Building Hygge In-Roads into Incremental Living

Tanisha Kalra
University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/masters_theses_2

Recommended Citation
Kalra, Tanisha, "Building Hygge In-Roads into Incremental Living" (2023). Masters Theses. 1304.
https://doi.org/10.7275/35389067 https://scholarworks.umass.edu/masters_theses_2/1304

This Open Access Thesis is brought to you for free and open access by the Dissertations and Theses at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Masters Theses by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
BUILDING HYGGE IN-ROADS INTO INCREMENTAL LIVING

A Thesis Presented
by
TANISHA KALRA

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

MASTER OF ARCHITECTURE

May 2023

Architecture

Department of Architecture
BUILDING HYGGE IN-ROADS INTO INCREMENTAL LIVING

A Thesis Presented

by

TANISHA KALRA

Approved as to style and content:

_____________________________

Carey Clouse, Advisor

_____________________________

Stephen Schreiber, Chair
Department of Architecture
ACKNOWLEDGMENTS

This thesis has been a long, grueling, exciting, and truly a learning process. There are so many people I am thankful to, but foremost would be my advisor, Prof. Carey Clouse. Her guidance and time spent through effective discussions helped me sail through some of the tough questions and mental blocks that came up during the discourse of this thesis.

I would also like to thank my friends who spent time with me discussing everyone’s thesis, and posed valuable questions that built up everyone’s thought process for the thesis. I would also like to thank my family for their valuable contribution and support.
ABSTRACT

BUILDING HYGGE IN-ROADS INTO INCREMENTAL LIVING

MAY 2023

TANISHA KALRA, B. ARCH, LOVELY PROFESSIONAL UNIVERSITY, INDIA
M.Arch, UNIVERSITY OF MASSACHUSETTS AMHERST

Directed by: Professor Carey Clouse

Housing is one aspect of architecture and urban planning that has constantly been improved and redefined to suit the needs of people during the time periods they have been living in. People have taken significant steps in establishing how they want to live in retrospect to the times, according to their values and needs. Today, more architectural research may address the understanding and production of a healthy way of living than any other aspect of placemaking. It is no surprise that so much effort supports this spatial concern, which contributes to a fundamental building block of shared cultural definitions.

The COVID-19 pandemic has simply underscored the importance of this movement. In human terms, these times have indicated that when the going gets tough, people turn to their own cocoons for shelter, safety, and storage, while this so-called place of safety becomes a focal point around which they can develop their life and subsequently their communication to the outside world.
With the growing challenges in everyday urbanism, and the population of the world reaching new peaks every year, one must question if the issues of the past such as the scale and speed of construction can coordinate with the critical timelines that society now faces. On top of that, disasters and climate change simply heightens these challenges. Providing housing for all may not be a viable solution in the long term. People often see housing as a product or the result of the process, and this idea needs to be given significant thought so that the discourse of housing and eventually urban living reflect a world of comfort and social utopia. The thesis also narrowly touches on the fact that housing is a form of architecture that is ever changing. Once this idea has been accepted, urbanism can begin to address things that affect the environment, health, and other aspects of value which are now loosely attached to one’s living conditions.

This thesis explores the various ways of establishing comfortable living space, in particular the notion of “Hygge” and its parallels across the world, and identifies “incrementalism” as a common framework to support health, facilitate safety, and build comfort for a large audience.
# TABLE OF CONTENTS

Table of Figures .................................................................................................................. vii

CHAPTER 1: ....................................................................................................................... 1

INCREMENTAL: A START .................................................................................................. 1

CHAPTER 2: ....................................................................................................................... 5

INTRODUCTION TO INCREMENTAL HOUSING ............................................................. 5

Framework of Incremental Projects ................................................................................. 7

CHAPTER 3 ....................................................................................................................... 13

INTRODUCTION TO HYGGE .......................................................................................... 13

Demystifying Hygge ......................................................................................................... 13

Mindfulness ....................................................................................................................... 14

Humility, politics, and a bit of criticism too ...................................................................... 14

A welfare state of living incrementally ............................................................................ 15

Hygge, architecture and place making ............................................................................. 15

CHAPTER 4 ....................................................................................................................... 17

WEAVING A RELATION BETWEEN INCREMENTALISM AND HYGGE THROUGH
ARCHITECTURE ................................................................................................................ 17

CHAPTER 5 ....................................................................................................................... 19

BACKGROUND ON PRIORITIES AND CASE STUDY ................................................... 19
CHAPTER 6.......................................................................................................................... 24

SITE SELECTION.................................................................................................................. 24

CHAPTER 7.......................................................................................................................... 28

DESIGN................................................................................................................................. 28

CHAPTER 8: ......................................................................................................................... 35

CONCLUSION......................................................................................................................... 35
Table of Figures

Figure 1: The thesis questions how we can solve the urban housing crises by combining hygge and incremental nature of living in architecture ........................................ 2
Figure 2: Incremental prioritizes the starter core and also focuses on the shell of the lot so as to contain the expansion within the given space ............................................ 6
Figure 3: Everyone expands differently so it is important to create hard boundaries for expansion within the shell.................................................................................. 7
Figure 4: The internal spaces of the house also need to prioritize the flexibility of space while maintaining the core valued functions ......................................................... 10
Figure 5: Creating Hygge Atmosphere .................................................................. 18
Figure 6: The guideline for customizing incremental house .................................. 20
Figure 7: How to extend a starter core................................................................. 21
Figure 8: Summary of the comparison of the two different studies in Gonzalo Lizarralde's research ................................................................................................. 22
Figure 9: Site, Jamaica Plain, 10 Lamartine Street ............................................. 25
Figure 10: Existing Buildings and Site Boundaries ............................................. 26
Figure 11: Site Phasing ...................................................................................... 27
Figure 12: From left to right: expansion in garden house, expansion in townhouse, expansion in apartment ...................................................................................... 28
Figure 13: Typical garden house core-expansion ............................................. 29
Figure 14: Typical townhouse expansion ........................................................... 29
Figure 15: A typical townhouse unit consolidated with prototypes .................... 30
Figure 16: a typical apartment unit consolidated with its units ....................... 31
Figure 17: Site Axonometric - layout of different apartment ........................................ 32
Figure 18: Proposed Site Plan ......................................................................................... 33
Figure 19: A view of the apartment .............................................................................. 34
CHAPTER 1:
INCREMENTAL: A START

The urban fabric of growing cities relentlessly bears the brunt of new challenges, such as over-population and housing shortages. As cities develop, these challenges seem to have grown more complex than those of their previous generations. Housing is one such challenge: To house people comfortably is probably a dream, but in the multi-layered phenomenon of urbanism, can also cause unforeseen counter-measures. One such counter-measure is the defensibility of the city space. If the cities were just made of satellite towns that were only housing people for their sole purpose, the rest of the larger city network would be left wanting for more dialogue and network. One solution to this problem comes from creating incremental living and housing solutions. In simple terms, incremental living is the process by which a dweller(s) would only use the space they require and expand into residual spaces when needed. It is like fostering a vacant space like one’s own and hoping for it to gradually change and support one’s own growth. Incremental housing is a process that can be a part of the solution, where people can learn to foster community in longer terms of life. Incremental living combines zones of working and areas of living. The concept revolves around “live, work and life” where instead of designating spaces within a house, one designates function and evaluates the requirement and prerequisite for such spaces. This creates a great deal of attention to the living conditions and potentially can upgrade the standard of living among communities.
Simply providing housing as part of the solution to eradicate homelessness, or a housing crisis is not only overly expensive, but also may lead to a hopeless catch-up mode. In one of his research projects on proactive urban strategy, designer Reinhard Goethert declares that “after-the-fact endeavors doom us to expensive reactive efforts and compromise urban development” (Goethert 2010, 4). According to Goethert, “We need to shift to a proactive strategy” (ibid).

The nature of building “instant” housing through conventional methods has often been found to be too costly, socially disruptive, and culturally imprecise. Moreover, these approaches have more than often overtaxed the administrative resources. One such example is the fiasco of the housing project of Pruitt Igoe, which is often seen as the case study of how not to approach housing. The project in St. Louis, Missouri is a prime example of representing the shortcomings of urban renewal projects in terms of public housing. While it was seen as an ideal solution at the time of building, not much ground was gained in terms of solution. The project was demolished in the years following, owing to architectural failures.
The incremental process of building accounts for newer housing and their improvements in most cities that are rapidly growing around the world. According to a study at SIGUS, a Special Interest Group in Urban Settlement at the School of Architecture and Planning at MIT, “the informal sector already builds an estimated 70 percent of all urban housing in the developing world, making it the leading actor in the housing supply chain. This informal sector starts with simple makeshift shelters (a shack or a one-room core) and, given sufficient time and resources, transforms them into middle-income houses” (Goethert & Nohn 2017, 23). This sufficiency and transformation would eventually propagate the expansion of housing. This is where one would find the addition of extra units that potentially increase the housing stock, and also create rental income for individuals or groups.

**Incremental: Not everything is glossy**

Not everything is perfect about incremental housing. While the idea makes an attempt at tackling the crisis at hand, not many examples set a benchmark for buildings that are healthy, multi-functional and cost-effective. The need for healthy living situations in households has been in conflict with work from home needs, where overlapping schedules and places within the house have often been stretched thin. This has increased the need for spaces in houses and in neighborhoods that can be comfortable and connected for all. This thesis investigates ideas that make the space of living and conducting life not only healthy but also highlights the fact that living is really a socially cultural process that varies from one family to another in their own meaningful ways. After all, everyone has different needs.
Perhaps these problems may have been well addressed, had the current trends of living been considered in terms of both future and past generations, as well as their way of working. Contemporary examples of incremental design from Alejandro Aravena and other architects who have influenced housing theories may offer a way forward. There are multiple ways of living that can make in-roads into this concept of incremental living. This thesis explores incremental ways of living and strategies for accommodating people so that they have a sense of comfort and connection.
CHAPTER 2:
INTRODUCTION TO INCREMENTAL HOUSING

The way of working: A concept in urban development

Incremental housing is a process of creating dwellings through multiple phases of construction, perhaps stretched out over a period of years or even decades. This kind of housing can be considered a starter house, or phased development, or owner-driven housing. However, at the fundamental level, “incremental housing is an integral urban development process” (Anderson 2009, 4), that helps to build housing communities and sense of belonging for every occupant. It must be kept in mind that this is not a time-bound practice, unlike many mainstream urban development or architecture projects. It is not quick, or immediately completed with a construction deadline in mind, but this flexibility gives owners a choice to expand the space upon need, opportunity, or demand. Some studies demonstrate that this kind of housing is best initiated with a starter core (Goethert 2010, 7).
Incrementalism is also a cost-effective way to quickly resettle many families that are prone to homelessness or are at the threshold of a minimum housing and services level. This is achieved by linking the energy usage of occupants with large-scale city planning. This provides security, but also maximum flexibility in housing decisions. In this way, urban expansion becomes predictable. This predictability eventually uses limited funds more cost-effectively and also does not overwhelm the cities’ administrative capacity. In a nutshell, this process provides more than housing: it nurtures people and communities and
develops social networks which eventually can support multi-level services and other small-scale commercial operations.

**Framework of Incremental Projects**

In his paper on Incremental Housing as an Urban Strategy, Reinhard Goethert explains that incremental projects are practices based on conventional wisdom and in fact, “draw on the knowledge of the 1970s with site and services/core house projects” (Goethert 2010, 4). He notes that these processes of development “used site and services to describe a type of novel project strategy that had a lot with legal title and water, sanitation, and streets, and usually supporting programs including training, microloans, schools, and clinics” (ibid). Eventually, such projects imitated “squatter settlements but with institutional support, legal title, attendant services, and usually some basic shelter option ranging from a simple one-room structure with kitchen and bath to a bare lot with utility connections” (ibid). However, the so called new and groundbreaking policies eventually liquidated into disuse, partly because they failed to recognize that this was supposed to be a process, and not a “standard” housing project.
Professor Pat Wakely explains, “Site and services were deemed unsuccessful and discredited. They were evaluated too soon after two to three years and there was misunderstanding about the criteria and indicators in this process-based type of project” (Wakely 2014). However, site and services also work, as it is evident in certain effective growth of the incremental houses over a longer period of time. It does come with a bunch of drawbacks however, where the “construction quality is sometimes problematic, and infrastructure facilities frequently delay and are not reflected in city wide planning” (Goethert 2010, 23). Perhaps, if one can actively improve and fix these problems, perhaps by identifying and creating a catalog of materials that can actively be successful, durable, and useful in incremental development without an active supervision of a professional, some of these problems will simply reduce in terms of percentage. Moreover, if policies can provide an active framework to deal with the city planning issues which are often very immediate and action driven and place a plan of action that is rather process driven, the city may be able to address the causes which are otherwise very difficult to address.

Implementation of the incremental framework: Not simple, but worth trying

In a paper on Incremental Housing as a proactive urban strategy, Reinhard Goethert and the SIGUS group at MIT explain that realizing an incremental policy is not as simple as one would expect. The findings of the research can be summarized into four related challenges that may further potentially drive a policy:

(1) “Establishing a framework to structure land development” (Goethert 2010, 24): this is perhaps the most important of the challenges because the land is not cheap but there is also a significant amount of pressure to get something out of it financially. Given the nature of
incremental living, it is hard to classify it in one economic group because the disposition makes it open to mixed use, residential and retail at the same time.

(2) “Providing a starter house-core” (Goethert 2010, 24) or at least identifying the core functions of the house: The process driven approach does not address all the problems at once. One of the factors in such long-term actions is finances. Figuring them out takes time given when we are prioritizing short term goals and accepting one need over the other. It is difficult but it is not hard because eventually the choice lies at the hands of the owner, and once they settle their thoughts into space, they can always outgrow its potential. Time plays a crucial factor in such endeavors.

(3) “Creating and supporting policies and programs that are helpful in propagating incrementalism” (Goethert 2010, 24): Accepting incrementalism as part of one's living is an activism of sorts. One does not have enough money to build their house altogether, or for the lack of better resources, but above all - one becomes closer to their self-worth in identifying what they need. It looks like a mountain to climb but it really is a sustainable approach to housing at a root level given that our most prominent option moving forward at every step is rationing our resources.

(4) Family, society, and individuals: the basics of occupying and living in a space. Here, several smaller principles drive the approach.

- First and foremost is to consider the capacity of the space and the family for both: short- and long-term living (www.incrementalsettlement.org.za n.d.).
Refined strategies may often entail liminal spaces that are multifunctional, overlapping in needs but at the same time have the potential to engage different activities discreetly. This does not only set the tone for the culture within the house but also outside it given that our houses have responded to being the place from which we have communicated the most over the past couple of years.

Figure 4: The internal spaces of the house also need to prioritize the flexibility of space while maintaining the core valued functions

During the pandemic, many people sought a personal space to attend to their priorities or work, hoping to focus attention and manage time.

- At the urban level, most families living in their housing within the realm of urban diaspora seeking liminal and shared activities do not have the capacity to both work and conduct their personal life efficiently at the same time. Perhaps, it is time to acknowledge the custom where work and life are truly begging us to be balanced both in house and also in our day to day lives.

Relevant family customs and personal interventions also build on the incremental practices. It is basically the focus on the least amount of space that can solve our broader issues if not all with the absolute minimum as well as desirable.
• Understanding global problems at local levels: to get into the true nature of incremental housing, one has to understand that housing demand is neither a new concept nor a new problem. It is linked to an age-old idea where the overwhelming demand often results in widespread intervention. This is not just a problem of addressing the demands of few against the demands of many, but also an issue of adequacy against flawlessness. Unlike the case of Pruitt Igoe, one must understand how to establish a sense of character and belonging among the occupants of the new starter housing. This is critical because this is difficult. It can be understood that even though, after a disaster, this kind of housing provides permanence and a sense of sustenance, and fosters development in new housing areas. Moreover, the framework and strategies need to embrace support from communities so that is where an expected channel of sustenance should be.

• Understanding the local level: Building one house- “starter cores”: the root of all incrementalism). Starter cores are the part of the incremental units in the housing plans that comprise kitchen/bathroom or living room providing a basic and quick way to accommodate occupants. In the retrospect of the defined location that facilitate and orient the planning of service facilities, starter cores assuage impacts on resource. To the families at the local level, incremental housing is expected to be more affordable, and a properly designed core offers flexibility in terms of spatial expansion.

According to Goethert, “Successful incremental settlements require support in four key areas:
• A simple process for expansion to speed development by adding to the housing stock quickly.

• Strengthening individual identity and sense of community.

• Promoting safe, good quality construction practices; and

• Encouraging provision and maintenance of basic services.” (Goethert 2010, 25)

However, it may be too much to ask from the process-driven approach to incorporate contextual and cultural understanding. This is where the second part of the thesis comes into play: lifestyle choices, living and conducting lives can come into the foreground through the development of “Hygge” (Hayden 2019, 3).
CHAPTER 3
INTRODUCTION TO HYGGE

Hygge, the Scandinavian way of living, is one such way of conducting life. According to author Louisa Thomsen, “Hygge is the practical way of creating sanctuary in the middle of a very real life” (Thomsen 2016, 29). Hygge living addresses the most basic domestic needs and makes sure that they are met. With such necessities addressed, people can become “aware of the decoupling between wealth and well-being” (https://www.findinghyggefilm.com/ 2019). This awareness of decoupling may be potentially helpful in addressing the multi-generational housing issues around the world. With the housing economies skyrocketing every moment, and migration becoming normalized across the world, society may need to look at the housing crisis with a different perspective.

Demystifying Hygge

Various sources suggest different origins for the word, although all agree that it has some relation to comfort and coziness. But whatever the origin, the juxtaposition of all the meanings combine a sense of warmth, such as an embraced hug, as a way of life (Denmark n.d.). While some sources suggest the Nordic root of the word, with whom the Danes shared the nation state until late nineteenth century, it is interesting to know how the meanings of the root word have slightly become different. Nordic defined Hygge as “well-being,” to Danes it means “to give courage, comfort, joy” (Hayden 2019, 15). In another etymological study, Hygge may be derived from hygge, a sixteenth century word which means to embrace, which eventually circles around comforting something or someone (ibid, 19).
Mindfulness

Hygge not only becomes a style but also a mindset; this is the very starting point of establishing cultural connections. This embrace encourages people to see the world differently, not through what can be acquired or achieved, but also through appreciating and “taking joy in small things, and joys of life” (ibid, 19). In a way, it is similar to concepts of meditation: The practice encourages one to stay in the present, enjoying what we have with loved ones and spending our time qualitatively rather than focusing on quantity.

This aspect is most important from the point of thesis as well because a part of the larger problem in incrementalism is accepting the mindful problems in the present and being too concerned about the future. This often leads to imaginary conversations that are never truly manifested within place making. Indeed, incrementalism may be a muted component of the Hygge life that defines understanding of happiness, decoupling of feeling, and comfort from the trappings of wealth and status. This is part of the equation where emphasis is laid on equality, teamwork, modesty, and simplicity.

Humility, politics, and a bit of criticism too

Not all is well for some people who criticize the culture to be a bit of encouragement towards a kind of conformity long associated with various Northern European countries. This conformity is based on the idea that no person should stand out or show off. According to author Barbara Hayden, while Hygge may suggest the element of some similar, it by no means encourages us to be the same way to conform to the aim of this lifestyle. She
elaborates that rather it is more about finding satisfaction in everyday parts of life, promoting tolerance and communal togetherness.

**A welfare state of living incrementally**

An argument about what makes hygge so achievable in Scandinavian lifestyle is because of the “welfare state.” Drawing parallels to incrementalism, many of the financial burdens that are part of the house building are taken care of with the incremental nature of the housing and needs. Similarly, with Danes, they can enjoy the small comforts of life and inherent joys of family and friends because they are not ridden with anxiety on how to afford things and think about how their liminal spaces are overstretched (Day 2021).

Having a basic understanding of certain prerequisites in Hygge, one can potentially explore the conduits in which Hygge can be achieved (Hayden 2019, 29). Emotionally, one of the benefits of hygge is to promote a sense of calm and peace. For example, if one’s home is cozy and comforting, with candlelit rooms, warm furniture, blankets, and smells of delicious home cooking, then it stands to reason that one’s state of mind is also at peace, not anxious. Additionally, increased feelings of optimism and self-worth are often by products of practicing hygge, as it gives us a sense of not thinking too much about external desires, hence fostering a sense of mindfulness and appreciation for the little things in life.

**Hygge, architecture and place making**

The application of hygge in everyone’s life boils down to a few key features, all of which will be discussed in this thesis. For now, some elements have been borrowed from Barbara Haydens and Meik Wiking, who in their books have discussed at length about
letting the “Hygge embrace” into our life. Warm lighting, such as candlelight, is perhaps one of the important elements in igniting hygge spirit (Byager 2018, 10). Material texture is also important in imparting a soft and warm touch to promoting a calm and relaxed environment (Hayden 2019, 28). The natural elements take precedence over cold, hard surfaces such as glass or steel. This also applies to use of color: beige and cream with light hints of color taken precedence and calmness over bright reds, yellows, or oranges. Coming from cold temperature, it is about warmth rather than room temperature.

Hayden explains that “the idea of architecture proving an internal psychological warmth is a result of providing a safe and comfortable environment for everyone who enters into space. An inviting space is a harmonious space” (Byager 2018). Togetherness is a key component of hygge, and people within that space should feel connected and comforted by each other as well as their environment. Activities suggested by the hygge lifestyle all reflect tenants described above. This is not about hosting formal dinners or leading loud rounds of competitive games. It could be anything from simple conversation to a home-style dinner to coffee and cards at the end of an evening. Whatever the plan in space, attune it to the goal of togetherness and connection with your family and friends” (Hayden 2019, 42).
CHAPTER 4
WEAVING A RELATION BETWEEN INCREMENTALISM AND HYGGE
THROUGH ARCHITECTURE

Framework: this thesis identifies or aims to find a common understanding between Hygge and incrementalism. From the onset of the two topics, it looks like that if one tries to match the right aspects of Hygge to incremental housing, it will produce a more holistic approach to building a sustainable community. After all, they seem to have the same essence.

The following steps were developed:

- Provide a framework in space with its sense of wear-tear, coziness, comfort, longevity, and happiness with time. It is partly a study of weathering spaces too.
- Learn and control the comfort of space and its materialistic values by having a structure to upcycle and down cycle textures and not disregard them in a wasteful manner.
- Learning how we imprint upon our spaces by living in them over time. Is there a role of memory and bodily experience?
- Answering if “Hygge space” is simply a residue of the “Hygge values”
• Identifying materials that can qualify as more mainstream to support the objective and try to create a conceptual layout/library.

![Diagram of Hygge Atmosphere](image)

*Figure 5: Creating Hygge Atmosphere*
CHAPTER 5
BACKGROUND ON PRIORITIES AND CASE STUDY

This chapter explores the work of various architects, through a literature review and case studies, and aims to summarize this material as a theoretical framework. The works addressed spread across conversations, writings and projects that help advance incrementalism as a movement.

Alejandro Aravena, one of the leading pioneers in incremental housing, has pointed out the scarcity of resources as a driving factor towards the philosophy of his practice. He underscores the impact of scarcity, and links it to the economics of the market where eventually everything can either be clubbed under “Reduce or Displace” (Aravena 2016). All of these factors eventually “reduce the size of the houses and threaten the quality of life of its inhabitants” (Zilliacus 2016), leading to segregations and rise of underserved peripheries. He points out the availability of resources, noting that designers need to understand that to face scarcity of means, the market tends to do two things. First, the market will reduce the size of the houses, threatening the quality of life of inhabitants, and second, it will displace them to underserved peripheries where the quality of life diminishes. This is where Aravena addresses the principles and philosophy behind incrementalism, highlighting certain steps that architects can focus on. He broadly elaborates the difficulties and breaks them into categories that talk about “the degrees of difficulty, individual capacity and what cannot be done alone, and looking for common goods” (Zilliacus 2016). Aravena’s book identifies 5 design conditions as pre-requisite for the incremental housing and these are broadly classified into “good location, harmonious growth in time, urban layout that introduces links between private space and public space,
structure that can support the growth of middle class, and a thorough understanding of middle class DNA” (Aravena 2016). He further implores designers to strike the right balance between social and middle-class housing.

_The Guideline for Customizing Incremental Housing_, based on two Chilean case studies by Goran Ivo Marinovic, discusses incremental housing supported by governmental funding for people who could gradually customize their dwelling units. The study highlights the household’s financial and motivational capabilities to finalize their units by proposing to phase out construction that may potentially fall short of completion. The paper explains degrees of “responsibilities of government and architects engaged into the process that will enhance the motivation of low-income families to customize their house by self-building practice” (Marinovic 2020, 170).

<table>
<thead>
<tr>
<th>phases</th>
<th>objective 1</th>
<th>objective 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) introduce the initial design of the base house</td>
<td>Present to households the first draft of the base house</td>
<td>Collecting data about households’ critique of proposed design solution</td>
</tr>
<tr>
<td>b) discuss the design of the base house with households</td>
<td>Collecting data about households’ plan to occupy the base house. What part of the house is the most important for them?</td>
<td>Present to households the possibility to adjust the design solution based on their needs</td>
</tr>
<tr>
<td>c) connect households’ construction plans with their financial resources</td>
<td>Group households according to planned investment in customisation</td>
<td>Inform each group on positive and negative sides of proposed self-build strategy</td>
</tr>
<tr>
<td>d) present the customisation design template</td>
<td>Introduce different phases of the design template and set the limits of self-building</td>
<td>Support households with construction knowledge for implementing proposed template</td>
</tr>
</tbody>
</table>

_Figure 6: The guideline for customizing incremental house (Marinovic 2020, 172)_

In figure 6, the author recognizes the need for phasing the housing process which involves “the introduction of incremental construction ideas, discussion with families about completing houses, connecting household construction plans to financial resources, and presenting a customized design template” (ibid, 173). He highlights that the incremental housing does not necessarily have to be an unfinished starter house but at the same time can motivate residents to take a primary role and responsibility in finishing it.
Stakeholder participation and incremental housing in subsidized housing projects in Colombia and South Africa, a paper by Gonzalo Lizarralde, discusses how subsidized housing projects in developing countries are limited by particular problems. The text highlights how the limitation of the upfront subsidy is challenging because it is insufficient to the housing needs of the inhabitants. It underscores the need for participation from the inhabitants from the construction to the occupation. It studies the “anticipation of user-driven additions and upgrades that recognize the needs of post occupancies” (Lizarralde 2011, 178). The writer urges designers to move the focus from the participation of occupants during construction and rather, to an understanding of conditions after the occupation of units.
The paper draws a comparison between the incremental idea of housing in Colombia and South Africa, and showcases how the differences reflect into the lives of the occupants. Eventually, the case studies that are used into the project suggest a means to “optimize the investment of subsidies” (ibid, 179) within incrementalism.

Build as you earn and learn: Informal urbanism and Incremental housing financing in Kumasi, Ghana, is a paper by Clifford Amoako and Emmanuel Frimpong Boamah. The authors talk about the failure of planning processes in developing countries in lieu of informal settlements, and their rapid, uncontrolled growth. It discusses how these conditions have overwhelmed the city authorities. It also highlights an understanding of
“financing the complex networks of sources that are not discussed in the housing literature” (Amoako & Boamah 2017, 435).

The nature and characteristics of unorthodox housing reveals an evolving and unconventional financial system that could open new avenues for conventional urban planning, affordable housing and housing financing systems. The paper further explores the dynamics of “complex and fluid networks” that are co-evolving within the processes of “social learning and informal urbanism” (ibid, 437).

*Incremental Housing as a node for intersecting flows of city-making: rethinking the housing shortage in the global South* is a paper by Femke Van Noorloos, Liza Rose Cirolia and Abigail Friendly. This paper identifies problems within the larger urban and regional systems and their flows, and suggests an extended framework for understanding the incremental housing in five dimensions that are land, finance, infrastructure, building materials and labor. The elaboration is made upon the fact that mapping these dynamics is necessary to understand fundamental questions of “where, how and why: that can improve or develop incremental housing to advance” (Noorloos, Cirolia & Friendly 2019, 7). The paper argues that further conceptualization of the incremental process will acknowledge the local incremental building practices.
CHAPTER 6

SITE SELECTION

A site on the outskirts of Boston, MA was chosen as a test for this thesis. It emerged as a suitable place for study, because it has the family-oriented population that drives back and forth from the city every day for work, and it was situated in a neighborhood that potentially poses significant living challenges due to the space being predominantly residential. The site lies between Heath Street and Center Street, and is next to Jackson Square train station in Jamaica Plain, MA. The site is currently home to several apartment complexes that are being demolished as part of the redevelopment of the precinct. With the redevelopment working out in phases, the development of the site focuses on blurring the boundaries of the neighborhood where the newer apartments are reconnected with the surrounding community.

The original apartment complexes were developed between 1930s to early 1950s as part of the federal government’s development planning to respond to post-depression and post-world-war II public housing shortages. The site is the example of the critical safety net housing and home to the community of different activists who have constantly worked to improve and protect the community.
The site is flanked by existing Stop n Shop on the west side of the site within walking distance, and train station (Jackson Square) on the east. The site also sits adjacent to the neighborhood recreational facility with tennis and basket-ball courts that are actively used by the neighborhood.

An on-going redevelopment program that was submitted to Boston Housing Authority in 2017 divides the demolition and re-development of the housing in seven phases over the time frame of 14-16 years. This also includes the development of Anna Nicole community center next to recreational park on the site, which is not within the scope of this thesis.
Phase 1 calls for the replacement of the seven residential buildings and the current Anna Mae Cole Community center with 673 units. Out of the 673 units, 253 will be replacing existing units for MCHA families and 420 will be new affordable and middle income units. Their idea is to maximize the low-income residency within the site,
therefore creating a resilient community.

Figure 11: Site Phasing

Seven new 6-story buildings
- Replace existing 251 apartments on site
- Total of approximately 680 apartments, adding new affordable, middle-income, and market-rate apartments
- New Anna Mae Cole Center
- New streets, pedestrian paths, and outdoor spaces
- 5 different phases spanning 8-10 years
- The thesis focuses on designing a part of the entire phase
CHAPTER 7
DESIGN

The thesis brings together the understanding of incrementalism and hygge into urban living. The primary challenge was to identify a site that provided enough opportunity to address various questions related to urban issues, and to allow for design explorations in terms of how the topic of incrementalism and hygge could potentially be manifested into day-to-day urban discourse.

Figure 12: From left to right: expansion in garden house, expansion in townhouse, apartment expansion.

After careful deliberation, one of the first steps in the designs was to identify what kind of typical units can be potentially experimented with.
When it was established that the thesis could use different layouts that are present in urban living and turn them into typical townhouses, apartments and typical off-the-grid cabins: a typical typology of 1-bedroom that could expand into 2 BR; 2-bedrooms that could typically expand into 3-BR; and studios that could expand typically into 1-2 B/R was proposed. However, the actual difficulties in the thesis lay in striving to develop an understanding of how these can be combined to form a fully functional building, as it is difficult to expand with the building envelope intact.
Figure 15: A typical townhouse unit consolidated with prototypes

In this scenario, two steps were taken into consideration: the first one was to identify the placement of starter core because that requires architectural coordination, and the second was the flexibility of spaces around the core itself. This flexibility would eventually determine which way the units expand.
Figure 16: Typical apartment unit consolidated.

It became apparent that the expansion was much easier in the singular houses with gardens, but as one moved to a townhouse and apartment living, the constraints begin to present themselves in aggregate. Once the basic idea of the prototype was developed, the space for potentially expanding incrementally could be initially proposed as a backyard or front-yard garden of the house. This decision aptly fit into the atmosphere of hygge, where the spaces of kitchen and garden provided enough elements to the house for comfortable, cozy environment. The design sought to go beyond the limitations of objectified hygge elements that have been trending, where a pillow case, or a candle could manifest into the idea of coziness. Rather, the discourse this thesis wanted to open up into was whether hygge could be achieved without these visual markers.
Having understood that incremental and hygge could be married into one with a certain state of mind, the thesis design started exploring options which could be economic as well as presented greater liberty in the flexibility of space. It is widely understood that the space can undergo changes both big and small, and is often representative of its inhabitants. The definition of incremental and hygge might mean different things to different people, and this thesis has investigated into consolidating those differences and creating an amalgamation of possible ideas into one place.

Figure 17: Site Axonometric - layout of different apartment styles

The site of Jamaica Plain, Boston offered more than enough opportunities to explore the design with considerable number of urban challenges. The thesis limits to broad
design decisions and the layout of units, and does not deal with accommodating the maximum units on the site, or increasing the density.

Figure 18: Proposed Site Plan

The idea was tied in the major concept of the thesis where each livable space had its own garden, which opened up into neighborhood. These gardens manifested the climate and hygge atmosphere more naturally than the other spaces on the site, and
brought the challenging nature of the thesis to conclusion.

Figure 19: A view of the apartment building
CHAPTER 8
CONCLUSION

The idea of combining incremental living and hygge living in architecture is quite an endeavor but it is nonetheless a rewarding experience. This thesis explored this intersection, in an effort to see if consolidating the comfort and coziness of residential living could also prioritize flexibility and adaptability for residents. Once the language of hygge can be understood beyond its materialist trends, it is all about comforting and welcoming atmosphere. Within incremental housing, this could mean embracing softer lighting, warmer tones, using natural materials like wood, wool and trying to find ways to explore them both on the outside and inside aesthetics. These aesthetics play a vital role in reflecting the priorities and core values of residents. Such simplicity can often translate into designing spaces that are functional, uncluttered and prioritize quality over quantity.

The thesis also posits that building hygge in incrementalism is also about community. While incremental housing shares some focus on community spaces to foster social interactions in kitchens, gatherings, and gardens, these spaces also create a sense of community and foster social connections. Not only is incremental and hygge true for interior environments, but it also manifests outside too. The thesis made an attempt to create connections with nature and environment both inside and outside the building, incorporating soft landscape within building envelopes, to create a sense of intimacy and tranquility. Finally, the thesis demonstrates that combining the idea of incremental and hygge into housing or any form of architecture prioritizes the values and needs of habitants, with greater emphasis on comfort, functions, and intimacy. As an architectural strategy, it offers an atmosphere that reflects people: their needs, abilities, and changing lives.
BIBLIOGRAPHY

Amoako, Clifford, and Emmanuel Frimpong Boamah. 2017. "Build as you earn and learn: informal urbanism and incremental housing financing in Kumasi, Ghana."

Journal of Housing and the Built Environment 429-448.


http://sigus.scripts.mit.edu/.


*Environment and Planning D Society and Space* 649-671.


www.incrementalsettlement.org.za.
