Testing 1 : 1

Outside the Market

Alexandra Vamberg Belli Urbanism & Societal Change



CONTENT

People roam from countryside to the towns, loose their roots, and are left sitting in their flat, with a bird in a cage, a picture of a cow on the wall, and a potted plant on the windowsill.

It doesn't work in the long run! ¹

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1 Quote from "Christianias Green Plan' December 1991

SUMMARY

The 30th of August 2022, Christiania signed a political agreement stating that, in exchange for buying off parts of the ramparts, and the housing placed on it, for 67.000.000 dkk from the Danish State, the Christianits agreed to build 15.000 m2 of 'almen housing' at Christiania .

Many residents felt forced into making this decision and some are even contemplating whether this will be the death of the Freetown¹.

The year prior to the agreement, the former government (The Social Democrats), along with other parties, set aside 10 billion dkk to build 22.000 new almen housing in the larger cities in Denmark. This should be seen in the context of a complex and messy history of many political interventions or attempts of interventions towards the Freetown. Christiania are currently debating the physical and social scope of these approximately 300 new neighbours with actors from the municipality and housing organizations.

This project intends to visualize one of many possible outcomes of the current situation.

The housing being built at Christiania is to be a frontrunner for a new experimentational and a more sustainable type of almen housing. A site for testing and exploring, both when it comes to lowering the environmental impacts of newly build housing, but also the social benefits of living in a community.

The investigations from the site could benefit the entire almen housing sector, and the remaining 21.700 housing units that are planned to be built. A knowledge bank that works outside the regular market exploring the gains from a non-competitive 1:1 building laboratory.

The project should be compassionate towards the fact that it is being built for the common good and aim to be representative and relevant towards the almen housing sector and its users.

The intention is to justify the building program by seeing them both as

- A site for both ecological and social architectural experimentation
- An opportunity for the Freetown to expand and spread their visions to the broader public.



Image from press conferrence 2021

¹ Nordens Bæredygtige Byer, #5, produced by Mathias Nordby, featuring Mette Prag, aired 12.05.2022, Urban Studio

METHODOLOGY

The design process will be informed by meetings with residents from Christiania and other actors involved in the process, and an already completed a research trip around western Europe exploring different forms and typologies within the self-organized eco-communities (see table index below) which also acted as the basis for the 10ECT written assignment.

Based the research trip I have, together with another student, produced a short documentary¹ on the subject of eco-communities called The Happy Few (Not to be shared) <u>https://www.youtube.com/watch?v=rnn8Y-VZfjk</u>. The film is a combination of interviews with residents and experts, as well as footage from cases. Learnings from the film will be taken into consideration when deciding on the program, organizational methods and the architectural outcome of the project.

The project takes inspiration from other hybrid models and combinations of the self-organized and almen housing, degrowth theories² and laboratories and studies of sustainable building culture.

Case name	Country	Dates of visit	Description	Interview
Princessgarden	Germany	5/8/22	Community-garden	Yes
Spreefled	Germany	6/8/22	Cooperative	Yes
Pöge Haus	Germany	7/8/22	Cooperative	No
Anna Linde	Germany	8/8/22	Community garden	No
SchloR	Austria	10/8/22	Cooperative - Habitat	Yes
BikesNRails	Austria	12/8/22	Cooperative - Habitat	Yes
Kowoo	Austria	14/8/22	Cooperative	Yes
Cambium	Austria	15/8/22	Eco-community	Yes
Wohnlabor	Austria	15/8/22	Architectural research	Yes
The Hardturm	Switzerland	17/8/22	Cooperative	Yes
Kalkbreite	Switzerland	18/8/22	Cooperative	Yes
Torri Superiore	Italy	19-21/8/22	Eco-community	Yes
SocialBite	Scotland	24/8/22	Community for homeless	No
BedZed	England	25/8/22	Eco-community	Yes
St. Werburgs	England	26/8/22	Self-build community	Yes
Brigdefarm	England	26/8/22	Community farm	Yes



Spreefelt, Berlin Own photo from research trip

¹ The Happy Few produced and directed by Astrid Juul Jørgensen, Alexandra Vamberg Belli, 3. semester assignment, Urbanism & Societal Change

² Nelson, Anitra, and François Schneider. 2019. Housing for Degrowth : Principles, Models, Challenges and Opportunities. Abingdon, Oxon ; New York, Ny: Routledge.

SOCIETAL THEME

THE BLENDED CITY

The home has over the past decades transitioned into an asset for private equity companies and pension funds as the real estate market in the bigger cities in Europe has proven to be a stable and secure investment¹. As the forces of the market depend on the correlation between income and expenditure, one can not count on the market to provide affordable housing and mixed cities².

This has made it difficult for low/average-income households to find affordable homes in the bigger cities in Denmark³.

POLITICAL CONTEXT

The context of this program is, as mentioned in the introduction, the political agreement; *The foundation for mixed cities – more cheap housing and a way out of homelessness* (2021)⁴ along with the agreement between Christiania and the state on the 15.000 m2 of almen housing (2022). These two political agreements are a part of a long history of interventions and agreements from different governments (See timeline). Already in 2007 there was talk of almen housing at Christiania. This chapter will focus on the two newest agreements between Christiania and the state, and highlight the relevance of them for this project.

The main focus of the *The foundation for mixed cities*⁵ is pointing towards the struggles of finding a home in the bigger cities with an average income, and as a result, how the cities are becoming more divided.

The solution presented is 22.000 new almen housing units in the larger cities in Denmark.

In total 21 new initiatives were presented as part of the agreement (see following pages).



 Parties:S, DF, SF, E, KD. 2021. Fonden for Blandede Byer - Flere Billige Boliger Og En Vej Ud Af Hjernløshed. Edited by Indenrigs- og Boligministeriet. November 26, 2021.
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INITIATIVES FROM 'THE FOUNDATION FOR MIXED CITIES'

1	2	3	13	14	15
Establishment of the foundation for mixed cities	Sustainable almen housing. Pilot / Demonstration projects	Financial support for buying land in areas where the price excels the housing organizations ability to purchase	A balance in the distribution of subsidies towards especially cheap housing on a national level	More housing for seniors.	Senior friendly cities.
10 billion dkk from 'Nybyggerifonden'	100 million for pilot / demonstration project	1,8 billion dkk		50 million dkk for conversion of existing almen housig	30 million dkk
4	5	6	16	17	18
Conversion of existing building stock to housing	Infill projects in existing almen housing departments / areas	Prioritize student housing and dorms, 4000 in Copenhagen.	Accessibility for disabled residents.	More housing for seniors Better utilization of existing housing stock (the distribution of m2 pr. Tennent). Mobility and moving chains.	National policy of architecture. (Housing and cities is to embrace new family patterns and forms of living and a focus on future-proved almen housing).
675 million dkk for conversion + 870 million for purchase	422 million dkk		4,8 billion for adaption of existing almen housing stock		19,5 million dkk
7	8	9	19	20	21
Prioritizing almen housing in the development of new areas.	Almen housing at Christiania	Almen housing at the small and bigger islands	Preliminary studies of a reconstruc- tion of the National Museum.	Promotion of cooperative building and housing communities and alter- native ways of living.	New form of Coop (andel)
	422 million dkk	10 million dkk	11,8 million dkk	5 million dkk for a new department in the 'authority of housing and planning'.	
10	11	12			
A way out of homelessness, More cheap housing to be assigned by the municipality.	Reorganization of efforts towards homeless citizens	Flexible housing (Youth housing should be convertible to senior hou- sing if needed and vice versa)			
				rom the agreement The foun	

– more cheap housing and a way out of homelessness (2021)¹ Initiatives with potential relevance to this project is highlighted (own translation).

¹ Parties:S, DF, SF, E, KD. 2021. Fonden for Blandede Byer - Flere Billige Boliger Og En Vej Ud Af Hjemløshed. Edited by Indenrigs- og Boligministeriet. November 26, 2021.

POLITICAL CONTEXT

The political agreement between the state and Christiania¹ is an addition to an agreement made back in 2011. It clarifies the scope and vision behind the 15.000 m2 of required newly built almen housing. In the agreement, Christiania and the state have described their common visions.

Two examples:

(...) Christiania wishes for the fact that an almen housing project should be adapted to Christiania and be sustainable and green, furthermore that the establishment of the almen housing can happen in phases so that experience and learnings from the first phases can be included when it comes to architecture, materiality, resident composition, community initiatives and so on.²

Following the agreement, the residents in the housing departments, depending on local conditions and with consideration to the individual unique cooperatives, can have influence on the resident composition (...) On the other hand, it is a condition that the agreement accommodates social considerations and an equal treatment of citizens³

Furthermore, the timeline for the building process is described, and clarifies how the process will be broken down into three parts to ensure the possibility of evaluation.



BID p. 4 own translation





The area Christiania has bought in exchange for the promise of 15.000 m2 of almen housing The district 'Christiania'



Timeline of building process

³ IBID p. 4 own translation

ENVIRONMENTAL AND SOCIAL SUSTAINABILITY

10% of Denmark's total CO2 emissions originates from building and construction processes as well as production of building materials. 40% of the Danish energy consumption descent from the operation of buildings which equals 20% of the total carbon footprint. 35% of all waste decents from the building and construction industry¹.

Targets for a greener building industry are from this year (2023) implemented by the former government², but responsibility of the conversion towards a more sustainable building industry is left for the market and philanthropies to handle.

This project intends to question whether all aspects of this transition be left for a competitive real-estate market to handle, and if green experimentations outside the market could contribute and be beneficial for both the private and the public sector?

From our interviews with the residents from the different cases that we visited (See Methology chapter), we learned that many of the residents experienced 'social support' in their communities. Martin from Kowoo described how the community stepped up both in the case of happy events like childbirth, but also sad events like depression or loneliness³.

(Unpublished) research by Maria Toft and the research group COMPASS has now calculated the impacts on the individual carbon footprint of living in an eco-community. Their data has shown that the CO2 footprint of individuals living in eco-communities is 30% lower than the average Dane⁴. This indicates that there are both social and environmental benefits from living in eco-communities.

One of the key findings from the research trip around Europe was that some of the Eco-communities that we visited were in danger of becoming exclusive enclosures or bubbles⁵.

Darinka Czischke, associate professor TU. Delft, and one of the experts that we interviewed on the subject for the documentary, also points towards this dilemma that she often discusses when talking to other researchers:

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The exclusivity, it's only for the happy few, you need to have a degree of cultural capital, social capital to be able to realize these projects¹.

One could argue that this tendency also should be considered when working with Christiania. That the almen housing should be seen as a welcomed opportunity for Christiania to remain open, free, and accessible for all. Czischke points to a potential solution: *The principles of this collaborative housing I believe can be transferred to other systems to make it more accessible to other populations*².

These 'other systems' that Darinka points to is in this project the Almen housing sector.

Both the social and environmental benefits of living in eco-communities should not only be for an exclusive group of individuals. The state of the planet calls for action, scalable solutions and clever square meters.



Screendump from own documentary "The Happy Few' Maria Toft explaining environmental benefits.

¹ Regeringens klimapartnerskab, Anbefalinger til regeringen fra klimapartnerskabet for bygge- og anlægssektoren, 2020, p. 46

² bolig og planstyrelsen, Klimakrav (LCA) i bygningsreglementet, 10.19.2022, https://bpst.dk/da/Byggeri/Baeredygtigt-byggeri/NY-Klimakrav-i-bygningsreglementet#

³ Martin, Interview with Martin at Kowoo, By Astrud Juul Jørgensen, Alexandra Vamberg Belli, 42 minutes, 08.14.2022

⁴ Hovalt, Daniel, Ny forskning viser sammenhæng mellem fællesskab og klimaaftryk, information, published 02:25:2020

⁵ The Happy Few produced and directed by Astrid Juul Jørgensen, Alexandra Vamberg Belli, 3. semester assignment, Urbanism & Societal Change

¹ Czischke, Darinka, Interview with professor Darinka Czischke, By Astrid Juul Jørgensen & Alexandra Vamberg Belli, 35 min., 11.03.2022 2 IBID

SITE ANALYSIS

HISTORY PRE CHRISTIANIA

The History of the site dates back to Christian the 4. King of Denmark (and Norway) from 1588 until his death in 1648. He founded Christianshavn in 1618 which in essence was an expansion of Copenhagen towards the island Amager¹.

The military use of the site dates back to 1836 and was in use by the Danish military forces until the area was overtaken by German soldiers in World War 2. Many of the buildings from this time still remain, and are today converted into housing and recreational purposes.

THE FREETOWN

Christiania was squatted and occupied firstly as a playground for the local children from Christianshavn but later as housing. It was officially founded on the 26th of September 1971 after two years of squatting. The initial vision behind the community was as following:

Christiania's objective is to create a self-governing society, whereby each and every individual can thrive under the responsibility for the entire community. This society must economically rest in itself, and the joint efforts must continue to be about showing that psychological and physical destitution/ pollution can be diverted/prevented²

Christiania as of today is still self-managed and car free.



Painting from early days of the casern unkown artist



Activists breaking down the fence around the military grounds in 1971 Unknown photographer

¹ Hovedstadshistorie, Christianshavn, Bådsmandsstræde, http://www.hovedstadshistorie.dk/christianshavn/baadsmandsstraede/ last visited 02.02.2023

² Verco, Natasha, *Christiania - A poster child for degrowth*, in Housing for Degrowth by Anitra Nelson & Francois Schneider, Routledge, 2019, p. 99-109

MAPPING

The history of the site is still very present to this day. A lot of the built environment at Christiania originates from the military days. Holmen, which is situated north of Christiania, used to be the base of the Danish Navy for more than 300 years¹ which is also visible in the build environment.

Furthermore, the ramparts are also still present, but the line of protection has not been respected by the Christianits to a full extent. This has resulted in the placement of self-build houses both on top and next to it.

In the agreement between Christiania and the state, three sites has already been pointed to as potential sites for the 15.000 m²: 1) Røde Sols Plads and 2) Prærien / or an area in connection to 3) Bådsmandsstræde².

This project will take place at Røde Sols Plads 1).

1) Røde Sols Plads

) Prærien

3

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Bådsmandsstræde



¹ Kultur ministeriet, Holmen, https://slks.dk/omraader/kulturarv/bevaringsvaerdige-bygninger-og-miljoeer/ bevaringstemaer/industrikultur/industrihistoriens-danmarkskort/holmen, visited las 02.20.2023

² Bolig og planstyrelsen, Tillægsaftale mellem fonden fristaden Christiania og staten, inderigs og boligministeriet, 08.30.2022



RØDE SOLS PLADS





Røde Sols plads Own Photo

Urbanism & Societal Change

PROGRAM

THE LABORATORY FOR FUTURE LIVING

The main driver guiding this project is the political agreement of building almen housing at Christiania.

Furthermore, the program is guided by the initiatives presented earlier from *The foundation for mixed cities*. Very relevant to this project is initiative nr. 2 on sustainable almen housing:

The Parties have agreed that the green agenda must be further promoted in the public housing sector, and DKK 100 million will be set aside for this in 2022 - 2026 within the foundation for mixed cities which will support the development of finding more sustainable solutions within the almen construction. The funds must support sustainable solutions and development in a broad sense. This could for example be through development of and experimentations with sustainable building materials as well as through demonstration projects and analysis to promote green measures in both new construction and the renovation of public housing. A pilot project that examines the recycling of materials in a larger renovation of almen housing will be able to be supported by the fund.¹

This initiative entails demonstration- and pilot projects, which is of high importance, both considering the urgency of transforming the entire building industry, but also, more directly, in the context of the development of 22.000 new homes.

The project should also be seen in combination with initiative nr. 18; *The new national policy of architecture*. One of the aims of the new policy is on housing and urban spaces to be more inclusive towards new family patterns and alternative forms of living. The agreement states how:

There is a large demand for new ways of building and living with a community in the center. Cooperatives and building-cooperatives are to be found in many different shapes and are contributing with their versatility and diversity in the creation of more mixed cities (...) these housing projects can also contribute to a greater architectural diversity, sustainable construction and more community and citizen-involvement. (...) The greatest barrier for the establishment of these cooperatives is the lack of knowledge².

The combination of several dreams, visions and ideas from different stakeholders is key, and will contribute to both a realistic but also visionary example of a potential outcome after years of negotiations and political interventions.

2 IBID, ow

¹ Parties:S, DF, SF, E, KD. 2021. Fonden for Blandede Byer - Flere Billige Boliger Og En Vej Ud Af Hjemløshed. Edited by Indenrigs- og Boligministeriet. November 26, 2021. Own translation 2 IBID. own translation

THE LABORATORY FOR FUTURE LIVING

The Laboratory of future living explores solutions towards a low impact housing sector through 1:1 experimentations on both the built, operated, organized, managed and experienced society.

The findings from the laboratory should both benefit the 22.000 new housing units, but it's goal is to be able to contribute both to the private and public sector by being a knowledge bank for the whole industry.

It will question and debate current regulations by pointing to obstacles found in the design process.

A coherent machine that will aim to pursue long term solutions and have a broad perspective on the future of the home.

The Laboratory can be divided into three sub categories shown opposite:

THE LABORATORY FOR THE DWELLING

The housing being built at the site should in itself be investigative and contribute to research on the topic of sustainable architecture. The organization of the homes takes inspiration from its site; Christiania.

1 BEDROOM DWELLINGS 1,5 BEDROOM DWELLINGS 2 BEDROOM DWELLINGS 3000 - 4000 M2

2

THE LABORATORY FOR ARCHITECTURAL EXPERIMENTATION

A physical laboratory space to ensure ongoing explorations after the housing is build. This space is also a meeting point for different actors of the building industry, the tenures and Christianits.

DOUBLE HEIGHT ROOM FOR 1:1 EXPERIMENTATION DELIVERY OF GOODS WORKSHOP SPACE FAB LAB DESKS FOR RENT 200 - 500 M2

3

THE LABORATORY FOR ORGANIZING THE COMMON

To ensure a thriving community, the different types of tenures should naturally meet and interact during the day. Shared facilities and community spaces will act as a link between the laboratory, the housing and the rest of Christiania.

In line with the organizational methods from Christiania, this room should be flexible and be able to host democratic events / meetings.

SPACE FOR DEMOCRATIC EVENTS HOME OFFICE KICTHEN / DINING AREA CHRILDRENS PLAYING AREA WASHING + DRYING FACILITIES LIVING ROOM 200 - 400 M2

RELATION BETWEEN FUNCTIONS

A diagrammatic overview of functions and facilities in connection to one and other and to the context (not to scale). Some of the different facilities will benefit from being placed next to each other, or even sharing the same space. This will be further investigated in the design process.





HAND-IN REQUIREMENTS

PROCESS / BUILDING PHASES

The project will act as a hybrid reality by both considering and taking part in the real and ongoing process taking place at Christiania, but also challenge and critique the reality by allowing for other directions than what Christiania and the actors involved decides.

Therefore I also see this as a planning assignment and the process will be a part of the deliverables as a strategic element.

The deliverables are an estimation and may change during the design process.

DELIVERABLES

Urban scale

1:500 / 1:1000 Investigations of the projects relation to context and the outdoor facilities within the project.

Architectural scale

1:50 / 1:200 model

Segments of the project will be explored in the scale of 1:50 and the organisation of the housing and volumenstudies will be explored in the scale 1:200.

1:50 / 1:100 / 1:200 plan drawings / Section / Elevation When relevant, segments will be drawn to scale 1:50. Key meeting points and representative segments of plans will be designed to scale 1:100 / 1:200.

CV

EDUCATION

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