

*Miriam Landa Kvaleberg & Lars Aabel*

# Made in Oslo

*Prediploma, fall 2019*





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Kvaleberg started her architecture education at NTNU in Trondheim. After the first year, she transferred to AHO, where she stayed until the end of the bachelors.

Her masters have been completed partly in Stockholm, and partly in Oslo, with an emphasis on dwellings and smaller public buildings.



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Aabel begun studying at AHO the fall of 2014. After finishing the equivalent of his bachelors, he moved to Rotterdam and worked as an intern at Powerhouse Company for six months.

His masters he has focused on residential and public architecture with an urban perspective.

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# Production Belongs to the City



Thesis - We want to reintroduce production as a vital part in the daily life of Oslo.  
Our task is to create a production school that combines production and education.



## Liveable and Productive

*Let's think the post-industrial city also beyond services and knowledge economy.*

*Let's imagine the city as more than merely the place of consumption.*

*In a truly mixed city, we will enable, encourage and celebrate the presence of the productive economy.*

City dwellers need to encourage production in their cities, and accept it as an integral aspect of the urban experience. Factories and areas for production need to proclaim their presence, and relevance to daily life. Our goal is a truly mixed city, where traditional production is celebrated to the same extent as leisure. The city of the future is a Productive City.<sup>1</sup>

### Our productive environment

Due to soaring housing prices, question of urban development in Oslo is often tackled by mono-functional residential areas. This one-dimensional focus is in stark contrast to the vital and often chaotic lure of cities. Moreover, these new norms of urban development are also a fundamental threat to our cities' productiveness and competitiveness.

### Dignity

Oslo well over 30,000 industrial workers, live in Oslo but their workplaces are viewed as undesirable and thus removed away from the city centre.<sup>2</sup> Today most of our traditional production takes place away from the urban core, essentially signalling the larger society that these jobs are merely a dirty and unsought necessary.

<sup>1</sup> Borret, 2018 : 4

<sup>2</sup> Andersen. Norsk Teknisk Museum

### Heritage

National capitals tend to be seen mainly as administrative centres, yet this model does not apply to Oslo.<sup>3</sup> Oslo is an industrial city, and its proud industrial past is clearly readable along the harbour-front and along the banks of Akerselva.

Before the urban de-industrialisation of central Oslo, factories were located in the city centre such as Aker Mekaniske, Lilleborg, and the Freia chocolate factory. These productions are today an undesirable part of the cityscape, yet their products are still in high demand in the city.

### Sustainability

The separation of industry from the city is predicated on the low cost of transportation and shipping, and the large difference in labour costs. However, this equation does not include the environmental cost of a fossil fuel driven transportation sector. The international trade-related freight transport currently accounts for more than 7% of global emissions.<sup>4</sup> The productive city is sustainable and is producing on all levels.<sup>5</sup>

<sup>3</sup> Rosseland 2019 : 13

<sup>4</sup> OECD 2016 : 3

<sup>5</sup> Rø 2018 : 6



*Christiania Seildugsfabrikk at Grünerløkka*

*The primary functions of a city is to facilitate production, recreation and reproduction. Nonetheless, the productive dimension of the city is rarely mentioned when debating urban development and renewal. The productive city remains a necessity we often choose to forget.*

*The productive city is also of great symbolic importance: A common belief is that children growing up in our city centres should know where milk and eggs come from. Likewise, we argue that it is of similar importance that children see and understand where manufactured goods come from. That they are produced by someone, somewhere.*







## Our Current industrial Landscape

European cities have made a concerted effort over the last few decades to become more liveable.<sup>1</sup> New developments and policies with the aim of restoring cities as the preferred place to live, trade, shop and relax have been evoked. Former wastelands and industrial sites in have been more or less successfully transformed and integrated into the urban fabric. Every old wharf has been transformed into new vibrant waterfronts, every brownfield has become new residential areas, and former factory buildings have been given a new purpose.

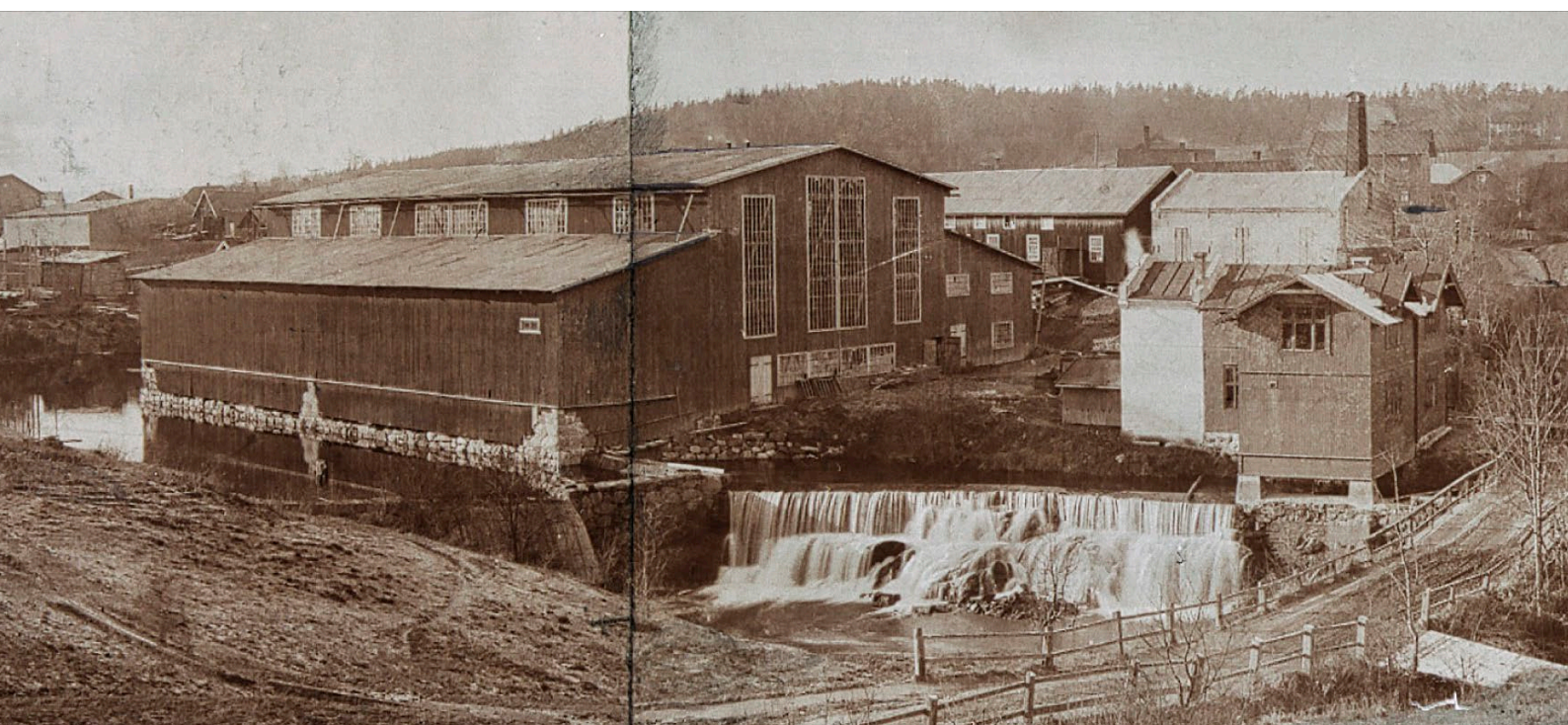
Whether it's Oslo's Aker Brygge, Akerselva,

1 *Borret 2018 : 3*

Hafencity in Hamburg or Île de Nantes, we have created new city areas everywhere with a focus on what we call a high urban mix. But, how mixed are such new neighbourhoods in real urban terms?<sup>2</sup>

Our post-industrial cities have to a large extent understood '*working in the city*' as various forms of working within service or knowledge. But, as we have seen, this is an incomplete view. If we are to achieve a real mixed city, our view also need to include manufacturing and logistics. This view has become more prevalent in later years, we are realizing that the city shouldn't merely be

2 *Borret 2018 : 4*



a showcase for consumption. A neighbourhood with vibrant urban character is often understood as having offices and public facilities, as well as wide range of shops, cafés, and restaurants. This is the aim of most western urban developments, and had been for the past thirty years. However the later years have made it painfully visible, that we have failed to incorporate the (semi-)industrial economy into our contemporary cities.

When production moved out of the cities, it also moved away from our collective consciousness. This realization requires a change in how we imagine our cities and our economies. In our understanding of the city, we need to include ‘dirty’

jobs. There is also a need for acknowledgement of manufacturing as a pillar to our quality of life.

Our recreational cities of restaurants, bars, and cafés are fully dependent on a mostly hidden world of logistics, production, and recycling. These activities were formerly comprehended as vital to the urban existence, nonetheless it was viewed as an urban dimension best left hidden away. Opposed to this view, we believe that we should challenge ourselves to view the city’s supporting activities as essential to the experience of the city, as it is to the existence of it.





# Oslo's Industrial Past

*A Brief History of the Industrial Oslo*

Oslo used to be an industrial powerhouse, and in many ways it still is, however the traditional industry is nowhere near as prevalent in the daily life of city dwellers.

Production has always been a part of our cities. The Industrial revolution was in many ways a story of urbanization. In the years following the post-war era, the noisy and polluting industry has gradually been moved to the periphery of the city, followed by a period of relocation to low cost countries in Asia as salaries reached high levels in the west. The story of Oslo used to be the story about the river and the fjord. These natural features gave us a city we don't really need anymore. The river shores of Akerselva are now occupied by institutions for higher education and previous wharfs of Aker and Nyland have been converted to pedestrian harbour-fronts.

The map on the next page shows the location of former factories. The data for this map was provided by the Norwegian museum of Industry.







1450

1500

1840

1860

### *Production History Oslo*

#### 1450-1500

The Norwegian production history began, as for most European Countries, in the medieval times with the establishment of all kinds of pools and crafts, such as modest, brazier and cooper. Some of these crafts and knowledges still remain in its original form. Besides, most of today's industries and vocational education originates from these small-scale craftsmanship's. This development also was also the beginning and establishment of city's and urban-societies.

#### 1500 - 1800

Productions involving small scale and simple machinery in Norway, originates from 1500 with the primitive processing of commodities such as iron and wood.<sup>1</sup> Particularly important for this production was the "Head Saw". This machine originates from medieval times and was a water-powered saw blade that moves straight up and down. It revolutionized the timber trade in Norway and led to new opportunities for export.

#### 1840

The industrialization of Norway started in the 1840's, inspired by the modern industries across Europe. Oslo was the industrial epicentre of Norway, with factories all along the banks of Akerselva. The river provided power and cooling for the machinery.<sup>1</sup> The industry of Oslo included a large range of industrial branches: from small wood workshops to large ice-cream factories.

#### 1870

In the following years from 1870-1900 the growth of industries increased, where in 1875 16,8 percentage of the population was employed in industry. At the turn of the century, this number had increased to 19,5 per cent a number that remained stable in the following years

As our map showed, most factories were placed in the central areas. There were particularly many in the areas around and east of the Akerselva. These areas had the highest density and variety of production sites and industrial buildings. As a result, the productions characterized the urban.

1 SNL 2018 : Norsk Industrihistorie

1 Norsk Teknisk Museum : Industrien langs Akerselva





1900

1960

2000

2019

1960

In this period a large scale de-industrialization started in Oslo. First the textile productions were shut down or moved to production facilities outside of the city centre. At this time the main reason for the decentralization was lack of space in too small buildings.<sup>1</sup> The new and modern industrial architecture was characterized by large rooms where all productions took place at one level. In the 1970s many electronic industries disappeared from the cityscape followed by the ship-building industries in 1980s.

The Norwegian industrial history the following years is also affected by the newly established petroleum-industry. The discovery of the “black gold” took place December 23. In 1969. This discovery increased the countries wealth which also improved the living conditions for most Norwegians. It created new job opportunities. Many many previous industrial workers. Most of these workers came from previous industries. Industries that were located Cities and not in large oil-rigs out in the North Sea.

2000- 2019

The late 1900s and beginning of 2000 has been characterized by the introduction of new productions, where computer technology has contributed to further rationalization and efficiency. Today less than 10 per cent, about 256 000 people, of Norwegian employees work in industry.<sup>1</sup>

In a more globalised world most productions have moved their production buildings to other countries. Here it is often more convenient and less expensive to establish large-scale and efficient productions. The labour is also significantly cheaper.<sup>2</sup>

As pointed out in the beginning of the text, this type of de-industrialization left hundreds of empty production rooms. As mentioned these are either demolished or reused for housing, offices, cultural programs and leisure activities.<sup>3</sup>

1 Norsk Teknisk Museum : Oslos tapte industrilandskap

1 Norsk Teknisk Museum : Oslos tapte industrilandskap

2 Norsk Teknisk Museum : Eksisterende industri

3 Norsk Teknisk Museum : Avindustrialisering

# Production Renaissance

*The production returns to the western cities*

Now production is returning to the Western city. The main cause is the utilization of new technology and automation, combined with a new-found interest in reducing emissions caused by international shipping. Robotization reduces the significance of cheap labour and 3d-technology render a future where everything can be produced everywhere. A focus on more efficient resource management also serves as important driving factors. There are signs that European cities might witness a re-industrialisation. Large manufacturers are now moving production back to the west.<sup>1</sup>

This is the start of a new trend says professor in industrial competitiveness at the Norwegian institute of business, BI, Torger Reve. Traditional industrial manufacturers are moving production back, and we'll see a lot of this in the years to come. This happens in industries with complex supply chains. The process of production becomes ever more stream lined, and unnecessary links in the chain are removed. This new wave of industrialization relies heavily on a combination of automation, and IT-logistics.<sup>2</sup>

Small scale industries seeking proximity to costumers are also returning to the cities. This applies particularly to small technology-driven businesses searching for innovative networks and knowledge sharing environments.

In the Productive city, we need to connect and involve as many actors as possible, in an attempt to deal with the ever dynamic and changing economy. The productive city is fundamentally a democratic agenda, it is about empowering city dwellers to help shape their own lives, from the objects they use, to the food they eat.

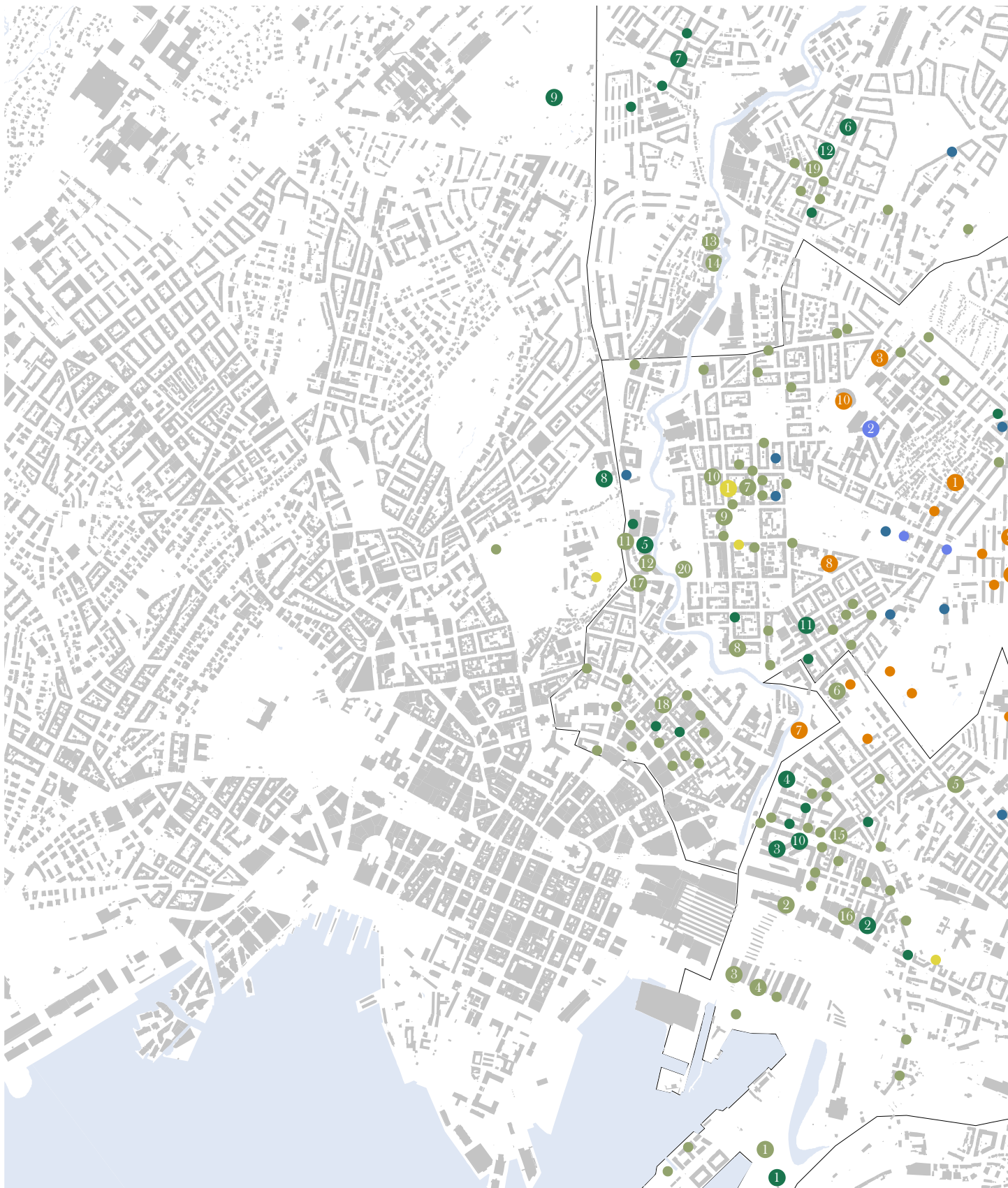
This pre-diploma has allowed us to investigate how future forms of production can be integrated into the urban fabric. To achieve this aim, we believe production should be combined with a public program, in our case an educational facility.

Next page shows a mapping of current production facilities in Oslo, with a focus on handcraft and food production in center-east.

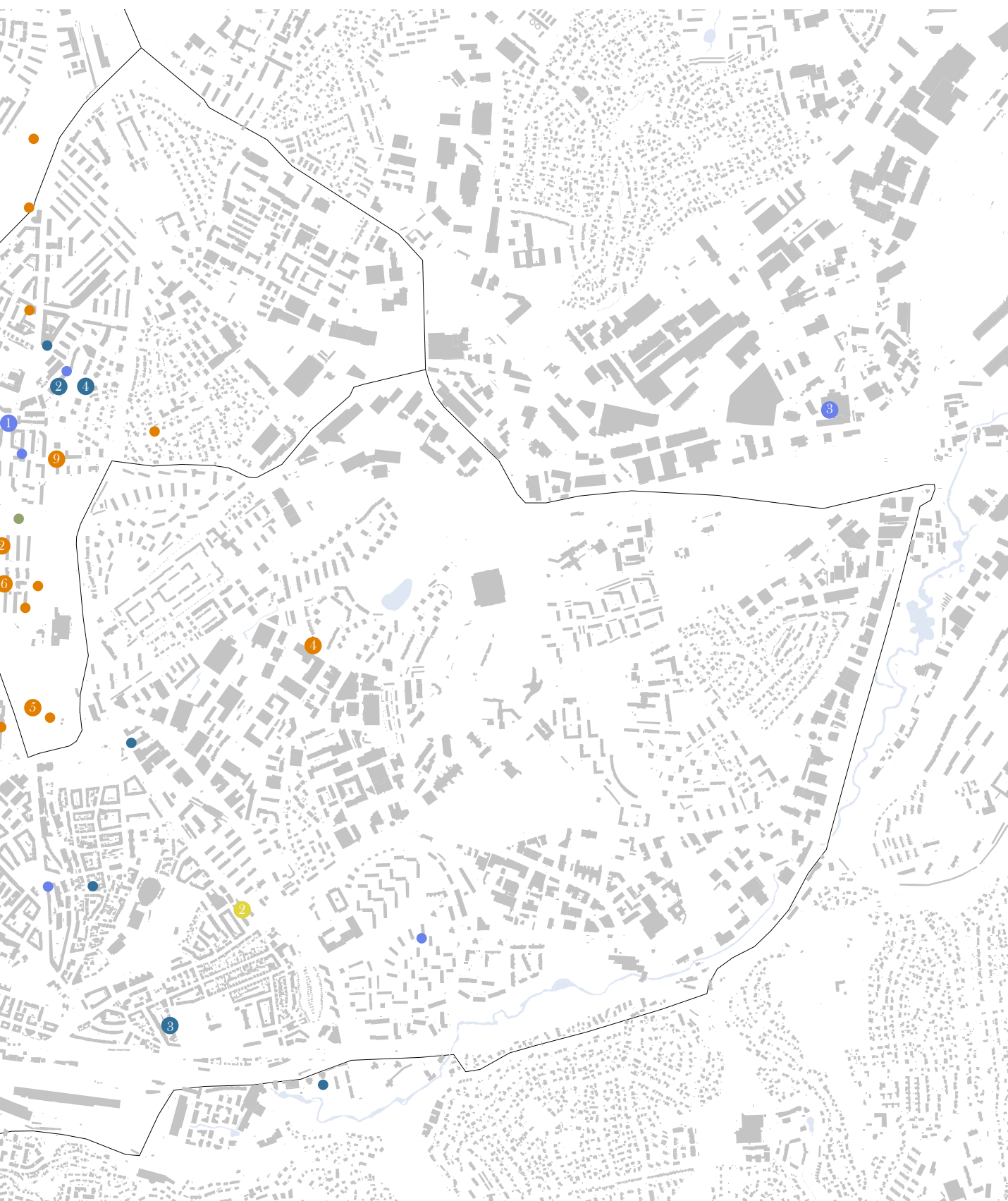
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1 Rø 2018 : 6  
2 Aale 2013





- |                |                      |                     |                |                        |
|----------------|----------------------|---------------------|----------------|------------------------|
| ● Cooking      | 9 - Villa Paradiso   | ● Food resources    | 7-Sagene Grønt | ● Wood workshops       |
| 1 - Losæter    | 10 - Brutus          | 1 - Parselgardens   | 8-Parsellhager | 1 - Fellesverkstedet   |
| 2 - Maemo      | 11 - Handwerk        | 2 -Roofgarden       | Telthusbakken  | 2 - Treverkstedet Oslo |
| 3 - Edda       | 12 - Mathallen       | -Landbrukskvartalet | 9-Geitmyra     | 3 - Østre Snekeri      |
| 5 - Grådig     | 13 - Kulinarisk      | 3 - Grønlands Torg  | 10-Slakter     | 4 - Lindaker           |
| 6 - Ille Brød  | Akademi              | 4 -A-Market         | 11-Slakter     | Møbelsnekker           |
| 7 - Godt brød  | 14 - Åpent Bakeri    | 5-Mathallen         | 12-Fiskebutikk |                        |
| 8 - Ben Reddik | 20 - Nedre Foss Gård | 6-Strøm Larsen      |                |                        |



● Welds / Metalwork

- 1 - Bolt
- 2 - Johs Tjelle Smed & Sønner
- 3 - Smia Galleri
- 4 - Unaas

● Tailor / Shomaker

- 1 - Faryabi Skinnverksted
- 2 - Fenrir Skomaker
- 3 - Sofierens Skorep. AS
- 4 - Sofia Rens og Skorep
- 5 - Aye Skomaker
- 6 - Din Skredder
- 7 - Tailor John

8- Møbeltrekker N. Hurum

- 9 - Trekkoteket
- Møbeltapetserer
- 10 - Puff Møbeltapetserer
- 11 - Oslo Møbeltapetserer
- 12- Stoff og Stil Oslo
- 13- Christiania Tailoring

● Potteries

- 1- Liv i Leire
- 2- Gamle Oslo
- Kreative verksted
- 3- Brudd håndverk
- 4- Kunsthandverkerne
- 5- Keramiker Wik
- 6- Kristine Pollen

## Production and Education



*Miriam Landa Kvaleberg & Lars Aabel*

We believe the industrial programme should be combined with education.  
This is for us a way to reintroduce the traditional production back into the city.



## Production School

*Learning by doing*

*“Production schools are powerful tools in the struggle against young people dropping out of youth educations, failing to find their path in the educations system and against youth unemployment. Large groups of young people need to learn in a different way – through practical work and problem solving in a work community involving real production and sale of goods and services.*

*Definition by IPSO, International Production School Organization<sup>1</sup>*

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<sup>1</sup> IPSO 2019







## Introduction to Production Schools

*The first production schools were established in the 1970s in Denmark. Today the production schools are established all over Europe in, Norway, Denmark, Austria, Sweden, Germany and France.*

### Pedagogy

All Production Schools have a common set of values, as defined by the Production School Association (IPSO): *The production schools offer individual courses that are based on what the youth can do, and how the youth achieve their goals. The learning environment stems from practical work in smaller workshop units and is complemented by a strong and coherent youth environment at the school.*<sup>1</sup>

The Production School pedagogy focuses on learning through practical work and production instead of traditional theoretical teaching: *learning by doing*. The theoretical curriculum is integrated into the practical production in the workshop. With this method, the overarching goal is to create a practical learning environment for personal growth. This will encourage and qualify each student to start and complete general and vocational education, or to enter into the labour market.<sup>2</sup>

All production takes place in a committed working community where each student is given responsibility and trust. The goal is personal, social and professional development.<sup>3</sup>

### Workshops

*Learning takes place in a binding working community. The aim is the young person's personal, social and professional development.*<sup>4</sup>

The practical learning environment is created in different workshops with professional diversity and quality that reflects the current labour market in the local community. Each school has a variety of productions, such as cooking workshops, wood workshops, sewing workshops, mechanical workshops. It is vital to maintain a constant connection to existing working communities outside of the school. This is one reason the students produce goods and services for real customers. This also contributes to the schools economy.<sup>5</sup> The architecture and physical manifestation of the Workshop is intended to create a flexible learning environment that easily can be transformed *according to changing requirements. It should facilitate the specific production and create a good framework for learning by doing.*<sup>6</sup>

### Teachers

It is important that workshop teachers and employees possess knowledge based on experience from working with relevant production. This will emphasise the schools connection to working life.

1        *Produktionsskoleforeningen 2019*

2        *Sørensen 2017 : 4*

3        *Opplæringsavdelinga 2018 : 18*

4        *Produktionsskoleforeningen 2010 : 4*

5        *Hordaland fylkeskommune 2018 : 1*

6        *Produktionsskoleforeningen 2017 : 3*



## The Student Body

*Most of the students in our school have had a tough challenging start in life. Through production many experience personal and theoretical growth. They constantly impress and surprise us with their engagement and knowledge.*

*-Baste Bruarøy, 2018*

### Students

The school's target group are young student between the ages of 16 and 25 who have dropped out of either vocational or study-related education programs. Many of these teenagers need motivation and guidance to find a new way into either continued education or work. In a Norwegian context these students are often referred to as *Drop Outs* – a student who decides to quit his or her education or work training ahead of the set graduation date.<sup>1</sup>

In Norway today there are approximately 13 300 people between the age of 16 and 21 that are not in any form of job or education. The Vocational studies (*yrkesfag*) have the highest number of drop outs. Only 58% of the students complete after five years, in comparison to general studies were 86% finish<sup>2</sup>

Among the 8 different vocational study programs, there are in particular problems with students dropping out in restaurant and food sciences, design and handicraft, and building and construction.<sup>3</sup>

### Causes

Researcher Eifred Markussen at NIFU points to

1 *Hauso, 2019*

2 *Budfir 2019*

3 *Statistisk Sentralbyrå, 2019*

four reasons why student drop out of secondary education.<sup>4</sup>

The main reason is that their low academic abilities put weaker students at a disadvantage. Over 99 per cent of students with a GPA of over 5.5 finish their degree within five years. According to a study from SSB. Only 13 per cent of students with a GPA of lower than 2.5 acquire a degree.

Another reason for the high dropout numbers are low engagement. This is often due to students not being accepted to their first choice of schools. Additionally, 20 per cent of students said there was too much theory, or that theoretical subjects were too difficult.

A third reason is students not being accepted as trainees after their second year at trade school. Students that are not accepted for trainee positions do not get the proper opportunity to finish the degree they embarked on.

The final reason stated by Markussen is students having a difficult time outside of school. These circumstances can be psychological difficulties, physical illness, pregnancy, difficult circumstances at home, and drug addictions.

4 *Svarstad 2015*

### “Consequences

Professor in pedagogy, Thomas Nordahl, points out that student’s level of school mastery gives several indications on how they will fare later in life. If a given student does not manage to finish secondary school, there is a 20 per cent probability that they will later need social benefits. The centre for economic research at NTNU have estimated that society could have saved between 5.4 and 8.8 billion NOK annually if the share of students finishing secondary education would rise from 70 to 80 per cent.<sup>1</sup> The high drop out numbers, and low recruitment could also lead to a lack of manpower in vital industries.

*Results from a skills barometer among RMS show particular need for labour with vocational training and post-secondary non-tertiary education. Projections on the national level also show excess demand for this type of labour in the future, as an aggregated group, and strong demand within construction.*<sup>2</sup>

### The production school as a solution?

Today there are two production schools in Norway, Hjeltenes production school in Hardanger and Hyssingen production school in Bergen. Reports from Hyssingen show that the production school model can be an effective tool in reducing the high drop out numbers. In total 85% of the students graduating June 2018 will continue professional work or education.<sup>3</sup> Interviews from Hyssingen show that the students enjoy school, both socially and educationally. Through the responsibility given and the production, they are constantly motivated.

1 Nordahl, 2014

2 Report, Kunnskapsdepartementet, 2016, s.5

2 Hordaland Fylkeskommune 2018 : 25

*Every single Friday, I can't wait until it's Monday.  
We are not teachers and students, we are a family  
-Andreas Tvedt Monsen.*



*Culinary Students at Hyssingen Production School*



*Oslo yrkesskoles culinary production school 1964*

## Case Studies

*An analysis of existing production schools*

Production Schools can be found in Norway, Denmark, Germany and France.

The following pages shows some quick case studies for currently operational production schools. We have made the decision to focus on schools in Norway and Denmark.





# Hyssingen

## Produsjonsskule

### Established

Hyssingen was founded in 2014, as Norway's first production school. The school was a result of the initiative *NyGIV*, that combined a centre for drop outs, and a centre for practical learning.<sup>1</sup> The pedagogy and teaching method is strongly influenced and inspired by the Danish Production Schools model.<sup>2</sup>

### Student group

Young people between the ages of 16 and 21, who struggle to complete a secondary education.

### Number of Students

Currently 45 students who attend the school.

### Workshops

Arts and Crafts, Cultural Workshop, culinary workshop, and Workshop for Construction.

### Cooperation with professional productions:

All workshops at Hyssingen work together with professional workshops. During schools hours some of the student are deployed as an apprentice at a professional firm or production. This close relation to working life has shown to strengthen the students professional and social skills. All workshops produce goods and services for real customers in the local community. The revenue from this covered about 20 percent of the schools expenses in 2017.<sup>3</sup>

### Location

The school has a semi-urban location, ten minutes outside the city centre of Bergen. The neighbourhood is mainly new urban developments, while still containing buildings from the textile productions and industries that used to characterize the area.<sup>4</sup>

### Typology

The school building is located in an old factory hall from 1938, drawn by the Norwegian Architect Leif Grung. It previously housed the former textile industry *Den Norske hyssing fabrikken*. Before the school moved in, the old production halls were totally transformed and renovated to suit the production schools needs and future use.

### Total building area

1300 m<sup>2</sup>

### Accessibility

Industrial buildings usually have a clear separation between public and private. However, Hyssingen runs a neighbourhood cafe within the school, activating the surrounding streets. This cafe is an important meeting point between the school and the neighbourhood.<sup>5</sup>

### Qualities:

The reuse of the industrial building have been successful and emphasizes the local and historical identity of the school. The pragmatic architecture facilitates the workshop activities.

1 Kunnskapsdepartementet 2013 : 9

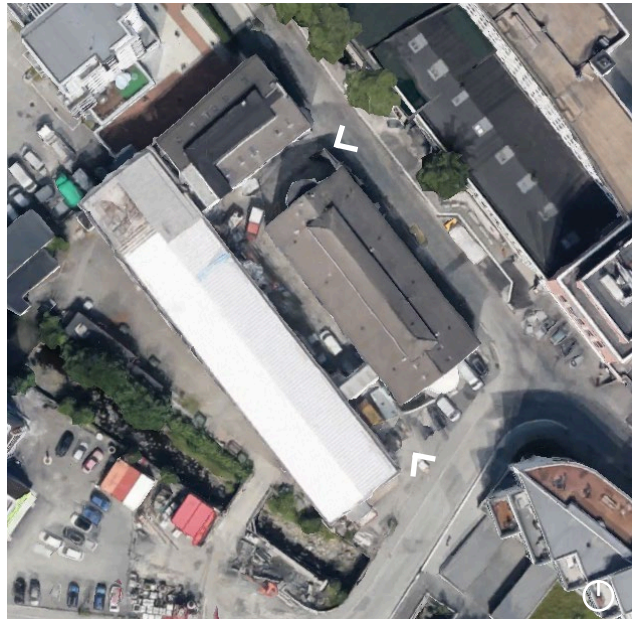
2 Hordaland fylkeskommune 2018 : 5

3 Hordaland fylkeskommune 2018 : 7

4 Hordaland fylkeskommune 2018, : 7

5 Hordaland fylkeskommune, 2017





# Hjeltnes Produksjonsskule

## Established

The school was established in Hardanger in 1901, originally as an agricultural school. The production school took over in 2018. This establishment was a direct result of the positive results with drop outs achieved with Hyssingen in Bergen. Both schools are public run by Hordaland County. The county government has committed itself in the task of helping youth who fall out of education and work, and the production school is a vital part of their strategy.<sup>1</sup>

## Student group

Young people between the ages of 16 and 25, who struggle to complete secondary education.

## Number of Students

Today, the school houses 45 students. Due to its rural location far from many students homes, most of them live in dormitories on campus

## Workshops

Agricultural workshop, culinary workshop, and mechanical workshop.

## Cooperation with professional productions:

The workshops have little or none contact to professional workshops in the local community. This is a direct consequence of the schools rural location, far from the closest city and professional workshops and productions. Nevertheless the students have an open relation to the local community, and offer them goods and services<sup>2</sup>

## Location

The school is located close to Hardangerfjorden, in Ulvik, five miles from Voss and fifteen miles outside of Bergen . It is a rural and scenic setting mostly characterised by forest and agricultural areas. The local community is small.

## Typology

The school consist of many smaller buildings which has been built, in different periods, while the student-number has grown. All buildings encircles a large and shielded outdoor area. This correlation create a typical Norwegian *tun*.

The oldest buildings are small, traditional timber constructions that originally housed the very first school building in Ulvik.<sup>3</sup>

## Total area of buildings

m<sup>2</sup>. The building mass is modest. This is a direct consequence of the Agricultural Workshops teaching method. Most of the production takes place outside in the field, by the fjord, or in the greenhouses. The education take advantage of the rural setting that is highly suitable.

## Accessibility:

Due to its rural setting, the school is less accessible for large amounts of people. Nevertheless it is open and welcoming for the local community.

## Qualities:

The rural and scenic setting suits the different workshops compliments the teaching methods. The tun typology creates shielded and common outdoor areas.

1, 2,3 Hordaland fylkeskommune 2019



# ØKO

## Produktionskole

### Established

The school was founded in the 1990s. The vision was to create a school that focus on sustainable production and living.<sup>1</sup>

### Student group

Young people between the ages of 16 and 25, who cannot immediately complete a secondary education, also referred to as drop outs.

### Number of Students

There are about 115 students who take part of the production schools many workshops.

### Workshops

Photography-workshop, Activism-workshop, Culinary-workshop, Wood-workshop, Dance-production, Music-production, Tailoring / clothe-desing, Office-work, Sports-workshop, and Art-production.

### Cooperation with professional productions:

The urban location facilitates a close relation to professional productions in the area. Several of the teachers have experience from working in workshops. The culinary workshop has a close cooperation with the many local restaurants in the area of Nørrebro. During schools hours students get the opportunity to work in professional kitchens for restaurant outside the school. Several workshops produce goods and services for real customers in the city of Copenhagen.

### Location

The School has an urban location Nørrebro, in

the citycenter of Copenhagen.

### Typology

The school building is located in an old apartment building, constructed in brick. It is part of a traditional city block and the building has two clear sides: one public facade facing the street scape and one towards a large and semiprivate backyard. This outdoor garden is shared with next door neighbours who live in the same block. The interior of the building has been renovated and adapted the schools use . All transformations are discrete and most of the building holds its original form and local identity.<sup>1</sup>

### Total area of buildings

The school is located in two separated buildings and has 1250 m<sup>2</sup> at their disposal.

### Accessibility

The school is located in relation to many central transit years for pedestrians, cars and bicycles. The very urban location in Copenhagen, public activities and events, and cooperation with local workshops have made the school known and visible for many people living in Copenhagen.<sup>3</sup>

### Qualities:

The urban location facilitates a tight cooperation to local and professional production. This gives an education with professional diversity and quality that reflects the current labour market in the local community. The reuse of old building mass help maintaining the local and historical identity in the school.

1,1,3 Økopro.dk 01.11.19



## Workshops

*Bellow we have listed potential workshops from already existing production schools, Vocational Education, and previously and currently located along Akerselven in Oslo*

### Workshops –Current Production Schools:<sup>1</sup>

Culinary-workshop  
Agricultural workshop  
Wood-workshop/carpenter  
Tailoring  
Clothe-desing  
Workshop for Construction  
Arts and Crafts  
Cultural Workshop,  
Photography  
Activism  
Dance-production  
Music-production  
Office-work  
Sports-workshop  
Art-production

### Workshops – Current Vocational Education:

Design and Industrial crafts  
Restaurant and food science  
Construction  
Engineering and industrial production workshop  
Media and communication  
Health and Social  
Service and transport

### Workshop, previously and currently in Oslo<sup>2</sup>:

Pottery  
Waste and recycling  
Mining  
Electrical engineering industry  
Fishing Industry  
Graphic industry  
Rubber and plastics industry  
Iron Work  
Chemical industry  
Shopping  
Toy  
Potteries  
Leather and leather goods  
Margarine Factories  
Machine Industry  
Dairies and dairy products  
Metal and metal products  
Mineral Product Manufacturing  
Measuring instruments, optics, watch-making  
Furniture and decor industry  
Food and beverages  
Oil refining  
Chocolate factories and confectionery  
Sports  
Textile and clothing (textile)  
Transport Industry  
Wood processing  
Lumber and wood products

1 .....  
*Hordaland fylkeskommune 2018,  
Øko produktionsskole 2019*

2 .....  
*Norsk Industrimuseum (unknown year)*



## Workshop Criteria

Our aim is to create a production school in an urban location. We want this to become a meeting arena for: education, production, recreation and socialisation. But, what type of workshop should the school offer?

### Future needs

Jobs in construction are needed in the future. The school should therefore offer a workshop involving construction, for instance: wood workshop, Workshop for Construction, or carpenter.

### Social meeting-point

The schools activities will mainly take place during daytime, this allows for time sharing of the workshop facilities. The workshop should be relevant for the city population.

### Multiple productions

Learning from already established production schools it seems obvious to combine at least two different productions. This creates a broader educational offer for both the students and the general population in Oslo.

### Cooperation with existing productions

The production school pedagogy is dependent on a tight relation to local and professional actors. It is thus important to choose a workshops that can draw on pre-existing resources surrounding the site. Mappings on current and historical productions shows that there are current needs, and a historical precedent for processing and production of food and workshops for mechanics and wood.

### Reduce drop out rate

As pointed out, among the eight different vocational study programs, there are in particular problems with students dropping out in restaurant and food sciences, design and handicraft, and building and construction.<sup>1</sup>

.....  
1 Statistisk Sentralbyrå 2019





# Potential Sites



*Miriam Landa Kvaleberg & Lars Aabel*





*Samnøyen gate 3*

*Brenneriveien 11*

## Site Criteria

Since our project relies so heavily on the relationship to the immediate surroundings, the site will be an important factor in the school's operation. Thus we have listed four criteria deemed important when proposing potential sites.

### Heritage

We also find it interesting to work with the productive city in a historic context. The Norwegian Museum of Industry has done a meticulous mapping of former sites of production in Oslo, and we intend to use these findings to locate potential neighbourhoods and sites.

### Accessible

As previously mentioned, the success of the school is dependent on how it manages to relate to its surroundings. Therefore, it is imperative to find a site which is easily accessible for both potential students, while also manages to engage the larger public.

### Drop Out

Looking at mappings of dropout in Oslo, there is a stark tendency that schools in the center-east of the city suffer significantly higher dropout numbers than the city in general.<sup>1</sup> Therefore we have concentrated on the boroughs of Gamle Oslo, Grünerløkka and Sagene.

### Current Production

We also want to draw on existing resources and businesses to generate positive synergies for both the school, and its surroundings.

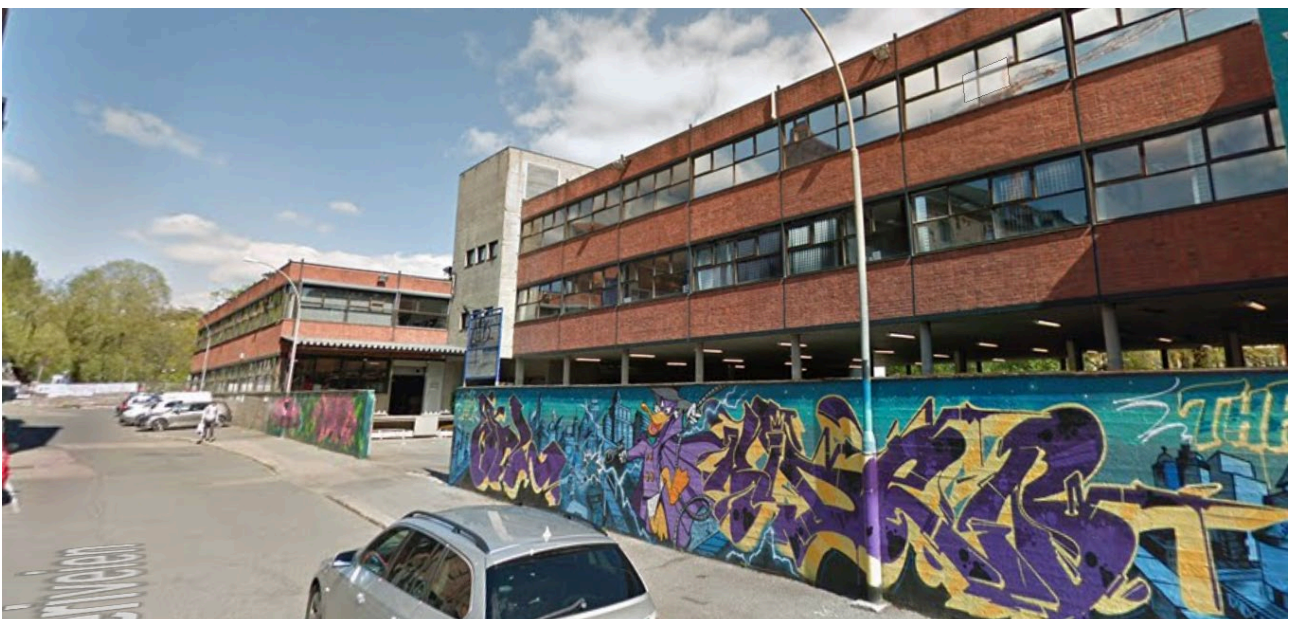
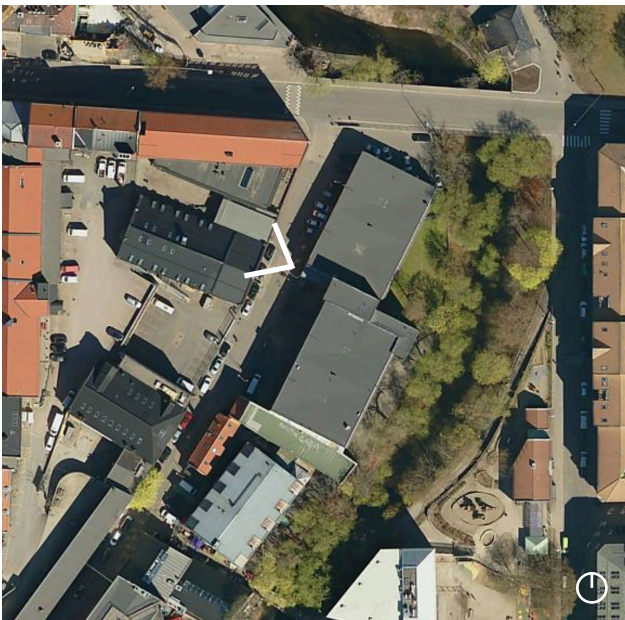
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<sup>1</sup> *Statistikkbanken, Oslo Kommune*



## Urtegata 11

*Urtegata 11 is located in the neighbourhood of Grønland, in the same block as a mosque and some forthcoming large commercial buildings.*





## Brenneriveien 11

*Brenneriveien 11 sits right on top of the banks of Akerseelva, in an office and industrial complex built in the 1960's.*

### Heritage

The banks of Akerseelva is historically significant in Oslo's industrial history. The site used to be used for production of Ice Cream and umbrellas.

### Accessibility

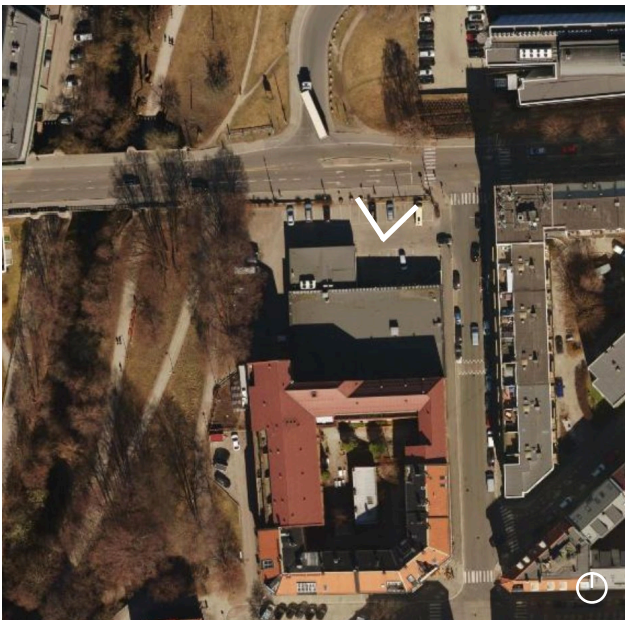
The site is located in a busy area of the Grünerløkka, in an area that houses industry and cultural institutions.

### Drop Out

The borough of Grünerløkka has some of the highest drop out numbers in Oslo.

### Current Production

The area is known for housing multiple schools for higher education in creative fields, as well as Mathallen, and several other important restaurants.



## Sannergata 3

*Sannergata marks the northern end of Grünerløkka, an area known for its industrial past in the late 1800's.*

### Heritage

Currently the site is occupied by an old fire station, now converted to a grocery store and a lamp boutique.

### Accessibility

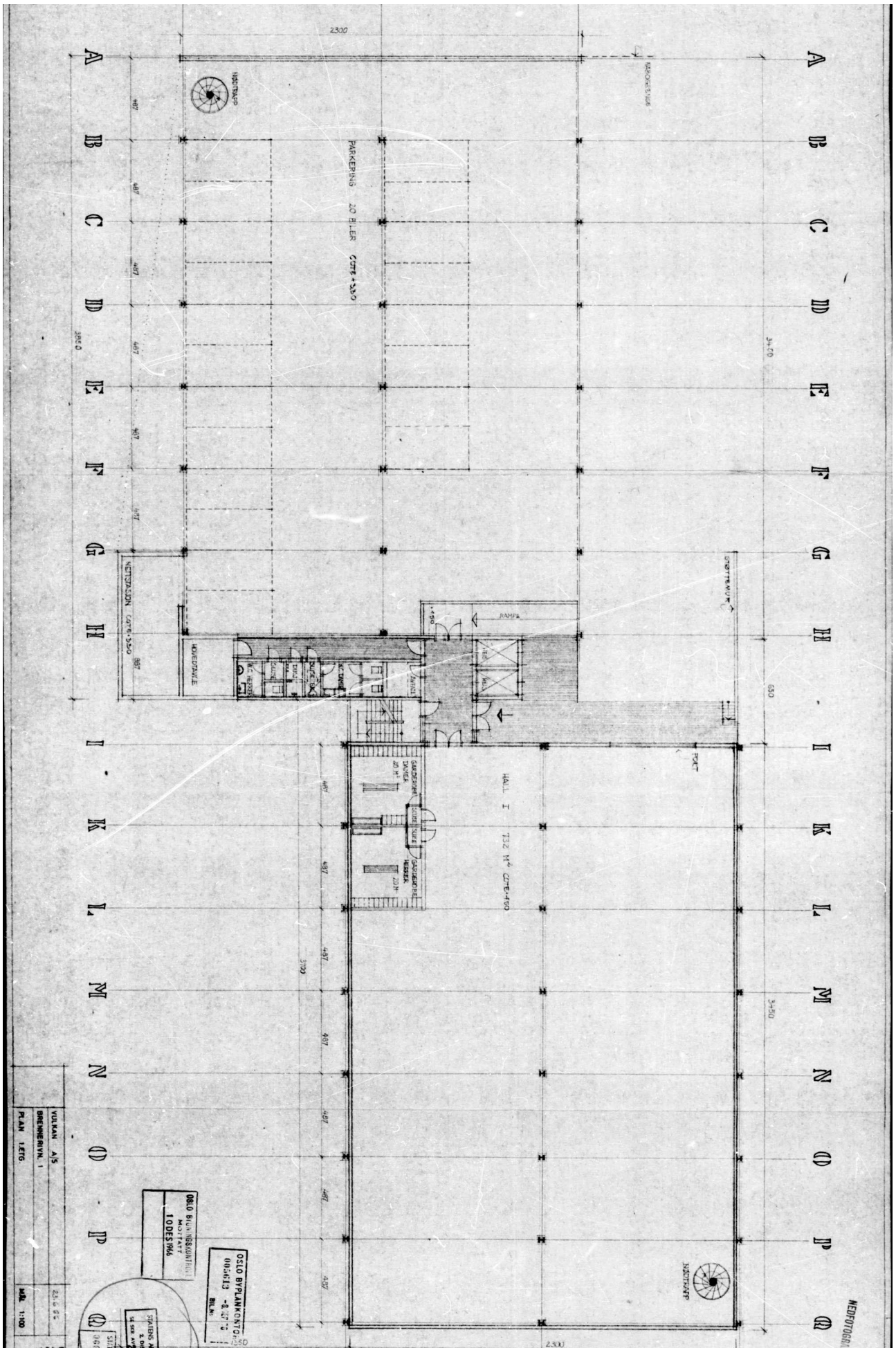
Sannergata is a busy street with high frequency bus service.

### Drop Out

The borough of Grunerløkka has some of the highest drop put numbers in Oslo.

### Current Production

The area of Grünerløkka is known for its lively cafés and bars.

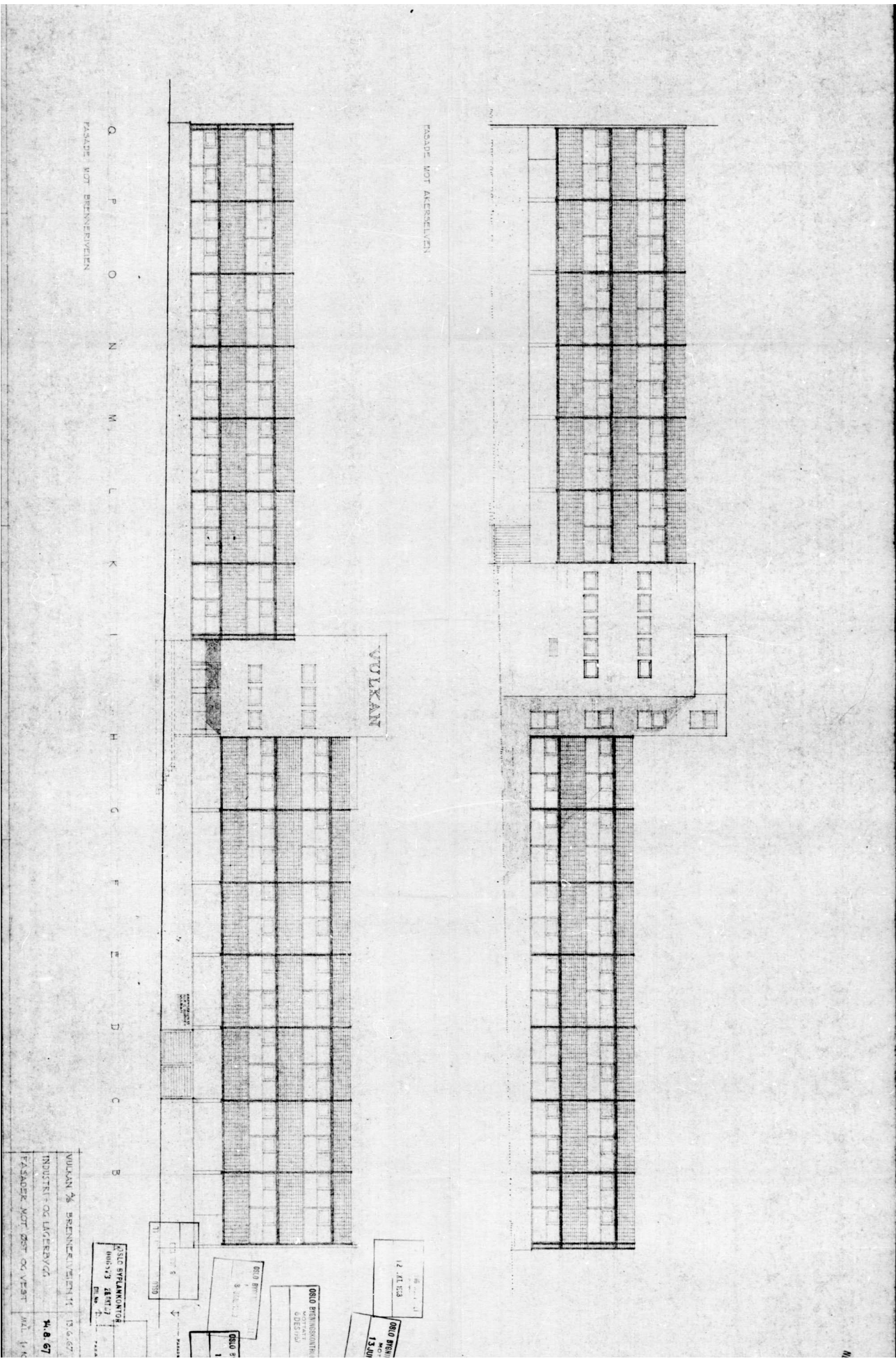


VULKAN A/S  
BRENNEVEIEN 1  
PLAN 1 ETG.  
MÅL 1:100

OSLO BYPLANLETTING  
02/01/13 - 2/27/13  
BLN

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1000000

Plans Brennerveien 11



Q P O N M L K J I H G F E D C B

FASADE MOT BRENNERIVEIEN

FASADE MOT AKERSHEIEN

VULKAN

VULKAN AS BRENNERIVEIEN 11 13.6.67  
 INDUSTRI- OG LAGERBYGG  
 FASADER MOT ØST OG VEST MÅL 1:400

ØST BYPLANOMRÅDE  
 1000/23 8.10.72  
 1:500

ØST 5  
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ØST 8  
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ØST BYPLANOMRÅDE  
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1:2 A.L. 1:50  
 1:500

ØST BYPLANOMRÅDE  
 1000/23 8.10.72  
 1:500

Elevation Brenneriveien 11

## Final Thoughts

Thesis: we want to re introduce production as a vital part in the daily life of Oslo. Our task is to create a production school that combines production an education.

### Conclusion - Workshop

After taking all criterias for choice of workshop into consideration it seems most relevant to create a production school with two main workshops: *Culinary Workshop and Wood Workshop for construction*

Both programs have problem with high drop our rates in the current vocational education, and especially construction will be a needed industry in the future .

As mentioned, our aim is to re-introduce and highlight production in the city centre of Oslo. We therefore find very interesting to reuse a building that originally was built and has been used for industry and production.

### Conclusion - Site

After many considerations we have concluded to continue working with a transformation and reuse of the previous industrial building in *Brenneriveien 11*.

This site meets all of the criterias that we have pointed out. To mention some, It is in an central and accessible location that many people live or visit for recreational use. This specific area also include a rich environment and tradition for production, both today and historically. Besides, there is a current problem with high drop out rates in the areas of Grunerløkka were Brenneriveien is located.

As pointed out by the mapping there are a great history for both workshops in the areas in relation to our site in Brenneriven close to Akerselven. This also reflects the current situation, with many professional productions in these type of workshops. To mention some the Culinary workshop could potentially collaborate with the many restaurants and bakeries in the area, and the next door food court. Regarding the Wood workshop a collaboration with KHIO and AHO could also be a great potential.



*Entrance to Brenneriveien - 1966*

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