Alvar Aalto's architecture in Oulu, Laanila: apartment buildings
planning of repairs and upcoming infill

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Oulu, 2015
THESIS ABSTRACT

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Title of Thesis
Alvar Aalto's architecture in Oulu, Laanila: apartment buildings planning of repairs and upcoming infill

Major Subject
Architectural Design

Type of Thesis
Master Thesis

Submission Date
25.11.2015

Number of Pages
100

Abstract

This study looks at the Laanila district of the city of Oulu and, in particular, apartment houses, designed by Alvar Aalto, their history and current situation from a number of points of view. Topical research includes the survey of industrial heritage of Alvar Aalto in Finland with focus point on workers' housing. This kind of work has not previously been done for Laanila housing, therefore, this is the first attempt to summarize and structure the knowledge about this area, which has been, somehow, the latest of Alvar Aalto works in the field of housing for industrial areas in Finland. My work is committed to learning the values of this district's constructed and natural environment. The general idea is to identify and assess cultural significance using international restoration declarations as a guidelines. In practice, my target is to investigate past and present condition of original Laanila buildings and their urban environment, social and technical aspects, and offer several renovation and infill solutions based on this analysis with all respect to the values this over 60 years old residential group possesses. They are meant to make a positive change for people who interact with these houses and their infrastructure. Another purpose is investment into the common knowledge of Alvar Aalto's work, which is not yet completely described and estimated.

368 800m² - area of investigation
90 000m² - area of close-up study
19 370m² - territory belonging to houses under research
1 708m² - footprint area of all three buildings

The sources of materials used come from the City of Oulu Archives, SATO Oy, Realia Oy, as well as Alvar Aalto Foundation, Oulu University School of Architecture archives and library, in addition to a number of literary and Internet references.

Master thesis consists of two parts: the exposure materials (8 boards A1) and a booklet.

Place of Storage
Library of the department of architecture

Additional information
Language of the Thesis is not native for its author

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I. HISTORY OF LAANILA
1. HISTORY OF LAANILA
When the feudal system reached its culmination in Finland during the reign of the Swedish Queen Christina in the 17th century the parishes in Northern Ostrobothnia were given to feudal barons, who had the right to collect taxes from them. In the 1650s in Northern Ostrobothnia were established seven baronial districts. The Oulu district comprising 78 units, was presented to baron Erik Gyllenstierna, who lived in Stockholm himself, and tax collection (mostly in the form of tar and fish) was the duty of his local representative.

The center of the feudal district of Oulu, the governor’s seat, was a manor formed by uniting three country properties. This estate later came to be called the “Laanila Court”, or the “Baron’s Court”. The first baron’s ‘office’ was built in 1667 by order of Gyllenstierna. In 1675 the feudal districts were officially dissolved, and Laanila lost its significance as the governmental estate of “His Highness”, but it soon became the seat of the assize-court judge. For more than two centuries Laanila was the centre of the judicial district. The name and size of the district fluctuated, but it was the house where the management of legal matters was concentrated.

The ‘present’ Manor Estate was built in 1859, and presented in 1886 to the town of Oulu to be used for some “appropriate purpose”. Since no such was suggested, the estate was rented out for agricultural purposes.

Soon after the independence war there was keen competition in the whole country for the location of a Finnish nitrogen plant. Since it was important for the industrialisation programme in Northern Finland to have a large-scale industrial concern, the town council surrendered the proprietary rights of the Laanila Estate to Typpi Oy on 5th September 1949. The original intention of the Finnish government was to ensure self-sufficiency in food production by using nitrogenous fertilizer, which increased the harvest in agriculture significantly. Also, one of the reasons it was decided to place the industry in Oulu, was a positive effect on employment situation, since, in 1949, Finland’s biggest unemployment areas after the war were the Oulu and Rovaniemi regions. On 10th August 1950 an Extraordinary General Meeting of Typpi Oy confirmed the previous decision of the Administrative Council that the nitrogen plant was to be built in Oulu. Thus the core of the three hundred year old Laanila manorial estate came to be used for industrial purposes, with Virkatalo now used for the company’s representative purposes.1

The ownership has changed several times - in 1971, for example, Typpi Oy was merged with Rikkihappo Oy, resulting with creation of Kemira Oyj. Currently the ownership is divided between almost 8 companies.

1. Summed up from the study made in 1958 by Aslak Outakoski, the archivist of the Provincial Archives of Northern Ostrobothnia.
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1. Summed up from the study made in 1958 by Aslak Outakoski, the archivist of the Provincial Archives of Northern Ostrobothnia
LAANILA HISTORIC MAPS ANALYSIS

SITE TRANSFORMATION THROUGH TIME

- Oulu river and water canals
- Virkatalo, 1859
- Villa Onnela, 1890s
- First Kemira factory workers house by Alvar Aalto, 1951
- First engineers house with garage and sauna, second workers house and heating center by Alvar Aalto, 1952
- Garages by Alvar Aalto, 1950s (demolished in 2000)
- Site manager’s house ‘Villa Lehmus’ by Alvar Aalto, 1956
- Third workers house by Alvar Aalto, 1957
- Second engineers house by Alvar Aalto, 1968
- Other buildings, not preserved

Typpi Oy factory in Oulu, 1950s  photo: Pentti Huttunen

1950 Osoitekartta  Oulu City Archive

1952 Osoitekartta  Oulu City Archive
LAANILA HISTORIC MAPS ANALYSIS

SITE TRANSFORMATION THROUGH TIME

Sarvioja ('Horn ditch')

1950 Osoitekartta
Oulu City Archive

Kuusamontie plan
Villa Onnela
Virkatalo
Factory exhaust water canal
Engineers rowhouse
Villa Onnela
Virkatalo
Pump station

1952 Osoitekartta
Oulu City Archive

Kuusamontie
First two workers houses
Typpi Oy factory in Oulu, 1950s
photo: Pentti Huttunen
Oulu river and water canals
Virkatalo, 1859
Villa Onnela, 1890s
First Kemira factory workers house by Alvar Aalto, 1951
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Second engineers house by Alvar Aalto, 1968
Other buildings, not preserved

1962, original project of car shelters for worker's houses

Oulu School of Architecture Archive

1953 Peruskartta
Oulu City Yhdyskunta ja Ympäristö palvelut

1957 map

Peruskartta
Oulu City Yhdyskunta ja Ympäristö palvelut

1953 Peruskartta
Oulu City Yhdyskunta ja Ympäristö palvelut

Hintantie 60, kaksikerroksinen rivitalo, 1952, Alvar Aalto

1962 original project of car shelters for worker's houses
SITE PLANNING by ALVAR AALTO

INDUSTRIAL DEVELOPMENT IN FINLAND IN XXTH CENTURY

The turning point was the beginning of the XXth century, when the young independent country of Finland was established, energetic, hopeful and ready to build new, own lifestyle. The "industrial life epidemic" has started. Timber industry was the dominant sector of development, based on ample forest resources of the nation. The power of making decisions on land use, economical forms and legal owning of territories belonged to a relatively small circle of certain ‘elite’ families such as Serfiačius, Rosenlew, Kihlman and Ahlstrom, for example. They depended on each other financially, had close ties with the national power structure and leading politicians, and were shareholders, too, in joint, large-scale investments such as developing the scattered and non-urban forest industries in Finland — located as isolated communities in the countryside and without amenities such as housing and social services which an urban structure would have provided — facilitated a vast range of planning and design tools. It can be stated, that the social and economic role of the state authorities was fairly weaker than those of the industrialists who led the modernization process socially and technologically by investing not just in manufacturing facilities but in development and in services needed by manufacturing communities. The sponsors of such communities depended on a stable workforce, and the opposite, working class needed ‘normal life’ with guaranteed employment, family level benefits, etc., so these ‘oligarch vs. worker’ relationships were to the mutual benefit of factory owners and workforce. Obviously, housing of a high standard was a necessary element that helped a lot to establish society in a country that had suffered a disastrous civil war and a class struggle in 1918. On the macro level, developing of industrial areas has laid the ground for the vast regional plans along major waterways and industrial routes, such as the Kokemäenjoki River and the Imatra plan of the 1940s.[1]

1. S summed from Pekka Korvenmaa’s article ‘Modern Architecture serving modern production’

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1950 Alvar Aalto’s Laanila development ideas

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originals scanned from Oulu School of Architecture archive and City of Oulu Archives

- proposal of apartment houses location
- proposal of infrastructure buildings location
- proposal of public buildings location
- buildings existing or erected according to Alvar Aalto’s plan
- worker’s houses (now Laamannintie 10, 12 and 15)

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Laamannintie 10 in 1951. Wooden window parts seem to have no paint

Takalaanila in 1950, before Typpi factory

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"The years after 1945 seem to have been an occasion for many of Aalto's generation to pause and reconsider their relationships with the technological society that had produced such massive violence and destruction, and in Aalto's case, if the pattern does hold, its amplified by his serious consideration of the nature of the emergent welfare state. He was keenly aware, arguably before any other major architect, that the project of making the good life available to everyone, while fundamentally the right course of action, carried with it the risk of anonymization, of draining that life of fundamental goods both at the phenomenological level of the body (interacting with objects, touching them, breathing air under trees) and the communitarian spirit of society."

(c) www.flickr.com/photos/doctorcasino/8058247562
A TRULY DISTINCTIVE AT THE INTERSECTION OF INFLUENCES

As in other arts, creative spirit plays a major role in architecture. Oulu can boast several works of Alvar Aalto, and Laanila residential group is one of his latest industrial poems of mature thoughtful modernism, written on a land under northern sky. The style (which certainly needs to be distinguished) is not, however, a key issue to understand the language of his architecture. The main principles of any style follow Vitruvius triad elements of and ideal building: it’s sturdy, useful, and beautiful. Purely humanistic scale of Laanila masterplan reveals the social relevance of the artist’s work. The uncluttered distribution of the houses considers the landscape properties of the site, as well as position of every employee in the company (Typpi factory). Alvar Aalto suggests a lifestyle according to people’s contribution to the well-being of own country, which might be considered controversial at some point, but definitely successful approach at the time. Laanila urban community is a manifest, taking into account everything touching physical and intellectual life of a man and his surroundings. Every building is made for a man and considers the scale of human body and the laws of perception. The proper ratio of parts gives a sense of balanced environment. It allows each resident not to feel depressed or poor even in the modest house. Hand-drawn patterns of the masterplans are an example that lets the viewer to see in action the principles of organic modernism as a Total Work of Art. Even when it seems the arrangement of housing groups is dictated by exclusively practical reasons of designing low-cost, small-scale housing for the reconstruction of post-war Finland; same time every tenant was provided with the necessary facilities, convenient distances, harmony of both private and community life, maximum landscape views, etc.

The most accessible skill, that requires only little effort (and, as always, practice) to understand this architecture is the ability to feel. Every building here creates a certain feeling in the viewer, the only task is to catch it. This is an easy experience when seeing the realtionship of the parts to a whole, hierarchy and proportions, along with understanding of the history of this excellent example of Alvar Aalto's work. A valuable urban area, Laanila original site fits the principles of the Washington Charter on the Conservation of Historic Towns and Urban Areas (1987), that makes it worth of special care and protection:

• Urban patterns as defined by lots and streets;
• Relationships between buildings and green and open spaces;
• The formal appearance, interior and exterior, of buildings as defined by scale, size, style, construction, materials, colour and decoration;
• The relationship between the town or urban area and its surrounding setting, both natural and man-made;
• The various functions that the town or urban area has acquired over time.
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- The various functions that the town or urban area has acquired over time.

1956 Alvar Aalto’s Laanila development ideas

1956 - 1957, Alvar Aalto’s Laanila development ideas

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>proposal of apartment houses location</td>
</tr>
<tr>
<td>Orange</td>
<td>proposal of infrastructure buildings location</td>
</tr>
<tr>
<td>Black</td>
<td>buildings existing or erected according to Alvar Aalto’s plan</td>
</tr>
<tr>
<td>Red</td>
<td>worker’s houses (now Laamannintie 10,12 and 15)</td>
</tr>
</tbody>
</table>
ATTITUDE

"It's much more than saving old buildings! Historic preservation champions and protects places that tell the stories of our past. It enhances our sense of community and brings us closer together: saving the places where we take our children to school, buy our groceries, and stop for coffee – preserving the stories of ancient cultures found in landmarks and landscapes we visit – protecting the memories of people, places, and events honored in our national monuments."

www.preservationnation.org

It is hard to build a good city from a scratch. You can invite best architects, but still a City is not just a collection of beautiful buildings, public spaces, and convenient road network. City is also defined by its (hi)story, that cannot be built in the open field for any money. Centuries are layered on top of each other - including town planning mistakes and successful decisions of different generations, architectural styles, cultural ‘footprints’ and nation customs. City can be read as a history book. Economic crises, wars, revolutions - all leave their mark. From these traces a unique atmosphere is formed, or if you like, the Soul of a City.

Rather prosperous years in the early 1930s in Finland allowed industrial society development as never before. The timber mills were located near water sources due to technological processes requirements. They laid the ground for the vast regional plans along major waterways and industrial routes. From the mid-1930s, it was a group of mainly family-owned corporations that needed architects to give shape to their new investments. Becoming an architect for this target group promised a lot of commissions — once the début was convincing. The fortune had chosen Hugo Alvar Henrik Aalto (3.2.1898-11.5.1976), young architect graduated from Helsinki University of Technology (1921), from the elite circles of Jyväskylä - based architects, where he established his own architectural office (1923). Social position of architect's profession, not so much anymore in our days, was rated elite due to the comprehensive character of knowledge required to accomplish a variety of new challenges implied by that time commissions. On the other hand, the development of buildings technique at that time made it possible for just a few specialists team participating the design process. In 2015 it's impossible to imagine only one bureau responsible for the variety of building 'layers and levels' - authorities agreement, geodesy, construction, design, area development, ventilation/electricity/water networks, on-site supervision and maintenance; everything up to the door handles, and matching it with contemporary fire/legal regulations, building codes, etc.

Development of the site didn't stop after erecting main buildings, during next decade several plans were issued by Alvar Aalto's office in Helsinki. However, after 1970 land-planning and construction activity got frozen until the end of the XX century. Next time this Oulu district has got infilled after year 2000 (Projects by Pekka Lukkarinen Oy and Veli Karjalainen Oy (mostly).
1951-52, Villa Lehmus (Site Manager’s house)

1964, Alvar Aalto’s Laanila development ideas

1967, Alvar Aalto’s Laanila development ideas

- water canals
- proposal of apartment houses locations
- proposal of infrastructure buildings locations
- proposal of public buildings locations
- buildings existing or erected according to Alvar Aalto’s plan
- worker’s houses (now Laamannintie 10, 12 and 15)

North mark by Alvar Aalto

BUILDING (HERITAGE) SURVEY

1951 | 2015 Laamannintie 10, 12; original drawings from Oulu School of Architecture archive

1951, original drawings by Alvar Aalto, North-East façades

2015, North-East façades with 'French' balconies  photo: Silti Koskinen

Laamannintie 10 original plan (työväen asunnot)

Laamannintie 10A basement entrance

Laamannintie 10C entrance

Laamannintie 12 original plan (mestarin asunnot)

Laamannintie 10C entrance

1st floor
regular floor

1st floor
regular floor
BUILDING (HERITAGE) SURVEY
1956 | 2015  Laamannintie 15; original drawings from Oulu school of Architecture archive, City of Oulu Archive, Realia Oy Archive

LAAMANNINTIE 15

South-West façade

North-East façade

1956, first idea drawings by Alvar Aalto (regular floor)

2000 first floor plan by Lukkarinen Oy

Roof structure

Basement entrance A
A entrance original bike stand
Panorama of the backyard from B20 apartment
AFTER ALVAR AALTO 1967
Masterplan with the latest Laanila development proposal by Alvar Aalto’s Asemakaava; original map by Realia Oy

Oulu in 1951; Invited guests and members of the Typpi Supervisory Board. First from the right Site Manager Jaakko Lehmus. photo by Uuno Laukka

Typpi factory in 1950s; workers' houses (now Laamannintie 10 and 12)
FIVE DECADES before XXI century

AIRPHOTO ANALYSIS
1970 - 1999, 1:5000, original airphotos from City of Oulu electronic map services kartta.ouka.fi

1970 airphoto analysis: buildings

1970, Alvar Aalto’s drawing

1980 airphoto analysis: movement

Virkatalo, 1859
Villa Onnela, 1890
First Kemira factory workers house by Alvar Aalto, 1951
First engineers house with garage and sauna, second workers house and heating center by Alvar Aalto, 1952
Site manager’s house ‘Villa Lehmus’ by Alvar Aalto, 1956
Third workers house by Alvar Aalto, 1957
Second engineers house by Seppo Valjus, 1968
Workers houses adjacent garages demolished in year 2000.

1990 airphoto analysis: infrastructure

North mark by Alvar Aalto

1999 airphoto analysis: nature

Lainiala

Tenni

Water pump area

Hovinpolku between Kuusamo road and Laamannintie 15

Virkatalonpuisto

Lautamiehenpui

Typpipuisto

Lainiala

Tenni

Water pump area
Roofed parking places between Notaaritie and Hintantie (2004)

Roofed parking places between Notaaritie and Laamannintie (2007)
SITE TRANSFORMATION IN YEAR 2000
original base drawings by Pekka Lukkaroinen Oy and Veli Karjalainen Oy, Oulu school of Architecture archive

NEW CENTURY

1970 airphoto + 1990 (black and white) kartta.ouka.fi

Site plan until year 2000

2000 Courtyards development proposal by Pekka Lukkaroinen Oy

- benchmark houses (Laamannintie 10, 12, 15)
- year 2000 planned infrastructure (not realised)
- planned locations of new houses
- garages and bike parking demolition plan
AIRPHOTO ANALYSIS

2004 - 2009, 1:5000, original airphotos from City of Oulu electronic map services kartta.ouka.fi

GROWTH after year 2000

2004 airphoto analysis: **infill, new street, sports park**

2009 airphoto analysis: **new street, infill**

- Virkatalo, 1859
- Villa Onnala, 1890
- First Kemira factory workers house by Alvar Aalto, 1951
- First engineers house with garage and sauna, second workers house and heating center by Alvar Aalto, 1952
- Site manager’s house ‘Villa Lehmus’ by Alvar Aalto, 1956
- Third workers house by Alvar Aalto, 1957
- Second engineers house by Seppo Valjus, 1968

- New apartment buildings by Veli Karjalainen, 2001
- 2002
- 2003
- 2004
- 2005
- 2006
- 2007
- Other (technical) buildings
COURTYARDS

Through the history, area around Laamannintie houses didn’t change much until the beginning of XX century, literally. From the aerial photographs no demolitions or new infill can be observed. Year 2000, two Oulu architecture offices had got commissions concerning the buildings and their surroundings - Pekka Lukkaroinen Oy (numbers 10, 12 and 15), and Veli Karjalainen Oy (number 14b, so called “Lämpökeskus”, or a healing plant). Laanila had accepted first changes. The canal with exhaust cooler water from Kemira factory had been put underground completely, and a street named Laamannintie on top of it had appeared. New parking places, then new apartment buildings were introduced (numbers 14a, 17), and by the end of decade most of the space between factory engineers and workers houses had been filled with modern comfortable houses, clad in red brick to match the original prototypes by Alvar Aalto.

Football field and tennis courts ended their existence, surrounding old forest was mostly cut, leaving several parks. “Lämpökeskus” had become a house, too, following a renovation project by Veli Karjalainen Oy. Still, site improvements for the former Typpi workers houses by Pekka Lukkaroinen Oy has never been done accordingly. It contained suggestions to install playgrounds, resting places, BBQ and grill shelters, benches and plant extra trees and bushes while removing original outdoor bicycle storages. However, some changes can be found - concrete slabs pointing the way to basement entrances were put onto the ground, and one bike storage in front of number 10 got demolished. Some lighting poles were added, too.
II. PRESENT STAGE SURVEY AND POTENTIAL FOR NEW INFILL
1. Typpipolku, one of the area’s oldest pedestrian routes

2. Hintantie and Rattarinpolku cross

3. View from Hovinsuo hill to landmark houses

4. Laamannintie

5. Laamannintie – Notaarintie crossroad

6. Typpipolku under Kuusamontie

7. Typpipolku behind Laamanninte 12

8. Herastuomarinpolku

9. Notaarintie

10. Laamannintie end

11. Herastuomarinpolku

12. Rättärinpolku
AREA TRAFFIC  
photo May 2015

4. Laamannintie

5. Laamannintie - Notaarintie crossroad

6. Typpipolku under Kuusamontie  
original photo by Irene Hämäläinen

7. Typpipolku behind Laamannintie 12

8. Herastuomaripolku

9. Notaarintie

10. Laamannintie end

11. Herastuomaripolku

12. Rättärinpolku
AREA BUILDINGS

- Virkatalo, 1859, Hintantie 62 photo: Irene Hämäläinen, 2015

- Villa Onnela, 1890s, Hintantie 58 www.villaonnela.fi

- Apartment house, 1951, Laamannintie 10 photo: Irene Hämäläinen, 2015

2012 Original airphoto from Ouka.fi
AREA BUILDINGS

Apartment house, 2002, Laamannintie 17

Apartment house, 2003, Notaarintie 6

Apartment house, 2007, Laamannintie 4 photo: google maps

Apartment house, 2012, Laamannintie 1

1859-2012 buildings by time diagram

XIX century

1859 - Virkatalo
1890s - Villa Ornela

XX century

1950s - Alvar Aalto
1960s - Seppo Valjus

XXI century

Veli Karjalainen
2001-2005
2006-2010
2010s

2001
2002
2003
2004
2005
2006
2007
2012

1859-2012 buildings by time diagram
NEW INFILL IDEAS ANALYSIS

The scale of Laanila environment is perfectly humanistic with the height of the buildings limited to four floors, with many green areas and parks, as well as walking distance to Oulu river shore. Alvar Aalto’s architecture designed for the needs of Typpi factory (nowadays Kemira and others) in the area had created an example of materials (red brick) used for all newer apartment buildings.

Several axes define the main directions of infill growth: main roads Laamannintie, Notaarintie and longitude axes of the oldest houses. In case of adding more houses the best locations seem to be along these ways. Most of existing buildings are grouped by two, creating a semi-closed courtyard spaces with a good level of privacy. However, some buildings (Laamannintie 1, 15 and 17) don’t have a ‘pair’. House number 17, built in 2000, could possibly host another building, which would create a courtyard instead of just a parking place view. Number 15, designed in 1957 by Alvar Aalto’s office after the first two (1952) is unique and doesn’t need a pair. According to mid-century masterplans, there has been different plans to put more than three workers houses, but those were never realised. Technologically, modern houses are considerably different, which makes an idea to place similar houses as an exact copy of Alvar Aalto houses irrelevant. Instead, new buildings that match both landmark houses style as well as prevailing housing groups (by Veli Karjalainen, especially one from 2012) built during last 15 years, seem to make no harm. In the lower part, Notaarintie new house may become the last point in the street view. Locating one more house along the street requires extra studies, particularly on parking places distribution.

Existing pedestrian and bicycle route runs from Kuusamo road underpass west side of building 15, crosses Laamannintie, and then splits into two directions: along the houses 10 and 12 courtyards (probably disturbing the courtyard privacy feeling) and Herastuomarinpolku. Then two waves unite again at Hintantie cross to reach supermarket area of Hintta or virkatalo area. In case of new infill, the route could become more straight in the ‘upper’ part, suggesting the choice of road by colour (red sand/gravel, for example).
Potential new infill masterplan

Aerial view analysis of infill close to Laamannintie 12

BING maps

Aerial view analysis of infill near Laamannintie 15

- car traffic
- courtyards car traffic / parking
- pedestrian / bicycle traffic
- worker's houses by Alvar Aalto (kerrosalot)
- bike parking roofs
- existing houses
- adjacent technical buildings
- potential new infill houses
- adjacent technical buildings (infill)
- new car traffic / parking zones
- 'pass thru' bike / walking route
- possible new location that requires extra parking and service space
- existing light poles
- proposal light poles
- evergreen trees
INFILL PROPOSAL

Schematical 'skyline' sections showing the potential location of new houses

Section I-I skyline

Section II-II skyline

Aerial view
**GREEN AREAS**

1. Laamannintie 15 southern façade park area

2. Lautamiehenpuisto, behind Laamannintie 12

3. Lautamiehenpuisto, behind Laamannintie 12

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**PARK ZONES**

2015 Green areas and parks diagram

- Park zones
- Green areas
- Infill houses
- Possible locations
- Area traffic
- Photo location

Photo May 2015
GREEN AREAS

1. Laamannintie 15 southern façade park area
2. Between Laamannintie 13 and 17
3. Lautamiehenpuisto, behind Laamannintie 12
4. Hovinsuo sports park
5. Birches on a boundary: Laanila | Hovinsuo
6. Laanilanranta - beach park behind row houses
7. Lawn on road side of Laamannintie 10
8. River sleeve near Virkatalo
9. River sleeve near Villa Onnela
10. Stones behind Laamannintie 3 rear facade
11. Birches on a boundary: Laanila | Hovinsuo
Laanila residential group is located from northwest to the southeast, approximately parallel to same axe so that the entrances and the living rooms are north-east side. Back facades are faced to the sunny side. The first site’s ‘mestatasunnot’ (nowadays numbered as Laamannintie 10 and 12) are located at the highest part of Laanila with regard to the best possible position. Laamannintie 15 (‘työväenetasunnot’ built 7 years after) took second good place in respect of worker’s position in the Typpi factory. Originally, all three locations were naturally successful, reflecting Alvar Aalto’s effort to provide links and views of the natural environment for all residents equally.

A road to Kuusamo has got much more load in recent decades, so due to the position house number 15 needs nowadays extra protection from noise and dust coming from the busy road (entrances are about 3m below Kuusamontie). At the moment, there is a relatively low concrete panels fence, that might be reinforced with, for example, tall evergreen blue spruce, that have dense branches and are used in other places in Oulu (for example, in neighbourhood Värttö) as melusuoja, or noise reduction.

Old forest (nowadays, park) pine trees in the south slopes of the hills are protected. They are an integral part of the impression kerrostalo evoke. Their environment tells a lot about a situation that has prevailed in the area before construction. Building environmental integrity insulates Laamannintie northernmost house of the two from the rest. However, in relation to its surroundings residential buildings form coherent and integrated package, which must be spared, and which could in some way try to improve the Laamanni road (Laamannintie). Residential buildings are located on the route that connects the beach buildings to Kemira factory area. The date of construction is clearly known from plans and sketches. Also, the original adjustment of lighting poles represents a row of the route in the terrain. Awareness of the proximity of the river creates a route of a clear identity, which is worth to cherish and possibly also it emphasize by suitable means. In particular, the materials, the surrounding forest, connections to nature and the human scale of the area are historically valuable features, which should continue to uphold.
NOISE PROTECTION BETWEEN KUUSAMONTIE AND HOVINPOLKU
photo May 2015

Kuusamontie / Hovinpolku noise protection: current

Proposal: concrete panels, fence, tall evergreen

South-west (rear) façade of Laamannintie 12

South-west (rear) façade of Laamannintie 15

KUUSAMONTIE
III. ADDING ELEVATORS?
ACCESSIBILITY

ELEVATORS INSTALLATION STUDY

At the moment all three houses are somehow 'unconquerable' for disabled or elderly people, as well as families with little kids and baby carriages. This can be fixed by installing lifts and ramps that would meet modern INIA standards as much as possible. In that case, there might be a certain compromise between this necessity and authentic looks of the buildings. Elevators could be installed inside or outside. Probably, in case of facade installment, lightweight glazed construction wouldn't destroy original Alvar Aalto's idea of facades image. There already exist vertical concrete walls running along the facade from the ground to (almost) the roof. Elevators that fit a cabin big enough for a wheelchair roundabout turn diameter (1,5m) can take place between those walls and entrance doors. Laamannintie 10 and 12 are fully identical; Laamannintie 15 would require a slightly different construction.

Outdoor elevator footprint will occupy approximately half of the staircase. That is required to have minimum 1,5m turning circle for wheelchair users. Wintertime use is an extra challenge for design of the ground level elevator entrances. Normally, northern climate means there is a need for tambours (small vestibule "tuulikaappi") that would change facade appearance considerably. Other solutions might include underground heating and/or roofs above the lift doors.

In case of hallway lifts installation one option is to replace single-room apartment bathroom of every block with an elevator shaft. That will mean no demolishing of the apartment doors, only making extra opening to the hall. Outside ramps will be needed, too. If the single room flat will become too little because of that change, its space may be attached to the neighbour flats.

Overall, elevators installation is irreversible change. Therefore, an extra study is necessary before making a decision. That may include opinions of Alvar Aalto's foundation specialists, construction engineers, house owners and residents, etc.

HERITAGE

original appearance
original function
accessibility
current use

NORTHERN CLIMATE

roof or tambour (tuulikaappi)
snow melting
weather shelter

CONSTRUCTION

steel frame
glass 'envelope'
wheelchair ramp
water pipes
roof solutions
(no) contact with existing wall?
tower and bridges?

MATERIAL

steel + top coating
glass
concrete
anti-slip floor

REFERENCES

The Reina Sofia Museum in Madrid, Spain
"This city takes its history, its art, and its architecture very seriously."
(c) buildipedia.com/aec-pros/featured-architecture/the-reina-sofia-museum-the-moma-of-madrid

Metal Effects - Reactive Iron [rust]
starscenic.net/metal-effects-reactive-iron.html#product-details-tab-description

c l i m a t e:  w e a t h e r  p r o t e c t i o n

Aqueduct Racetrack station on the New York City Subway
subwaynut.com/ind/aqueduct_racetrack
POSSIBLE ELEVATOR LOCATIONS FOR LAAMANNINTIE 10 and 12

2-4 (typical) staircase

1st floor, entrance

2-4 (normal) floor, balcony

Ø1,5m - wheelchair turning diameter

1 floor, entrance

1951, original staircase design by Alvar Aalto
ELEVATORS INSTALLATION STUDY
Laamannintie 12 (10 is very similar) options

Laamannintie 10, A entrance with elevator

KONE EcoDisc powered elevator

Laamannintie 10 A entrance

Kone hydraulic glass elevator at Propsthof Nord subway station in Bonn

Laamannintie 10, 12 entrance facades with outdoor elevators
Laamannintie 10 and 12 imagined with outdoor glazed elevators
POSSIBLE ELEVATOR LOCATIONS FOR LAAMANNINTIE 15

Laamannintie 15 options

Option 1
2-4 (typical) staircase
1st floor, entrance

Option 2
2-4 (normal) floor, balcony

1956, original staircase design by Alvar Aalto

Reference: Värttö / Pohjantie boundary

2015, Laamannintie 15 A entrance

Staircase lighting

Reference: Des Moines Art Center

Entrance & Accessibility Improvements

Noise/dust reduction from Kuusamontie
Kuusamontie
Hovinpolku

Tall evergreen (fir)
Concrete panels fence

Laamannintie 10, 12 entrance facades with outdoor elevators

+2 800
+0 000
+5 600

Photo by Lukkaroinen Oy

Reference: Des Moines Art Center

Entrance & Accessibility Improvements

1 floor, entrance

1956, original staircase design by Alvar Aalto

Ø1.5m - wheelchair turning diameter
ELEVATORS INSTALLATION STUDY
Laamannintie 15 options

Laamannintie 15 A entrance with elevator

B - B section

+5600
+2800
+0000

reference: Des Moines Art Center Entrance & Accessibility Improvements

2015, Laamannintie 15 A entrance

Staircase lighting

photo by Lukkarinen Oy

2000, Laamannintie 15 A entrance

Laamannintie 10, 12 entrance facades with outdoor elevators

Noise/dust reduction from Kuusamontie

concrete panels fence
tall evergreen (fir)

reference: Värttö / Pohjantie boundary
INFILL: STREET PERSPECTIVES
LAAMANNINTIE
HOVINPOLKU

KUUSAMONTIE

noise protection

new

15
IV. APARTMENTS MAINTENANCE AND RESTORATION
APARTMENTS TYPOLOGY: LAAMANNINTIE 10 and 12

1951, Laamannintie 10 floor plan by Alvar Aalto + apartment types 1 and 2

1951, Laamannintie 12 floor plan by Alvar Aalto + apartment types 3 and 4

source of original paper documents scanned: Oulu University School of Architecture Archive
Laamannintie 12 winter view from 1st floor apartment balcony

Laamannintie 10 summer view from 1st floor apartment

Laamannintie 10 (12) stairway hall
IDENTITY ELEMENTS
Key features of types 1 - 4 (Laamannintie 10 and 12)

- **d e t a i l: niche cupboards**
- **b e a m s: visible in every apartment**
- **m a t e r i a l: floor surface - wooden planks**
- **g e o m e t r y: typical balcony / window**

- **curtains wooden peitelevy**
- **ventilation grid with a chain**
- **opal glass sphere**
- **solid wood doors**

- **cupboard handle**
- **openable floor niche**
- **coat rack (ARTEK 109)**
- **bathroom, original tiles and hooks**

- **p r o p o r t i o n: wooden kitchen cabinets**
patina: door panels

pipes under floor next to balcony door

French balconies

view from a drawing room

view from the window wall

wood, glass and metal

original threshold

entrance hall

63
APARTMENTS TYPOLOGY: LAAMANNINTIE 15

1957, Laamannintie 15 floor plan by Alvar Aalto + apartment types 5, 6, 7 and 8

source of original paper documents scanned: Oulu University School of Architecture Archive

1956, first version similar to Laamannintie 10 compared to realised (orange margin)
<table>
<thead>
<tr>
<th>Difference point</th>
<th>Laamannintie 10, 12 (1952)</th>
<th>Laamannintie 15 (1957)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main brick outer walls</td>
<td>475mm</td>
<td>350mm</td>
</tr>
<tr>
<td>Basement outer walls</td>
<td>660mm (460mm in staircases)</td>
<td>520mm (350mm in staircases)</td>
</tr>
<tr>
<td>Doors in basement pits</td>
<td>1130mm</td>
<td>1000mm</td>
</tr>
<tr>
<td>Basement columns</td>
<td>350x350mm</td>
<td>270x270mm</td>
</tr>
<tr>
<td>Typical floor columns</td>
<td>300x300mm</td>
<td>350x250mm</td>
</tr>
<tr>
<td>Special columns (fire section/deformation seam)</td>
<td>250x220mm</td>
<td>-</td>
</tr>
<tr>
<td>Basement windows</td>
<td>1170x870mm</td>
<td>1410x1330mm</td>
</tr>
<tr>
<td>Amount of basement windows</td>
<td>22 in L10, 14 in L12</td>
<td>11</td>
</tr>
<tr>
<td>Apartment windows*</td>
<td>Straight board</td>
<td>Straight board + wall cut</td>
</tr>
<tr>
<td>Beams</td>
<td>300x260mm</td>
<td>250x250mm</td>
</tr>
<tr>
<td>Floor height</td>
<td>2800mm</td>
<td>2800mm</td>
</tr>
<tr>
<td>Basement inner staircase</td>
<td>3800x1200mm</td>
<td>3500x1200mm</td>
</tr>
<tr>
<td>Typical inner staircase</td>
<td>4600x1200mm</td>
<td>4300x1200mm</td>
</tr>
<tr>
<td>Basement entrances</td>
<td>Next to main entrances, stairs made of natural stone</td>
<td>Short sides facades, stairs made or concrete</td>
</tr>
<tr>
<td>Balconies</td>
<td>'French' (equal to wall width)</td>
<td>1500x600mm (0.92m²)</td>
</tr>
</tbody>
</table>

Laamannintie 10, 12 and 15 (*L10, L12, L15)
- bomb shelters (VSS) inside basement (3 of them, one is later turned into sauna which required pits (kuopat))
- less amount of beams used in L15
- system of longer straighter corridors (comparing to L10,12)
- the seam between change of heights is made technically (structurally) different
- the amount of changes (demolishing, mostly) is bigger than in L10,12
- window boards are straight in all variants, but in L15 the wall under is cut the same way as in the basement windows
- parts of the walls that contains balcony doors, are technically different
- stairs in L15 are more steep
- balconies in L15, even are still small, bigger than 'French' balconies in L10,12
IDENTITY ELEMENTS
Key features of types 5 - 8 (Laamannintie 15)

LAAMANNINTIE 15 APARTMENTS

- entrance
- kitchen cupboards
- original kitchen with new cooktop
- original bathroom with new towel hooks
- balcony handrail 'cut'
- curtains
- wooden peitelevy
- walls paint
- p a t i n a: water pipe lock
- bathroom tiles 15x15cm with round edges
- balcony / apartment treshold
- staircase / apartment treshold
- window solid cover (instead of glass)
- storage room with original hooks
- room entrance - original glazed door
- main room, kitchen and niche cupboard doors
- coat rack (furniture rented with apartment)
- inside window shutter surfaces (bedroom)
- wall cut under window board (all windows, even basement)
- left window shutter and balcony door painted white inside
- balcony - apartment outdoor surfaces
- apartment entrance door detail
- 1956, glazed door design by Alvar Aalto
- Realia Oy Archive
left window shutter and balcony door painted white inside

main room, kitchen and niche cupboard doors

coat rack (furniture rented with apartment)

inside and outside window surfaces (bedroom)

wall cut under window board (all windows, even basement)

room entrance - original glazed door

inside window shutter surfaces (kitchen)

apartment entrance door detail

balcony - apartment outdoor surfaces

1956, glazed door design by Alvar Aalto

Rekla Oy Archive
**TYPOLOGY**

Types 1-8 amount

Laamannintie 10 - apartment types 1 and 2

Laamannintie 12 - apartment types 3 and 4

Laamannintie 15 - apartment types 5, 6, 7, 8

**AMOUNT**

Laamannintie 10 - 1788 m²

Laamannintie 12 - 1184 m²

Laamannintie 15 - 1860 m²

<table>
<thead>
<tr>
<th>TYPE</th>
<th>2 rooms + kitchen,</th>
<th>per floor x 4 floors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>53m²</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>43m²</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>61m²</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>26m², 1 room + kitchenette</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>54m², 3 rooms + kitchen,</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>47m², 2 rooms + kitchen,</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>63m², 2 rooms + kitchen,</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>38m², 2 rooms + kitchen,</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

96 apartments - 4832 m²
### Apartment Types Review

- **Laamannintie 10** - Apartment types 1 and 2
  - **Type 1:** 53m², 2 rooms + kitchen, 6 per floor x 4 floors ..........24
  - **Type 2:** 43m², 2 rooms + kitchen, 3 per floor x 4 floors ............12

- **Laamannintie 12** - Apartment types 3 and 4
  - **Type 3:** 61m², 3 rooms + kitchen, 4 per floor x 4 floors ............16
  - **Type 4:** 26m², 1 room + kitchenette, 2 per floor x 4 floors ..............8

- **Laamannintie 15** - Apartment types 5, 6, 7, 8
  - **Type 5:** 54m², 3 rooms + kitchen, 5 per floor x 4 floors ............20
  - **Type 6:** 47m², 2 rooms + kitchen, 2 per floor x 4 floors ..............8
  - **Type 7:** 63m², 2 rooms + kitchen, 1 per floor x 4 floors ..............4
  - **Type 8:** 38m², 2 rooms + kitchen, 1 per floor x 4 floors .............4

- **Laamannintie 10** - 1 788 m²
- **Laamannintie 12** - 1 184 m²
- **Laamannintie 15** - 1 860 m²

### Authentic Features

- (‘French’) balconies
- Windows / doors shapes and materials inside and outside
- Wooden cornices with metal strings
- Window boards framed with wooden planks
- White walls only
- Ceiling (white, height 2.5m)
- Wooden plank floor (natural colour)
- Solid wood entrance doors (natural color)
- Bathroom and kitchen tiles
- Wooden cupboards (painted white)
- Minor metal details: window handles, locks, hooks, keys, ventilation filter grids and chains, etc.
- Coat racks (ARTEK 109, designed by Alvar Aalto, 1936)
- Lighting fixtures
- Visible beams across the ceilings
- Openable niches in the floor with water pipes inside (Laamannintie 10 and 12 only)
- Walls / floor surfaces edged by painted white wooden threshold
- Electric sockets, switches, pipes and other technical fixtures
- Holes to outside (cupboards used to serve as fridges)
- Authentic bathtub and tiling
Reference: Maison Louis Carré is a house designed by Alvar Aalto in Bazoches-sur-Guyonne, some 40 km southwest of Paris in 1959 for the French art dealer and collector Louis Carré. Similar window, floor and walls of same age in a perfect condition.

APARTMENTS REPAIR PROPOSAL

BASIC TREATMENT

- Authentic wooden surfaces need maintenance in damaged and worn-out areas: clean, polish, restore colour and protect with transparent coating.
- Floor surface next to the doors requires special treatment.
- Floor inside the niche closets must match with the rest of the room floor.
- Thresholds are necessary only as boundary between ‘wet’ and ‘dry’ areas. Authentic looks includes metal stripes, as in originals.
- Covering original floors to conserve them is an appropriate temporary solution.
- Cupboards require new wooden shelves to replace missing and damaged ones. The shade of white paint should be tested.
- Interior doors paint has layers of paint peeling, that requires total removal of all layers and re-paint.
- Possibly repair / change wall-floor boundary wooden plinths and curtain pelmets.
- Tenants agreement should include the rule to consult the building owner before making any irreversible changes to the apartments.

LIGHTING

- Rooms/kitchen lights are left for a tenant’s taste. Kitchen and bathroom lamps
- Bathroom and kitchen lighting is relatively dim and has low light temperature. New modern copies of Alvar Aalto design lamps that allow using energy-saving bulbs would suit the apartments.

TECHNICAL

- Original kitchen ventilation doesn’t seem to provide enough power for removal the cooking process smells. Installation of an air filter above the oven is a reversible change that solves the problem (filter should be changed, then, once a year).
- Ventilation canals might need professional cleaning.
- Many pipes require removal of an old and covering with new white paint.
- Radiators must be painted with retro-white shade, similar to authentic tiling colour.
- In case electrical equipment needs to be changed, a good choice would be retro socket covers with round edges.
kitchen in Laamannintie 15 apartment (type 6)

pipe installation in type 2 bathroom

original furniture decay

peeling paint

missing light fixture

kitchen in Laamannintie 15 apartment (type 6)

floor 'traumatic' damage

floor 'normal wear-off' marks

'hard use' spots

ventilation grid without a chain

metal overpaint, white plastic

surfaces and colours

PHILIPS MyBathroom Baume

FIRSTLIGHT Opal Glass Sphere

THPG Lisilux Opal glass wall lamp with fixed arm

(too) big light shade mirror rust on edges

electrical outlet plastic cover damage

THPG 176405 Electrical socket

THPG 186880 Electrical socket

THPG 173067 Electrical outlet

Toggle switch alternation

Rotary switch alternation, porcelain
- If any repair plan is possible, a similar treatment should be done for all windows / balconies in the house.
- Restoration project should consider windows properties from original drawings.
- If any authentic metal hardware is lost, a good copy of existing similar detail may be ordered.
- Metal string hidden by wooden curtain pelmet should be checked on its usability. It might need removal of rust, old paint splashes and dust, lubricating and new hooks.
- Outdoor planks loose paint. That requires peeling and repainting with matching existing shade and new by NSC colour code.
- Window boards look their best executed in natural solid wood. However, temporary cover with changeable material (like, new board panels or linoleum of light colour) is fine.
- Original board edges, as well, require slight repairing, due to especially hard use over years.
- Some of the windows leak outdoor air when closed (tenants tend to stick duct tape to prevent that), which leads to a temperature loss in winter, and, therefore, more expenses for heating.
- Balcony railings might need removal of rust, old paint splashes and dust, lubricating and new white paint.
If any repair plan is possible, a similar treatment should be done for all windows/balconies in the house. Restoration project should consider windows properties from original drawings. If any authentic metal hardware is lost, a good copy of existing similar detail may be ordered. Metal string hidden by wooden curtain pelmet should be checked on its usability. It might need removal of rust, old paint splashes and dust, lubricating and new hooks. Outdoor planks loose paint. That requires peeling and repainting with matching existing shade and new by NSC colour code. Window boards look their best executed in natural solid wood. However, temporary cover with changeable material (like, new board panels or linoleum of light colour) is fine. Original board edges, as well, require slight repairing, due to especially hard use over years. Some of the windows leak outdoor air when closed (tenants tend to stick duct tape to prevent that), which leads to a temperature loss in winter, and, therefore, more expenses for heating. Balcony railings might need removal of rust, old paint splashes and dust, lubricating and new white paint.
The primary mean of 'rehabilitation' (as an act of restoring something to its original state) would be physical therapy of sensitive areas of apartments - kitchens and bathrooms. The fact is, there are many original pieces of furniture, about 70 years old. Same time, several attempts to replace damaged furnitures were made. The idea mostly implied expanding bathrooms to give room for installing washing machine and bigger showers instead of small bathtubes.

In the kitchens, counter surface is 76cm above the floor, which is quite low according to modern kitchen design standards. Lifting it up to 80cm would make it easier to use for taller people. Then, the distance between the counter and upper cabinets is 45cm (three tiles 15x15cm). It’s not too high, but possible, although in case of lifting lower counter +5cm would give more room for cooking and other activities usually performed in the kitchen. It will make easier to find right size of cooktop/oven. Therefore, backsplash tiles can be changed to 10x10cm grey or coloured tiles, or even ceramic mosaic. Also, it’s important to keep same height of metal and wooden counters, and avoid open seams and gaps between. Metal counter may be plain or have light checkerplate texture.

In case of complete replacement of kitchen furniture cabinet doors should have no bevel edges, carving or any extra decoration as long as it’s beyond the boundaries of functionalism style of the buildings. Proportions and colour are important as well. Oak wood (light or dark - both belong to original design), white or light grey seem perfectly suitable, as long as main walls keep white only. Floor is a complicated issue. As long as these apartments are for rent, wooden floors in the kitchen may be hidden under neutral grey linoleum to preserve the original for later decisions. Another option might be ceramic granite tiles that would repeat gently existing wooden floor colour. Door handles underline the style, so their shape and style demand special attention. Matching oakwood or stainless steel would fit. Water tap, sink form, oven style and (possible) ventilation hood should follow same uncluttered design idea.
The primary mean of 'rehabilitation' (as an act of restoring something to its original state) would be physical therapy of sensitive areas of apartments - kitchens and bathrooms. The fact is, there are many original pieces of furniture, about 70 years old. Several attempts to replace damaged furnitures were made. The idea mostly implied expanding bathrooms to give room for installing washing machine and bigger showers instead of small bathtubes.

In the kitchens, counter surface is 76cm above the floor, which is quite low according to modern kitchen design standards. Lifting it up to 80cm would make it easier to use for taller people. Then, the distance between the counter and upper cabinets is 45cm (three tiles 15x15cm). It's not too high, but possible, although in case of lifting lower counter +5cm would give more room for cooking and other activities usually performed in the kitchen. It will make easier to find right size of cooktop/oven. Therefore, backsplash tiles can be changed to 10x10cm grey or coloured tiles, or even ceramic mosaic. Also, it's important to keep same height of metal and wooden counters, and avoid open seams and gaps between. Metal counter may be plain or have light checkerplate texture.

In case of complete replacement of kitchen furniture cabinet doors should have no bevel edges, carving or any extra decoration as long as it's beyond the boundaries of functionalism style of the buildings. Proportions and colour are important as well. Oak wood (light or dark - both belong to original design), white or light grey seem perfectly suitable, as long as main walls keep white only. Floor is a complicated issue. As long as these apartments are for rent, wooden floors in the kitchen may be hidden under neutral grey linoleum to preserve the original for later decisions. Another option might be ceramic granite tiles that would repeat gently existing wooden floor colour. Door handles underline the style, so their shape and style demand special attention. Matching oakwood or stainless steel would fit. Water tap, sink form, oven style and (possible) ventilation hood should follow same uncluttered design idea.

Times has changed between 1950's and current 2015 year. Kitchen technology and many ideas about what is a common basic 'norm' that every household facility should have. The common height of countertop is 80cm at least, so typical size stoves pop-up between original 75cm countertops. That can be fixed either with an installation of a thicker countertop or, otherwise, add of a platform under lower cabinets to match the 80cm 'standard'.
KITCHENS’ REPAIR PROPOSAL: TYPES 1-8

LAAMANNINTIE 10 and 12

Kitchen of **TYPE 1** (3) apartment (Laamannintie 10)

Kitchen of **TYPE 2** apartment (Laamannintie 10) - entrance wall

Kitchen of **TYPE 4** studio apartment (Laamannintie 12)

Kitchen of **TYPE 2** apartment (Laamannintie 10) - main part

**Example of TYPE 6** - Laamannintie 15 B20

Laamannintie 15, A2 - same type, alternative

**Counterparts**

- Hammered/checker stainless steel or wood
- White paint above 1.6 m water-proof
- Grey quartz floor linoleum
- Grey quartz floor tiles (optional)
  - Ceramogranite
- White wall tiles (kitchen backsplash) ceramic tile, 10x10 cm
  - 15x15 cm ceramic mosaic
- Coloured wall tiles (kitchen backsplash) ceramic tile, 10x10 cm
Kitchen of **TYPE 5 (7)** apartment

Type 7 is the same, but mirrored

- **LAAMANNINTIE 15**

Example of **TYPE 6** - Laamannintie 15 B20

- White wall tiles (kitchen backsplash)
  - ceramic tile, 10x10cm
- 15x15cm
- ceramic mosaic
- Coloured wall tiles (kitchen backsplash)
  - ceramic tile, 10x10cm

- White paint above 1,6m
  - water-proof
- Countertop
  - hammered/checker stainless steel or wood
- Floor tiles (optional)
  - ceramogranite,
- Floor linoleum
  - grey quartz
- 15x15cm
- ceramic mosaic

Laamannintie 15, A2 - same type, alternative
BATHROOMS’ REPAIR CONCEPT

1956. Original bathroom layout design by Alvar Aalto
source of original paper documents scanned: Realia Oy Archive

Bathroom of TYPE 5 apartment

Bathroom of TYPE 6 (8) apartment

Bathroom of TYPE 7 apartment

Bathrooms are presented within three options at the moment:
1 - original with only new WC/basins/water taps
2 - half-changed
3 - totally rebuilt spaces (including wall/floor tiling)

When it comes to repaired spaces - functionalism approach don’t exactly fit into those new designs. New tiles of relatively small size with a touch of retro (round edges as in original) would help to restore the right atmosphere. Coloured tiles of 10x10cm or 15x15cm size should fill no more than up to 1.8m in the bathrooms. Space above it might have water-proof white matte paint or white tiles of same size. Bathroom floors can become grey. Light wooden planks as a ceiling treatment fits the idea as much as basic white.

Semi-original bathrooms still bear traces details hand-drawn in Alvar Aalto’s office with thought and care. Unfortunately, it’s impossible to ignore the fact that these apartments are for rent. Original bathrooms seem to be too compact comparing to what people are used nowadays. Uniting bathroom spaces with storages makes more room. Bathtubs may be installed later in case apartments get private owners, but for the current use showers seem more appropriate. Shelves and flat cabinets with mirror glass doors that repeat the proportions of original plain mirror would provide extra storage.
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BATHROOMS’ REPAIR PROPOSAL

LAAMANNINTIE 10 and 12
1:40

Bathroom of TYPE 1 (3) apartment - ‘minimum’ repair

- Bathroom floor and first row of wall tiles
  - Ceramic tile, 10x10cm

- White wall tiles above 1,8m
  - Ceramic tile, 10x10cm

- White paint above 1,6m
  - Water-proof

Bathroom of TYPE 1 (3) apartment - ‘maximum’ change
more storage places

- Coloured wall tiles
  - Ceramic tile, 10x10cm

- Bathroom ceiling
  - Wood planks

- Bathroom floor and first row of wall tiles
  - Ceramic tile, 10x10cm

Bathroom of TYPE 4 apartment (Laamannintie 12) - ceiling light, more storage space behind mirror and under sink

Bathroom of TYPE 2 apartment (Laamannintie 10) - wall light, plain mirror, glass shelf

- 3,9m²

- - washing machine
  - 3,9m²
Bathroom of **Type 2** apartment (Laamannintie 10) - wall light, plain mirror, glass shelf

Bathroom of **Type 4** apartment (Laamannintie 12) - ceiling light, more storage space behind mirror and under sink
Bathroom of **TYPE 5 (7)** apartment - 'minimum' repair
wall light, plain mirror, glass shelf

Bathroom of **TYPE 6 (8)** apartment

- Beam
- White paint above 1.6m water-proof
- White wall tiles above 1.8m ceramic tile, 10x10cm
- Coloured wall tiles ceramic tile, 10x10cm
- Bathroom ceiling wood planks
- Bathroom floor and first row of wall tiles ceramic tile, 10x10cm

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3.8m²

2.8m²
Laamannintie 10, type 1, current state:
- Furniture and equipment replaced.
- Floor covered with linoleum.

Laamannintie 10, type 2, current state:
- (bathroom often already combined with storage)
Apartment TYPE 1, current state
(bathroom often already combined with storage)

Apartment TYPE 2, current state
(furniture and equipment replaced, floor covered with linoleum)

Laamannintie 10, type 1
Kitchen restoration / replacement
bathroom takes place of a storage room

Kitchen of apartment type 1(3)
version with coloured ceramic tiles 10x10cm
Backsplash height 50cm

False ceiling to hide space behind a beam

Kitchen of apartment type 2
version with coloured ceramic tiles 10x10cm
Backsplash height 50cm

Kitchen of apartment type 1
version with coloured ceramic tiles 10x10cm
Backsplash height 50cm

False ceiling to hide space behind a beam

Kitchen of apartment type 2
version with coloured ceramic tiles 10x10cm
Backsplash height 50cm

Apartment TYPE 2, repair proposal
kitchen restoration / replacement
bathroom takes place of a storage room

Apartment TYPE 1, repair proposal
kitchen restoration / replacement
bathroom takes place of a storage room
APARTMENT TYPES 3, 4

LAAMANNINTIE 12

apartment TYPE 3, current state

Laamannintie 12, type 3
original storage room

apartment TYPE 4, current state
**Type 3 Apartment**
- Original storage room
- Kitchen restoration/replacement
- Bathroom replaces storage room

**Type 4 Studio Apartment**
- Kitchen restoration/replacement
- Bathroom replaces storage room

**Kitchen Details**
- Type 3: Coloured ceramic tiles 10x10cm, backsplash height 50cm
- Type 4: White ceramic tiles 10x10cm, backsplash height 50cm

**Living Room Details**
- Type 3: Two light sources on both sides of a beam

**Bathroom Details**
- Type 4: Green/grey/white ceramic tiles 10x10cm, backsplash height 180cm, natural wood cabinets and ceiling planks, etched/matte glass
APARTMENT TYPES 5, 6

54.4m²

54.4m²

1956, Type 6 apartment 1st version with ‘French’ balcony

1957, Type 6 apartment final version

original Alvar Aalto’s drawings copy
from Oulu school of Architecture archive,
Realia Oy Archive

apartment **TYPE 5**, current state
(bathtubes preserved according to
Lukkaroinen Oy plan from year 2000)

apartment **TYPE 6**, current state
apartment **TYPE 5** repair proposal
kitchen restoration / replacement
bathroom takes place of a storage room

**Kitchen of apartment type 5**
version with white ceramic tiles 15x15cm
Backsplash height 45cm

**Bathroom of apartment type 5**
beige/grey/white ceramic tiles 10x10cm
Backsplash height 160cm

apartment **TYPE 6** repair proposal
kitchen restoration / replacement
bathroom takes place of a storage room

**Kitchen of apartment type 6**
version with white ceramic tiles 15x15cm
Backsplash height 45cm
APARTMENT TYPES 7, 8

Apartment TYPE 8, current state
- 37.4m²
- Kitchen restoration / replacement
- Bathroom takes place of a storage room

Kitchen of apartment type 8 version with white ceramic tiles 15x15cm. Backsplash height 45cm

Apartment TYPE 7, current state
- 64.8m²
- Kitchen restoration / replacement
- Bathroom takes place of a storage room

Bathroom / hall of apartment type 8 version with grey ceramic granite floor tiles 30x30cm. Backsplash height 160cm
**Apartment Type 8 Repair Proposal**

- Kitchen restoration / replacement
- Bathroom takes place of a storage room

**Kitchen of Apartment Type 8**
- Version with white ceramic tiles 15x15cm.
- Backsplash height 45cm

**Bathroom / Hall of Apartment Type 8**
- Version with grey ceramic granite floor tiles 30x30cm.
- Backsplash height 160cm

**Apartment Type 7 Repair Proposal**

- Kitchen restoration / replacement
- Bathroom takes place of a storage room

**Kitchen of Apartment Type 7**
- Version with grey ceramic tiles 10x10cm.
- Backsplash height 60cm
APARTMENTS: STUDY OF ALTERNATIVE LAYOUTS

apartment **TYPE 1** alternative layout version with kitchen and living room united; storage room changed for closets

52,8m²

Kitchen of apartment type 1 version with coloured ceramic tiles 10x10cm
Backsplash height 50cm

apartment **TYPE 3** alternative layout (for 2-3 people) similar to type 1, with extra 8,3m² combined for a bigger private zone with a use of ARTEK100 screen designed by Alvar Aalto

61,7m²

Apartment type 3 open space version with grey ceramic granite floor tiles 30x30cm

Bathroom / hall of apartment type 1 (3) green/grey/white ceramic tiles 10x10cm
Backsplash height 180cm
Natural wood cabinets and ceiling planks
APARTMENTS: STUDY OF ALTERNATIVE LAYOUTS

**Apartment Type 1** alternative layout version with kitchen and living room united; storage room changed for closets

**Apartment Type 3** alternative layout (for 2-3 people) similar to type 1, with extra 8,3m² combined for a bigger private zone with a use of ARTEK100 screen designed by Alvar Aalto

**Apartment Type 5** alternative layout version with kitchenette in dining / living room; storage room changed for closets

**Apartment Type 6** alternative layout version with kitchenette in dining / living room; storage room changed for closets; washing machine is outside of bathroom; sauna, optionally

**Kitchen of Apartment Type 1** open space version with coloured ceramic tiles 10x10cm; backsplash height 50cm

**Kitchen of Apartment Type 5** open space version with natural wood cupboard doors; backsplash height 50cm, grey tiles 10x10cm

**Apartment Type 5** floor: 54,4m²

**Apartment Type 6** floor: 46,8m²

**Apartment Type 3** floor: 61,7m²
APARTMENTS: STUDY OF ALTERNATIVE LAYOUTS

Kitchen of apartment type 8 open space version with natural wood cupboard doors; backsplash height 50cm, white tiles 10x10cm

Storage space hidden behind folding doors in hallway including space for washing machine (requires pipe connections and water-proof floor)

apartment **TYPE 8** alternative layout version with kitchen and living room united; washing machine is outside of bathroom

37.4m²

Kitchen of apartment type 7 version with grey granite ceramic tiles 30x30cm backsplash height 50cm, white tiles 10x10cm

apartment **TYPE 7** alternative layout version 1 with private and common space zoning; separate entrance to each room floor tiles in 'wet' areas

64.8m²
'ALTERNATIVE' PROPOSAL DISCLAIMER

Apartment types marked as alternative are a result of subjective perception of these spaces by the author. They cannot be considered as any direct guidance but only an architectural fantasy on certain case. It’s a personal point of view on how else components could be arranged within each apartment.

This exercise has its roots in interest to interfere and develop the original order of spaces in these three houses, when using a same set of details with certain proportions. They are a valuable material that deserves restoration and a closer look on opportunities. In case of updates that would require major changes rather than maintenance - those interventions may consider this study as one’s personal opinion. The reason is that such a project would require a separate field study of many aspects involved. For example, one issue concerns floors: walls cannot change their places without removing original wooden floor, at least temporary.

For the respect of tenants privacy only several apartment samples were taken into research. They were mostly uninhabited for the luck of people to come for winter tour devoted to Alvar Aalto’s architecture in Oulu and other cities. However, the amount of apartments visited allows to make conclusions of building general condition and layers of change.

Generally, there are two types of apartments - Laamannintie 10 and 12 designed 1952 year, and Laamannintie 15, from 1957. Maison Louis Carré, which is considered here an inspiration for repair guidelines, became a subject of commission in 1956, and doesn’t have big differences in walls / windows / floors treatment. Still, this reference is a villa that would be able to accommodate many guests for art viewings, but also incorporated a private component.

Laanila, somehow, seems to be among the latest projects of Alvar Aalto in the field of factories’ employees housing. An interesting case would be, for example, Sunila residential area in Kotka. Being 20 years older, it’s apartments should have already passed the same point in history, where maintenance / restoration / renovation becomes a keen issue to discuss.

Comfort, as a function of apartment, is nowadays understood differently prior to what it could possibly mean in 1950. Apartments that were originally designed by Alvar Aalto for the majority of countrywise important industry workers, are a tourist attraction point. Maybe future use would allow one apartment with all restored original interior parts for rent (for example, photoshoots).
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ACKNOWLEDGEMENT

I would like to express my gratitude to professor Anna-Maija Ylimaula for her guidance, as well as dr. Özlem Özer-Kemppainen for her patience, motivation and comments that incented me to widen my research from various perspectives. I will warmly remember Helena Hirvinen and Karl Niskasaari for their kind support. I’m thankful to Leena Kuorelahti and our (ex-) janitor Esko Makkonen, as well as Sirpa Leiviskä for keeping the unique atmosphere of Lafka spirit, and make any of my troubles disappear magically. There has been lovely times spent in conversations with teachers of all different directions in Oulu school, their colleagues and all-over world origin students. I wish that variety of events happened in my first alma-mater Moscow Architectural Institute during my times there. That depends on education language, and it’s great I can present my Thesis on a second language. I’m surely willing to give more time for studying original language of documents, books and other references this Thesis is taking into consideration. Therefore, some of possible sources could have escaped my attention due to my current level of finnish level (A2, it’s not much).

A perfect support for my studies was an opportunity to use drawings of Alvar Aalto’s workers’ houses (Laamannintie 10, 12 and 15) by Lukkaroinen Oy from 2000 year - an important point in the history of Laanila neighbourhood. Besides, historical analysis is based on the maps from City of Oulu Archives, SATO Oy (Realia Oy) Archive, as well as Realia Oy; and our school own archive.

One special gratitude I would like to address Arto Aalto as representative of a company that takes care of over 70 year old buildings and supports the research about architectural heritage values of houses and their environment in many ways.

Oulu, November 2015

Julia Leshkova
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Oulu, November 2015

Julia Leskova