsalo – an idyllic workers' community

Säynätsalo is a relatively small island in Lake Päijänne in Central Finland, not far from the city of Jyväskylä. The relatively long planning period for Säynätsalo shows the way Aalto combined general and community planning and, finally, proceeded to the design of public buildings.

The industrial history of Säynätsalo began in 1887, when Johan Parviainen (1834–1900), a prosperous local entrepreneur, acquired the island. In 1913 his son Hugo Parviainen (1872–1920) established a plywood mill there, the Johan Parviainen Tehtaat Osakeyhtiö. A small but locally important industrial community subsequently grew on Säynätsalo. However, after Hugo Parviainen died the company faltered. In 1936 the stocks had to be sold, and in 1939 the Bank of Finland became the sole owner. After modernising the mill, it sold the stocks to Enso-Gutzeit Corporation in 1946. Previously Enso-Gutzeit had operated mainly along the Kymi water route; now it could expand to the Päijänne water route.⁴⁷ Hilmer Brommels (b. 1896) was appointed the director of the mill in 1936, and he continued under the command of Enso-Gutzeit. In practice the new owner made only the major decisions, leaving Brommels with quite a lot of freedom, whilst also investing in the development of the Säynätsalo mill.

Aalto started to prepare a town plan for Säynätsalo in 1942. Early in 1943 he apologised to Brommels for being late in his planning task; due to the war he could not get qualified assistants. The drafts for a town plan were delivered to Brommels in August.⁴⁸ Aalto's regional intent becomes clear in another document, dated January 1945 and addressed to the Joh. Parviainen Mills. The text was unsigned but obviously composed by Aalto. He explained how he had been asked to create a regional plan for the Säynätsalo area, its industrial extension and the surrounding area. As Aalto explained, in the future the island of Säynätsalo, another nearby island and the mainland would be provided with rail and road connections, creating an exceptionally advantageous industrial area. However, the future industrial establishments should comply with the new traffic arrangements, as much land and water would be needed, and neither should the location of housing prevent the expansion. Aalto prepared his plan according to these guidelines, even if he considered the main island insufficient in size for all the necessary housing.⁴⁹

Only a few undated drafts show the general plan, which apparently was not planned further. It covered the island of Säynätsalo, the neighbouring island of Lehtisensaari, two tracts of mainland, both connected to the islands, and a few minor islands (Fig. 4).⁵⁰ The drawings, at the scale 1:8000, displayed the industrial and housing areas, forests, parkland, railways, main roads and the border of the mill area. The plan allocated land for three main purposes: industrial areas, town planning areas, and forest and parkland. It also suggested railway connections and some new main roads. Most of the

industrial functions were on the main island, but an extension for the mainland was planned along the railway route. The Säynätsalo side track was actually built at the end of the 1960s: it was functional for three decades, but has since been dismantled. In addition, a road towards the west was realised, even if not exactly according to Aalto's plan.

The town plans for the island of Säynätsalo were drafted at the scale 1:2000. Draft number 5 was dated 31 May 1944 (Fig. 5). In addition to the existing industrial area in the south of Säynätsalo, it presented three spare areas for future extensions: one directly to the north of the existing area and two on the west of the island, on both sides of the entrance road and the railway line. In the north of the island was a grouping of apartment buildings; in the east were small houses in rows. At the centre of the island there was an old church and a graveyard, an open-air sports ground and an open-air Greek-style theatre. The last two were placed on an elevated part of the island, called 'Akropolis' in the plan.

One of the planning issues was the central place at the junction of the entry road and the north side of the mill area.⁵¹ At the southern end of the square there was the mill's administrative building and, opposite it, the intended town hall. The final drawings for the triangle-shaped central square were prepared following the competition for Säynätsalo Town Hall, which was now moved to the opposite, i.e. northern end of the square (Fig. 6).⁵² Aalto was officially invited to take part in the architectural competition on 30 July 1949 and the deadline was 15 December. Brommels was entitled the organiser of the competition. The competitors could quite freely choose the location of the building, called 'a kind of city hall'. Aalto won the competition under the pseudonym 'Curia'. The construction was completed in 1952.⁵³

Aalto had developed his ideas for public buildings over several years. Already during the war, he had sought contacts in Sweden and had become acquainted with a local steel company owned by the Johnson family. Among others, Aalto made an ambitious plan for cultural buildings, known as the Johnson Institute (Johnsoninstitutet).⁵⁴ In 1944 Aalto, in collaboration with the Swedish architect Albin Stark, made a proposal for the town centre of Avesta. This project was also entitled 'Akropolis'. It consisted of municipal offices, a library, a workers' club, a theatre, a concert hall, a hotel and restaurants, arranged as a single entity around a central square, called a 'citizen courtyard'. One part of this centre would have been a community centre, *folkets hus*. Aalto and Stark emphasised how such a concentration of activities would bring social life together. Their idea was to create a particular locus for the city, a centre that could join the lives of all inhabitants and become 'a symbol of inner loyalty'⁵⁵ (Fig. 7). The following year, Aalto and Stark submitted a competition entry (entitled 'Song of the pines') for Nynäshamn Town Hall. The wedge-shaped building was located on the seashore, on top of a knoll. This was another version of a town hall, but was mainly intended for municipal administration.⁵⁶ These proposals were not realised.

The layout of Säynätsalo Town Hall, around a central court, resembled the Avesta proposal on a smaller scale. The town hall consisted mainly of municipal offices, an assembly hall for the town council, and a public library. Aalto himself described Säynätsalo 'an idyllic workers' community, a kind of Tahiti on Lake Päijänne'. He also preferred to call the town hall a 'miniature city hall', even if the community had only some 3,000 inhabitants⁵⁷ (Fig. 8).

In his town plan Aalto had envisaged a cultural centre, an open-air theatre and a sports field. These elements were not included in the competition programme. However, together with architect Veikko Raitinen, Aalto came up with another design for Säynätsalo Cultural Centre near the Säynätsalo sports field. Its programme resembled that of a community centre, including a gymnasium, an auditorium, a theatre stage, meeting rooms and a coffee shop. This project was not built.⁵⁸

The general town plan of Imatra

The planning for Imatra was initiated at the end of the Second World War. In terms of territorial concessions, the result of the war remained the same as at the end of the Winter War. Imatra was now located only about ten kilometres (six miles) west of the new south-eastern Russian border, on the shore of the largest Finnish lake, Saimaa, in the opposite direction. Here the waters of Saimaa pour into the river Vuoksi, which flows through Imatra and then cross the border. This short river section had two hydropower plants: Tainionkoski and Imatra. In the new situation, the Enso-Gutzeit Corporation considered it important to integrate the existing functions of Imatra. In February 1947, the board of directors took the initiative to develop a general plan for the area. In June 1948, the town council of Imatra commissioned Aalto to prepare the plan. Enso-Gutzeit defrayed the expenses and the plan was ready in 1953.⁵⁹

Aalto's plan unified the originally dispersed plan of Imatra to a certain degree, but not entirely. He coined the term 'forest town', referring to the amount of forest patches between built areas: '– – Parks (preserved woodland) form by far the most outstanding feature of the plan, and Imatra may well be called a forest town. It is therefore unnecessary to plan artificial parks in the middle of the built-up areas, particularly as the woodland often penetrates to the heart of the main centers.'⁶⁰ (Fig. 9).

The starting point of Aalto's plan was the Kaukopää sulphate cellulose mill, constructed ten years previously. This part of Imatra was a narrow strip between Saimaa and another lake, Immolanjärvi. Another, smaller concentration of industrial functions was located east of the river Vuoksi. In Aalto's plan, these areas were called the northern and the southern industrial areas. The rest of the plan was divided into 27 zones. The published plan reflected this division. Each zone had a separate description with a detailed map. Zones 1–18 were kind of town districts, reserved for residential and other urban functions, on both sides of the river. Three of them were old local village centres: Imatrankoski (no. 4) was famous for its rapids and a Jugendstil-style castle-like hotel (built in 1903). Tainionkoski (no. 1) had been built around the industrial facilities of the Tornator company. Vuoksenniska (no. 11) was situated between the Kaukopää industrial area and Immolanjärvi. Zone 14 was the traffic centre, and zone 15 the administrative centre. Zones 19–25 were reserved for agriculture. Zone 26 consisted of a few nearby islets, and zone 27 of sports grounds and a woodland cemetery.

The intended urban focus of the area was the administrative centre of zone 15. Aalto considered such a centre necessary because of his applied structural principle. He explained this idea in the plan: 'When a new municipality is formed out of several scattered nuclei a new administrative center is inevitably required. In this case, the most profitable approach seemed to be to neglect all of the old centers – – and to form a new, more central, administrative focus which would be of use to all these areas. This would form a fourth dominant concentration of inhabitants and a new traffic center.'⁶¹ The idea was logically sound, but it left space for new public buildings as well. Aalto started to prepare his own proposal before finalising the general plan, in 1949. This project, therefore, coincided with the competition for Säynätsalo Town Hall.

Aalto's proposal was not successful, but the drafts have remained. They expose an ambitious composition of a town hall, a cultural centre and a few smaller buildings, all grouped around a common square. The cultural centre had several functions: a library, a theatre, an exhibition hall, and a cafeteria.⁶² A photograph of the scale model was included in the published version of the general plan (Fig. 10). Obviously Aalto's idea had been rejected at this phase, as the model was not in line with the description of the final plan of 1952. It does not mention the cultural centre at all.⁶³ Later, in 1955 Aalto participated in an architectural competition for a new church for Imatra. His proposal won and Vuoksenniska Church became one of Aalto's most renowned works. Aalto's elastic structural idea unfortunately proved unsuccessful as time passed. Too much open land area, left inside the town, complicated the future development of Imatra.⁶⁴

Conclusion

Each of the three examples analysed above had both regional and local urban dimensions. Aalto's interest in public buildings adds a 'third level' to the analysis. In the planning for the Kokemäenjoki River Valley, Aalto remained at the regional level but justified the existence of urban concentrations within a regional system. This idea cleverly created a rationale for his later community concepts, a framework that he used for town planning and building design purposes. The planning of Säynätsalo was made for a single industrial party and therefore resembled an ordinary industrial community the most. Aalto focused his planning on the urban community, but placed it within a regional frame, even if it was limited in scope. In Imatra, Aalto's task was to rearrange an originally dispersed village system. He formulated a system of separate urban districts, which together created an entity. The structural aspect of regional planning was clearly important to Aalto, but has been neglected in several recent analyses.

Aalto was probably influenced by American regional thinking and the TVA project, even if he did not explicitly refer to it.⁶⁵ His connections with the United States were active before and during the Kokemäenjoki River Valley project. Finnish industry, on the other hand, provided valuable resources for Aalto's regional planning efforts. The most important contextual link between Aalto and industry was, however, community planning. Industry needed production plants, houses for the workers, schools for their children and other buildings. Here the Finnish industrial tradition perhaps diverged from American resource towns. Aalto's industrial communities were for permanent use and future expansion – this was one of his basic ideas about regional planning. Lewis Mumford, for example, had been critical of the housing that the Norris project had produced.⁶⁶

Emanating from this industrial background, Aalto's planning extended towards 'ordinary' urban planning. Aalto seemed to anticipate the later neighbourhood unit concept, especially in respect of structural considerations. He certainly was aware of it at the end of the 1940s, and the general town plan of Imatra approached the neighbourhood unit concept in a strange way. Still one cannot easily take it as a direct application of the British, or any other planning model. Considering Aalto's general attitude towards planning and design problems, he was unlikely to adopt such ready concepts.

The clearest indication of Aalto's individual thought was his idea of local centres. They were not restricted to the Swedish concept of the 'folkets hus' or the British community centre model.⁶⁷ The designs for Avesta, Nynäshamn, Säynätsalo and Imatra were all different, and did not share a common architectural programme. In their urban character they were more ambitious than those ordinary club buildings⁶⁸ that Aalto had designed for industrial areas. Aalto's buildings reflected his experience as a designer of cultural institutions: churches, theatres, assembly halls and libraries. Demetri Porphyrios, for example, has associated Säynätsalo Town Hall with Bruno Taut's idea of *Stadtkrone* (1919).⁶⁹

Hence, Aalto's 'layered' view of planning was practical in at least two ways. It legitimised his community ideas, but also allowed him to merge various influences from foreign regional planning, domestic industrial community planning, and traditional architecturally ambitious town planning.

In 1953 Aalto encouraged the design of neighbourhood centres but, at the same time, defended public buildings against commercial building, which now dominated the city.⁷⁰ Aalto was not active in the planning of Finnish neighbourhood units during the 1950s. His legacy was more about urban design and planning than neighbourhood unit development. It is not surprising that after Säynätsalo Aalto designed many ambitious projects for traditional city centres in the 1950s. According to Eva Rudberg, Avesta centre was a pioneering project that anticipated post-war solutions in the Nordic countries. Of Aalto's own projects, the town centre of Seinäjoki (1958) in Finland was the closest to the Avesta project.⁷¹ The tradition of building town halls, often supplemented by cultural services, remained in Finland for a long time. This may have been part of Aalto's legacy.

Still many of Aalto's plans resembled neighbourhood planning in some respects. He won the town planning competition for the new University of Technology in Otaniemi, Espoo (the neighbouring municipality of Helsinki) in 1949. Another successful competition came in 1951 for the Institute of Pedagogics in Jyväskylä. Both these long-standing projects consisted of town planning and design for university buildings. These specialised campus communities somewhat complied with Aalto's previous community ideas. Aalto later designed a shopping centre (1960) for Otaniemi. Another important project was the industrial area for the Typpi Oy fertiliser factory in Oulu (1950–). One of the buildings was a shopping centre (1952) for the housing area. Only one of Aalto's later proposals came close to neighbourhood unit planning: the master plan for Stensvik, Espoo (1964–1966). This would have consisted of several housing areas, but without public traffic connections. The plan was not accepted.

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Notes

- ¹ Korvenmaa, "Aalto and Finnish Industry," 73–74; Korvenmaa, "Modern Architecture Serving Modern Production," 10–13; about Toppila, see Schildt, *Alvar Aalto*, 1994, 147.
- ² Härö, "Schooling architects – On systematic architectural education in Finland"; Wäre, "Architects and the Finnish Architects' Club at the turn of the century."
- ³ Mikkola, "Alvar Aalto ja kaupunkisuunnittelu = Alvar Aalto and Town Planning," 130–131.
- ⁴ Korvenmaa, *Kauttua*; Korvenmaa, "War destroys and organizes: Architects and crisis"; Korvenmaa, "Aalto and Finnish industry"; Korvenmaa, "Modern architecture serving modern production."
- ⁵ Nupponen, *Arkkitehdit, sota ja yhdyskuntasuhteiden hallinta*.
- ⁶ Pelkonen, *Alvar Aalto*, 117–139.
- ⁷ Anderson, Fenske, and Fixler, *Aalto and America*.
- ⁸ Nikula, "The city in the writings of Alvar Aalto."
- ⁹ Mumford, "Alvar Aalto's Urban Planning and CIAM Urbanism."
- ¹⁰ Hurme, *Suomalainen lähiö Tapiolasta Pihlajamäkeen*.
- ¹¹ Hankonen, *Lähiöt ja tehokkuuden yhteiskunta*.
- ¹² Korvenmaa, "War destroys and organizes: Architects and crisis," 116.
- ¹³ A concise overall introduction is available in Myllyntaus, "Technological Change in Finland"; see also Myllyntaus, *Finnish Industry in Transition 1885 – 1920: Responding to Technological Challenges*.
- ¹⁴ Korvenmaa, "Aalto and Finnish industry"; Korvenmaa, "Modern architecture serving modern production."
- ¹⁵ Nupponen, "Yhdyskunnat ja yhteisen hyvän tekijät. Teollisuus ja arkkitehdit yhdyskuntien kehittäjinä."
- ¹⁶ Schybergson, *Verk och dagar*; Tallqvist, *A. Ahlström Osakeyhtiö*.
- ¹⁷ Ahvenainen, *Enso-Gutzeit Oy 1872-1992*, 1992; Sivonen, *Enso-Gutzeit Osakeyhtiön selluloosateollisuus maailmansotien välisenä aikana*; Niskanen, *Väinö Vähäkallio ja hänen toimistonsa*, 238–244.
- ¹⁸ Virkkala, "Finnish Regions: After Transition," 104; Hoikka, *Väliasteen hallinto Suomen poliittisessa järjestelmässä*, 115–126.
- ¹⁹ Alpola-Narinen, *Uusmaalaisen aluesuunnittelun vuodet*; Schulman, *Alueelliset todellisuudet ja visiot*, 116.
- ²⁰ "Otto-I. Meurman"; Meurman, *Asemakaavaoppi*, preface for the facsimile printing; Hurme, *Suomalainen Lähiö Tapiolasta Pihlajamäkeen*, 76–78, 85–89.
- ²¹ Ajo, *Valtakunnansuunnittelu*; Paavilainen, *Valtakunnansuunnittelu Suomessa*; Aalto, "Valtakunnan suunnittelu ja kulttuurimme tavoitteet."
- ²² Mumford, *The Culture of Cities*; Mumford, *Stadskultur* (in Swedish); Mumford, *Kaupunkikulttuuri* (in Finnish); see also Meurman, "Lewis Mumfordin teos kaupunkikulttuurista"; Saarinen, *The City, Its Growth, Its Decay, Its Future*.
- ²³ Meurman, *Asemakaavaoppi*, 77–81; see also Hurme, *Suomalainen lähiö Tapiolasta Pihlajamäkeen*, 78–82.
- ²⁴ Meurman adopted the diagram from Danneskiold-Samsøe, "County of London Plan 1943."
- ²⁵ Meurman, "Hagalundin rakennussuunnitelma"; Hurme, *Suomalainen lähiö Tapiolasta Pihlajamäkeen*, 97–104.
- ²⁶ Perry, "The Neighborhood Unit: A Scheme of Arrangement for the Family-Life Community."
- ²⁷ Hurme, *Suomalainen lähiö Tapiolasta Pihlajamäkeen*, 35–36; see also Meurman, *Asemakaavaoppi*, 63–64, 336.
- ²⁸ Fry, *Fine Building*; Meurman, "Maxwell Fry: Fine Building."

- ²⁹ Hurme, *Suomalainen lähiö Tapiolasta Pihlajamäkeen*, 55–58; Sidenbladh, *Planering för Stockholm 1923-1958*, 263–265, 305; Rudberg, *Uno Åhrén. En föregångsman inom 1900-talets arkitektur och samhällsplanering*, 175–180.
- ³⁰ Ahlberg, *Stockholm blir regionstad*, 58; Danneskiold-Samsøe, *Nutida engelsk samhällsplanering*.
- ³¹ Sidenbladh, *Planering för Stockholm 1923-1958*, 337–338; Åhrén, “Community Centres – Folkets Hus”; Stephenson and Stephenson, *Community Centres*; Curman and Zimdahl, “Gruppsamhällen.”
- ³² Hurme, *Suomalainen lähiö Tapiolasta Pihlajamäkeen*, 82–85, 104–133; Hertenzen, *Koti vaiko kasarmi lapsillemme*; Wejke and Ödeen, “Bebyggelsen på Guldheden i Göteborg.”
- ³³ Pearson, *Alvar Aalto and the International Style*; Mikkola, “Alvar Aalto ja kaupunkisuunnittelu = Alvar Aalto and Town Planning,” 133; Schildt, *Alvar Aalto*, 1986; Schildt, *Alvar Aalto*, 1991; Rautsi, “Alvar Aalto’s unrealised regional and urban plans”; Nikula, “The city in the writings of Alvar Aalto”; see also the anthology Anderson, Fenske, and Fixler, *Aalto and America*.
- ³⁴ A chronological list of the visits is available in Anderson, Fenske, and Fixler, *Aalto and America*, vii–ix.
- ³⁵ Anderson, Fenske, and Fixler, *Aalto and America*, vii; Pelkonen, “Aalto Goes to America,” 93 note 31; Korvenmaa, “A Bridge of Wood: Aalto, American House Production, and AFinland,” 100.
- ³⁶ Sophia Mumford’s letters to Aino Aalto on 22 April and 2 May 1940. (The collection of the Alvar Aalto Museum.)
- ³⁷ Friedmann, “The Concept of a Planning Region – The Evolution of an Idea in the United States,” 503–507; see also Soja, “Regional Planning and Development Theories,” 261.
- ³⁸ Wickberg, *Amerikka rakentaa*; see also Aalto, “Amerikkalaisen rakennustaitteen henkinen tausta.”
- ³⁹ Mumford, “Alvar Aalto’s Urban Planning and CIAM Urbanism”; Sert, *Can Our Cities Survive?*, 220.
- ⁴⁰ Schildt, *Alvar Aalto*, 1994, chap. I.
- ⁴¹ The starting years are mainly from Schildt, *Alvar Aalto*, 1994. Other sources: The drawing collection of the Alvar Aalto Museum; Korvenmaa, *Alvar Aalto Architect: Sunila 1936–54*; Nupponen, *Arkkitehdit, sota ja yhdyskuntasuhteiden hallinta*.
- ⁴² Aalto, *Kokemäenjoenlaakson aluesuunnitelma*; Nupponen, *Arkkitehdit, sota ja yhdyskuntasuhteiden hallinta*, 62–108, esp. 67–78, 97–101.
- ⁴³ Aalto, *Kokemäenjoenlaakson aluesuunnitelma*.
- ⁴⁴ Aalto, “Maaseudun rakennuskysymys”; Aalto, “Kokemäen jokilaakso, aluesuunnitelma, yleisselostus.”
- ⁴⁵ Aalto, “Maaseudun rakennuskysymys.”
- ⁴⁶ Aalto, “Maaseudun rakennuskysymys”; Aalto, *Kokemäenjoenlaakson aluesuunnitelma*, 9–10; Aalto, “Kokemäen jokilaakso, aluesuunnitelma, yleisselostus”; about Aalto’s views, see also Nikula, “The city in the writings of Alvar Aalto,” 159.
- ⁴⁷ Ahvenainen, *Enso-Gutzeit Oy 1872-1992*, 1992, II Vuodet 1924–1992:496–497; Kuusi, *Toiminimi Joh. Parviainen 1856–1947*.
- ⁴⁸ An unsigned letter to Hilmer Brommels from Aalto dated 15 January 1943; a letter from Aalto’s office to Brommels dated 28 August 1943 (The collection of the Alvar Aalto Museum). However, ‘draft no. 5’ (no. 13/244) has been dated 31 May 1944, and according to Schildt the plan was completed in 1947 (The drawing collection of the Alvar Aalto Museum); Schildt, *Alvar Aalto*, 1994, 17. According to Kuusi, *Toiminimi Joh. Parviainen 1856–1947*, 212, Aalto’s town plan was applied from year 1943.
- ⁴⁹ A copy of an unsigned letter to Joh. Parviainen Tehtaat Oy, dated January 1945; a pencil marking for 6 February 1945 added. (The collection of the Alvar Aalto Museum.)
- ⁵⁰ Drawings no. 13/250 and 13/251 (The drawing collection of the Alvar Aalto Museum).
- ⁵¹ Copies of Aalto’s letters to Parviainen (Brommels), signed and dated 29 September 1945, and to Brommels, unsigned, dated 29 October 1945 (The collection of the Alvar Aalto Museum).
- ⁵² Drawing no. 14/155 (The drawing collection of the Alvar Aalto Museum).
- ⁵³ A letter (no. 558/49) from Säynätsalo Town Council to Alvar Aalto, dated 30 July 1949. (The collection of the Alvar Aalto Museum.) I was kindly informed about the deadline by Mr Timo Riekkö from the Alvar Aalto Museum (email correspondence of 19 Feb. 2015).
- ⁵⁴ For more about these projects and the Avesta centre, see Schildt, *Alvar Aalto*, 1991, 72–84; Storm, “Hope and Rust.”
- ⁵⁵ Aalto and Stark, “Avestan kaupungin keskus : Avestan kaupungin yleisten rakennusten kehittämissuunnitelma”; Aalto and Stark, “Avesta stadscentrum.”
- ⁵⁶ “Tävling om stadshus i Nynäshamn.”
- ⁵⁷ Aalto, “Kunnantalo, Säynätsalo.”
- ⁵⁸ Drawings no. 46/968–46/973 (The drawing collection of the Alvar Aalto Museum), the site plan dated 14 April 1950; Schildt, *Alvar Aalto*, 1994, 17, 93.
- ⁵⁹ A copy of a letter from the Imatra Town Council to the Council of State, dated 24 July 1948 (the collection of the Alvar Aalto Museum); *Imatra*.

- ⁶⁰ *Imatra*; see also Rautsi, "Alvar Aallon toteutumattomat alue- ja kaupunkisuunnitelmat," 114; Aalto, "Imatran yleiskaava."
- ⁶¹ *Imatra*, 8 (original text in English).
- ⁶² Drawings no. 13/917-13/930 (The drawing collection of the Alvar Aalto Museum).
- ⁶³ *Imatra*, 83.
- ⁶⁴ Rautsi, "The Alternative: Alvar Aalto's Urban Plans, 1940-1970," 16.
- ⁶⁵ Korvenmaa, "Aalto and Finnish industry," 92 (note 67).
- ⁶⁶ Plates 23 and 24 in Mumford, *The Culture of Cities*. About architect Roland Wank's temporary housing for TVA, see Wank, "Demountable Houses: Smith Creek Village, Appalachia Dam, TVA"; *The Norris Project. A Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Tennessee Valley Authority's First Water Control Project*.
- ⁶⁷ Åhrén, "Community centres – folkets hus"; Stephenson and Stephenson, *Community Centres*.
- ⁶⁸ These designs include clubhouses for the workers of the Toppila mill in 1936, for Strömberg Corporation in 1943, and for the company Atri Oy in Lapland in 1944.
- ⁶⁹ Porphyrios, *Sources of Modern Eclecticism*, 28.
- ⁷⁰ Aalto, "Julkisten Rakennusten Dekadenssi = De Offentliga Byggnadernas Dekadens = The Decadence of Public Buildings."
- ⁷¹ Rudberg, *Alvar Aalto i Sverige*, 66-68, 77.

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List of illustrations

Figure 1. Map of Finland, showing the main cities, the pre-1939, 1940–41 (dotted) and post-1944 (solid) borders, principal area cessations (grey; Petsamo after 1944), and the industrial sites discussed in this paper.

Figure 2. The Kokemäenjoki River Valley Regional Plan. (Source: Aalto, *Kokemäenjoenlaakson aluesuunnitelma* / The drawing collection of the Alvar Aalto Museum.)

Figure 3. A photograph of Harjavalta hydropower plant was included in the Kokemäenjoki River Valley plan. The iconography closely resembles that in Mumford's *The Culture of Cities*, especially the depictions of the Norris dam, spillway and powerhouse in plates 23 and 24. (Source: Aalto, *Kokemäenjoenlaakson aluesuunnitelma*)

Figure 4. The Säynätsalo General Plan, undated. The originally coloured map shows the following types of areas, shaded: industrial areas (dark grey), town planned area (white), forest and parkland (medium grey). As can be seen, Aalto's word 'region' signified a relatively small area, less than six kilometres (four miles) in diameter, enclosed within the Parviainen mills industrial property. (Source: the drawing collection of the Alvar Aalto Museum, drawing no. 13/250.)

Figure 5. The Säynätsalo Town Plan, draft, dated 31 May 1944. Legend: m) Mill area, r) Industrial reserve area, q) Central square, s) Sports arena and public buildings, t) Open-air theatre, b) Bathing place, 1) Mill headquarters, 2) Station building, 3) Town hall, 4) Church, 5) School, 6) Hospital, 7) Staff club. (Source: the drawing collection of the Alvar Aalto Museum, drawing no. 13/244.)

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Figure 10. Imatra centre, model photograph. The town hall is on the right and the cultural centre at the back. (Source: *Imatra: Kauppalan yleisemakaava*.)



Fig. 1.

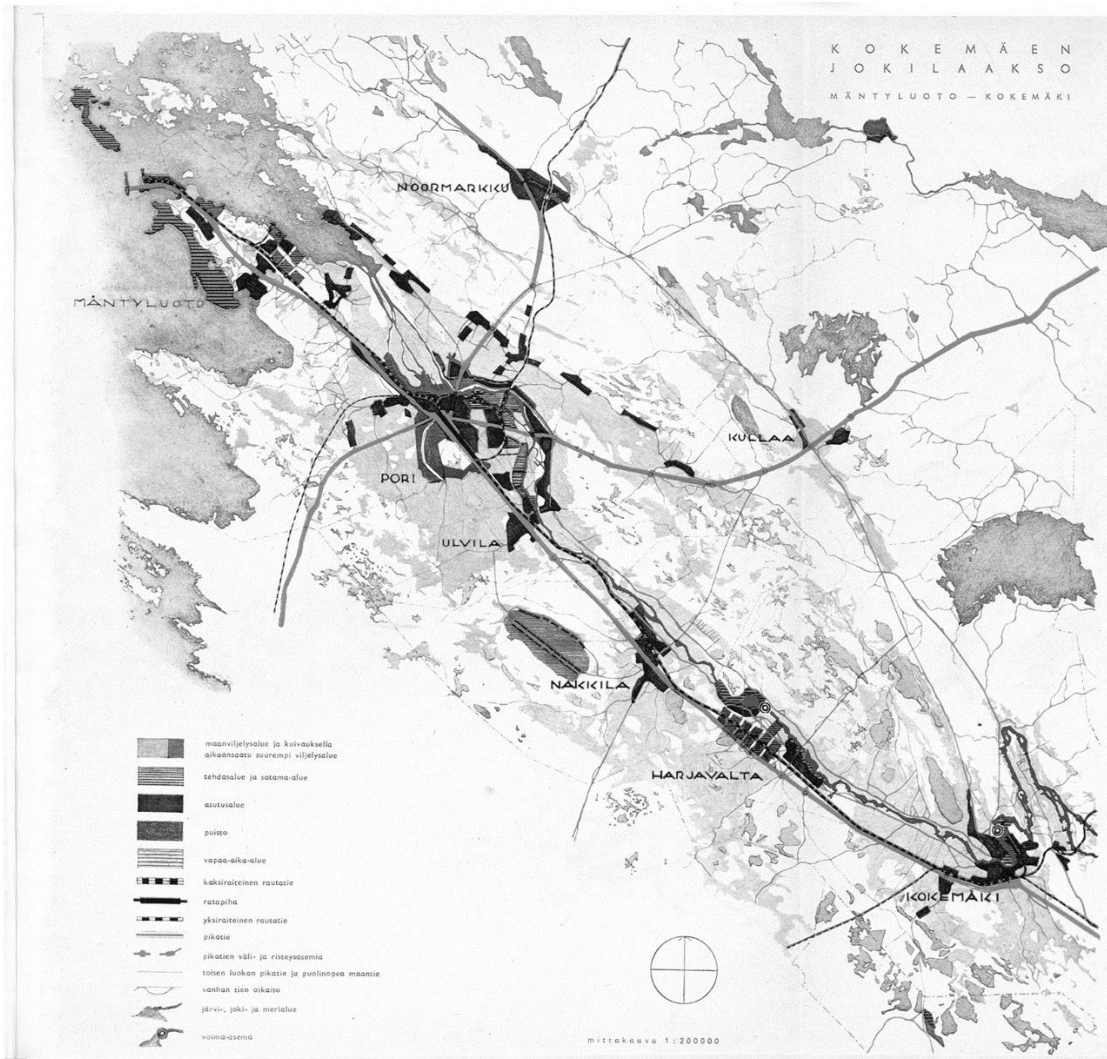


Fig. 2.

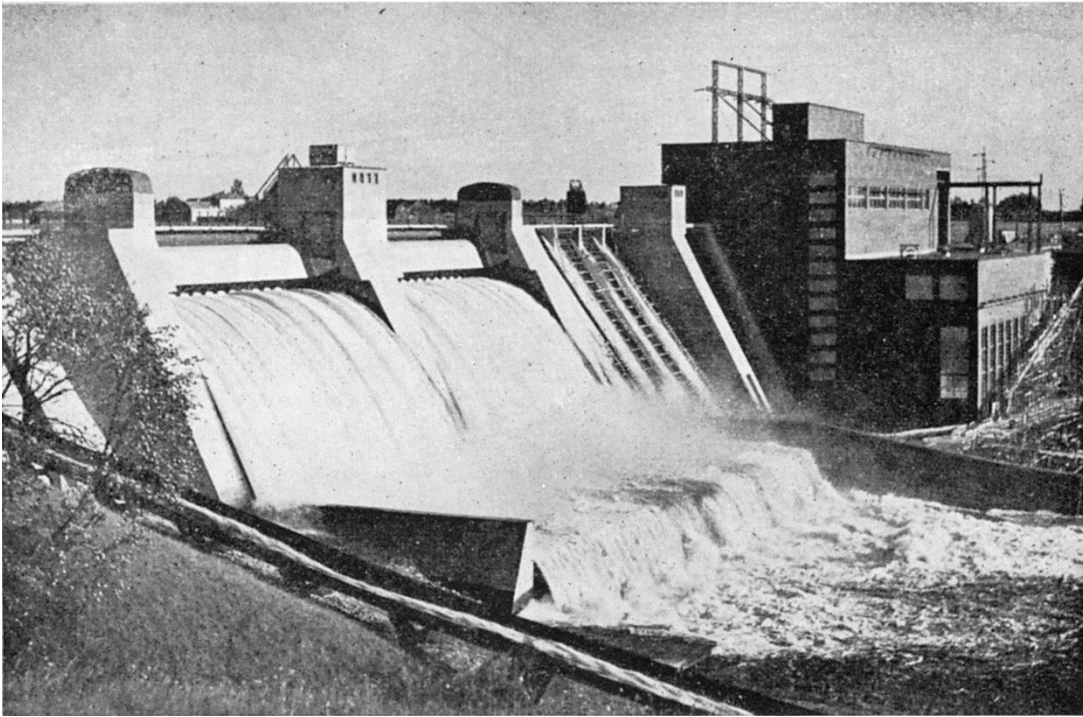


Fig. 3.

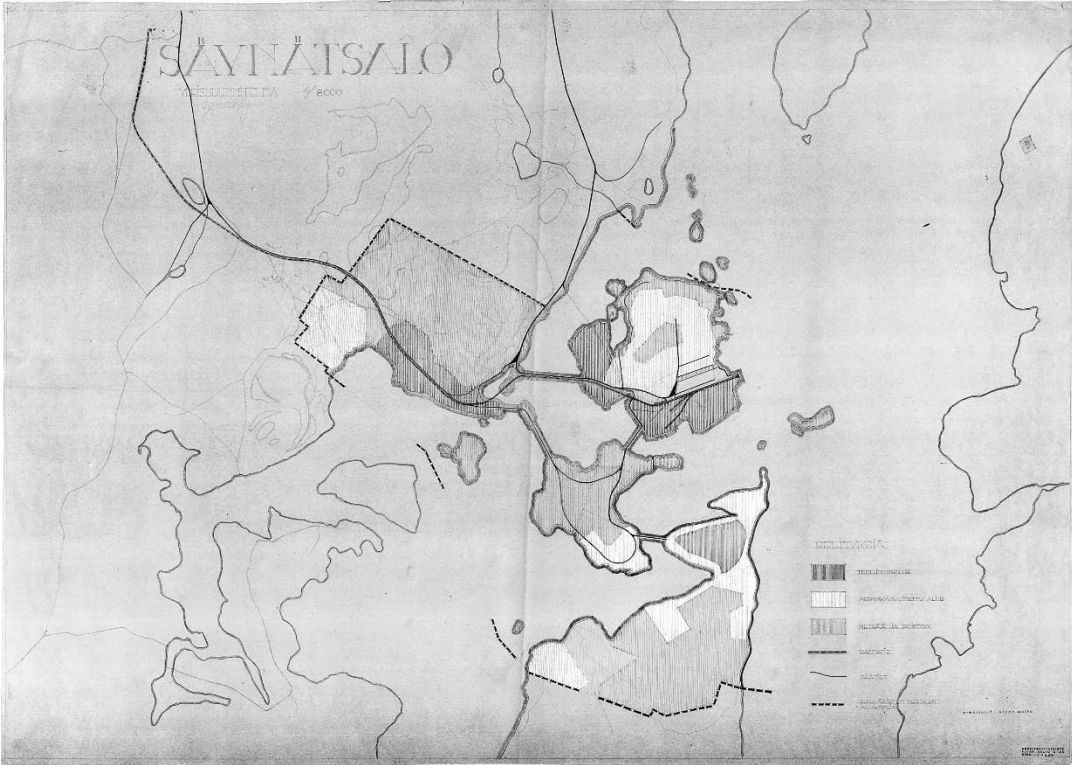


Fig. 4.

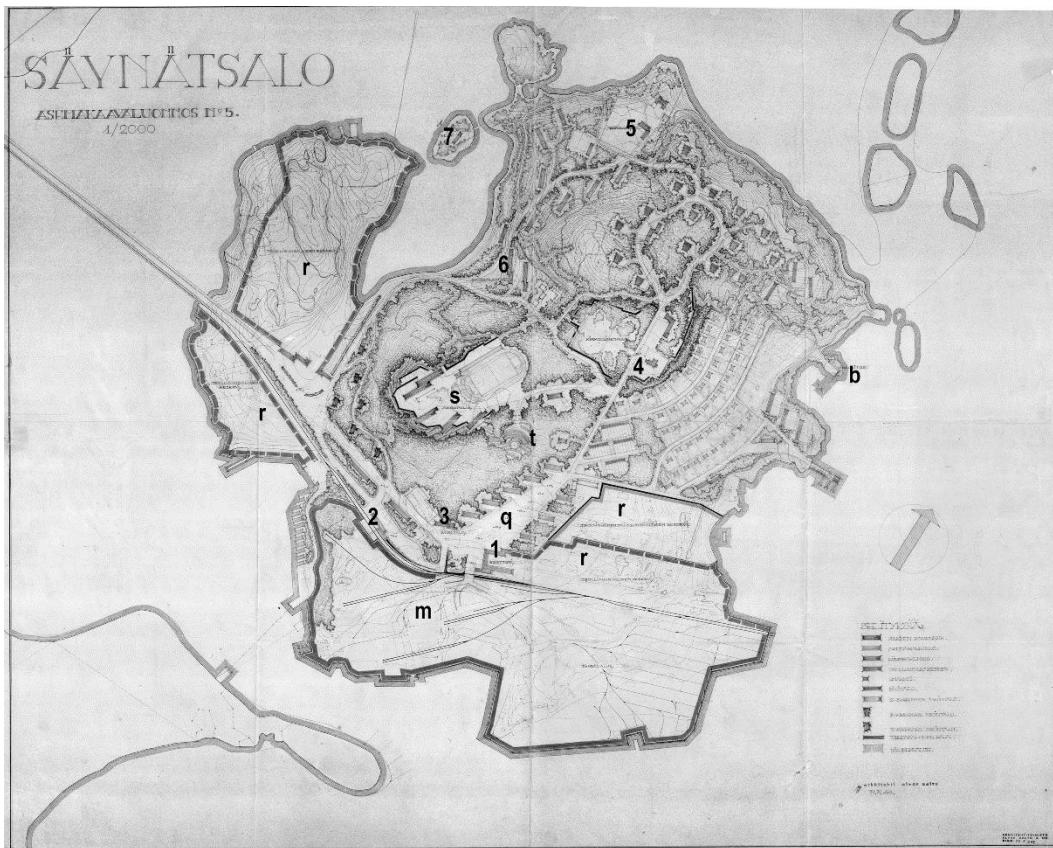


Fig. 5.

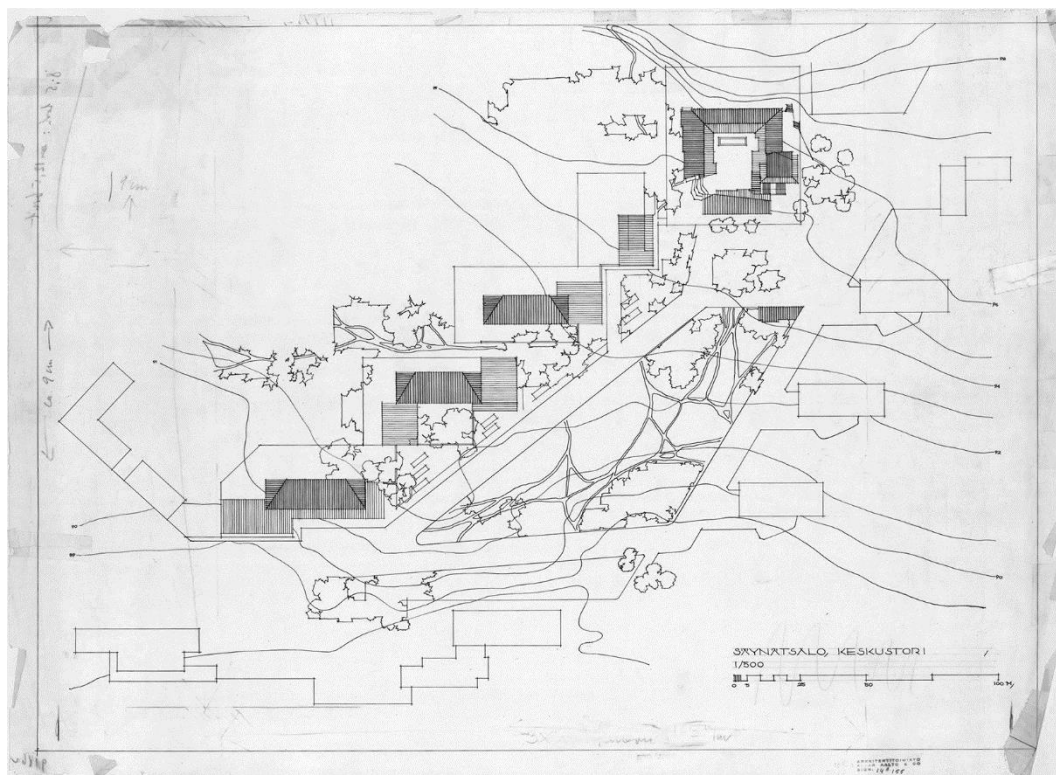


Fig. 6.

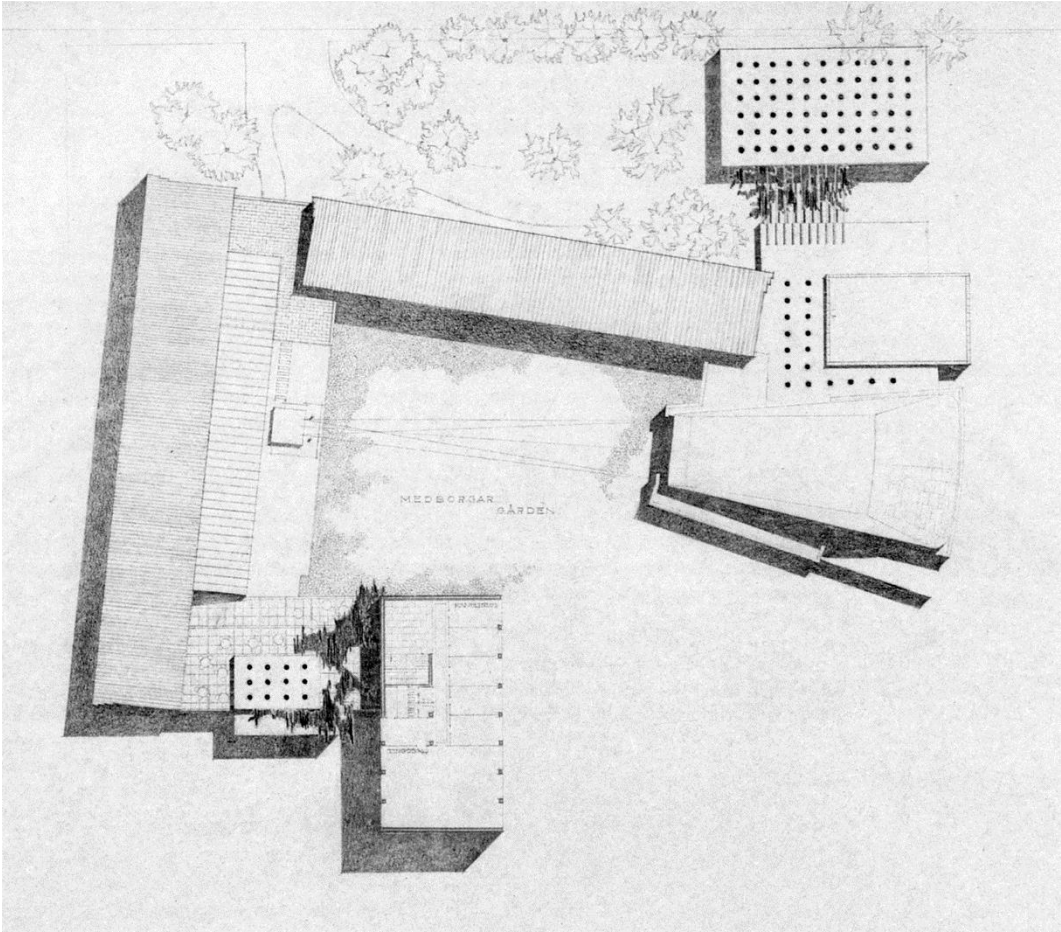


Fig. 7.



Fig. 8.



Fig. 9.

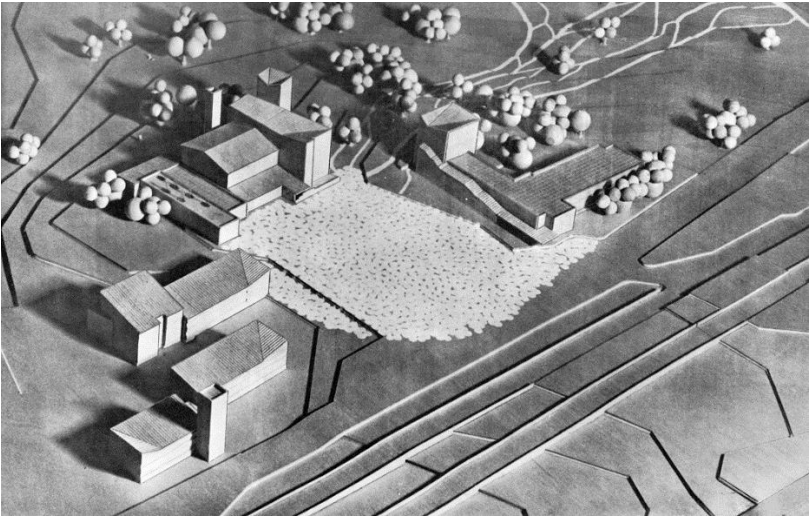


Fig. 10.