My House is Your House:
Toward a New Composition of Living and Working in the City

by

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Dalhousie University is located in Mi'kmaq'i,
the ancestral and unceded territory of the Mi'kmaq.
We are all Treaty people.

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Abstract

This thesis investigates the housing accommodation that combines living with working, commonly referred to today as "live/work." Expanding on the notion of living and working beyond its literal interpretation as live/work, this thesis argues that it is both a dwelling condition and a building type that has been central to the evolution of domestic space. Continuing the tradition of typological design, this thesis analyses four case studies to understand how living and working has historically been negotiated and translated into domestic space. Today, radical technological changes have ironically allowed us to return to earlier dwelling principles. Yet, the current urban live/work model is devoid of any sense of social reciprocity. Therefore, this thesis argues that urban housing should be considered a cooperative structure in which it is possible to live and work in situ, where reproductive labour can be socialized beyond the family, and productive work can become civic engagement.

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Chapter 1: Introduction

Objective

This thesis investigates the housing accommodation that combines living with working, commonly referred to today as "live/work." This thesis argues that living and working is both a dwelling condition and a building type that has been central to the evolution of domestic space. By expanding on the notion of living and working beyond its literal interpretation as "live/work," this thesis attempts to reform our understanding of the house as an architectural typology that has become emblematic of the private individualist life. The main argument of this thesis is that urban housing should be considered a cooperative structure in which it is possible to live and work in situ, and the architectural project can support a scenario in which reproductive labour can be socialized beyond the family and productive work can become civic engagement.

Live + Work

The House

Our collective contemporary discernment of house has shifted drastically throughout the history of domesticity. Today, home buyers often leave institutions having borrowed a substantial sum of money expected to be repaid over a vast period, excited about their new homes, yet often uninterested in legalities; they seldom think about arcane vocabulary (Stilgoe 2015, 101). It is important to note that house is not home. The term house connotes a structure that is permanent and tangible. House finds its linkage with contemporary law through real estate, which constitutes land and everything annexed to it naturally and by artifice, including structures such as the house (Stilgoe 2015, 103). On the other hand, home is intangible, often referred to as someplace merely where the heart is or where a hat hangs—a favorable proverb of American real estate agents since the 1920s (Stilgoe 2015, 110–11). Furthermore, the term dwelling suggests something almost entirely different. Dwelling originates in the Old English “dwela,” which meant going astray. Since the beginning of the thirteenth century, it had begun to mean staying, but not permanently (Stilgoe 2015, 115). Thus, dwelling highlights a fundamental difference between house and less permanent structures: house is a permanent structure, rooted in place. Houses can be vessels for homes, yet homes can not be houses; dwellings can not be either. These distinctions are important to establish when discussing domesticity, as etymology plays a vital role in our understanding of these notions.

The house serves as an important subject of study, as it is considered to be the most significant architectural space that humans experience in their lives. Houses have historically represented shelter, security, stability, and—more recently—ownership and privacy. Aureli and Tattara state, “The goal of the house has always been to create the possibility of frictionless cohabitation in which people can reproduce themselves” (Aureli and Tattara 2015). Following the Greek *oikos*, Aureli and Tattara position the family as the subject of the household,

> This is why the subject of the house becomes the family. The term “family” comes from the Latin familia, which means servile. The house is thus a congregation of famuli, of servile persons whose lives are dedicated to reproduction. If in the ancient oikos these persons were women and slaves, in modern times the servile subjectivity of the house survives in the many forms of domestic labor that are still needed in order to maintain the household. (Aureli and Tattara 2015)

Yet, houses are not merely innocent vessels where everyday family life unfolds. House represents an architectural typology that serves as an apparatus to translates politics and economics into spatial conditions (Aureli and Tattara 2022, 4). Undoubtedly, the most significant typological characteristic of modern housing was the separation between living and working and the individuating of the nuclear family (Giudici 2018, 1203-1229). This thesis will continue a tradition in architectural practice known as typological design as a method of reforming existing housing types toward new compositions of inhabitation. In the context of this thesis, typological design is understood here not as acritical reproduction and variation of existing established types, but rather, as a process both of critique and analysis of the way living and working has historically been negotiated and translated into domestic space.

The Workhouse

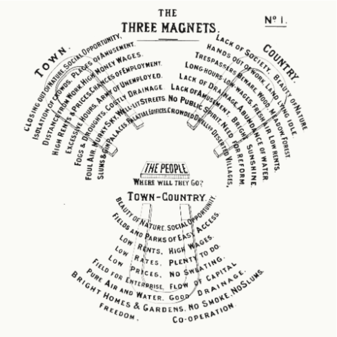
Throughout the history of domesticity, housing types have taken on many forms, scales and names that reflect an array of various living conditions and activities,

> humans construct the broadest array of [houses] on Earth. Our words for 'dwelling' point to this diversity:
>
> Palace, hovel, hogan, ranch house, croft. Tipi, chalet, duplex, kraal. Igloo, bungalow, billet, cabin. Cottage, crannog, adobe, manor. Wickiup, villa, lean-to, abbey. Hacienda, barrack, lodge, shanty. Pithouse, penthouse, pueblo, condo. (Moore 2012, 2)

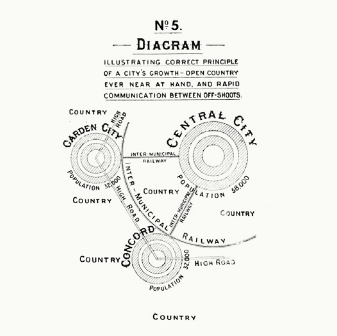
While the term "house" applies to all buildings people live in, and "workplace" refers to buildings in which people conduct work, historically, there was no term that refers to the building type in which people both live and conduct work (Holliss 2015, 9). However, this building type that combines living and working exists in every country and culture in both vernacular and elite architectural traditions (Holliss 2015, 9). Over centuries, until the Industrial Revolution, these buildings were called “house,” with subsets of “longhouse,” “farmhouse,” “manor house,” “fire-house,” “courthouse,” et cetera (Holliss 2015, 9). Etymologically speaking, no distinction could be made between a single-family suburban dwelling versus a structure serving to shelter vehicles, vessels, and equipment while providing a place for firefighters to seek refuge; both became known, more or less, as “house.” Traditionally, these dual-use buildings were nameless as a type; therefore, their existence has often gone unnoticed. Frances Holliss (2015) establishes and affirms the existence of this building type as the “workhome.” This thesis will use a slightly different nomenclature: the workhouse. In 1751, Swedish botanist Carl Linnaeus—whose binomial nomenclature classification system is still in use today—declared, “If you do not know the name of things, the knowledge of them is lost too” (Linné and Freer 2003, 169). Thus, establishing the workhouse as a building type is essential to affirming its existence. By establishing the workhouse's existence allows us to identify it, analyze it, and develop a conceptual framework to understand its spatial characteristics. Yet, a study of the workhouse—at its very core—is a study of the evolution of domesticity itself and the spatial relationship formed around living and working. Thus, this thesis poses a critical inquiry into domesticity throughout history by investigating a selective study of workhouses, and attempts to reform what is, to us as a society, the most familiar and yet misunderstood kind of architecture: the house.

House as Workplace, Workplace as House

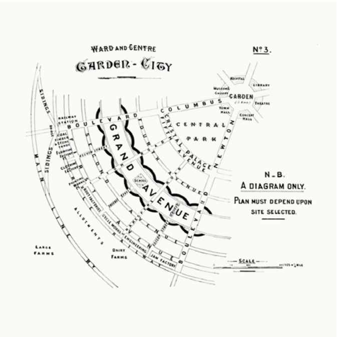
For millennia the house exemplified an intimate relationship between domestic and working activities. Historically, almost everyone across the globe either conducted work from their house or lived at their workplace. However, this condition remarkably shifted around the middle of the nineteenth century with the rise of the modern capitalist city. Aureli and Tattara (2022) argue that the spatial separation of living and working was a result of the Industrial Revolution, which saw people moving from the city into the suburbs to avoid unhealthy urban living conditions. Modernist thinkers theorized so-called planning solutions as a response to shifting social structures and new urban living conditions.


THE
THREE MAGNETS.
Nº 1.
TOWN.
CLOSING OUT OF NATURE. SOCIAL OPPORTUNITY.
ISOLATION OF CROWDS. PLACES OF AMUSEMENT.
DISTANCE FROM WORK. HIGH MONEY WAGES.
HIGH RENTS & PRICES. CHANCES OF EMPLOYMENT.
EXCESSIVE HOURS. ARMY OF UNEMPLOYED.
FOGS & DROUGHTS. COSTLY DRAINAGE.
FOUL AIR. MURKY SKY. WELL-LIT STREETS.
SLUMS & GIN PALACES. PALATIAL EDIFICES.
COUNTRY.
LACK OF SOCIETY. BEAUTY OF NATURE.
HANDS OUT OF WORK. LAND LYING IDLE.
TRESPASSERS BEWARE. WOOD, MEADOW, FOREST.
LONG HOURS-LOW WAGES. FRESH AIR. LOW RENTS.
LACK OF DRAINAGE. ABUNDANCE OF WATER.
LACK OF AMUSEMENT. BRIGHT SUNSHINE.
NO PUBLIC SPIRIT. NEED FOR REFORM.
CROWDED DWELLINGS. DESERTED VILLAGES.
THE PEOPLE.
WHERE WILL THEY GO?
TOWN-COUNTRY.
BEAUTY OF NATURE. SOCIAL OPPORTUNITY.
FIELDS AND PARKS OF EASY ACCESS.
LOW RENTS. HIGH WAGES.
LOW RATES. PLENTY TO DO.
LOW PRICES. NO SWEATING.
FIELD FOR ENTERPRISE. FLOW OF CAPITAL.
PURE AIR AND WATER. GOOD DRAINAGE.
BRIGHT HOMES & GARDENS. NO SMOKE. NO SLUMS.
FREEDOM. CO-OPERATION.

Ebenezer Howard's Three Magnets diagram, (adapted from Howard 1898)


Nº 5.
DIAGRAM
ILLUSTRATING CORRECT PRINCIPLE OF A CITY'S GROWTH - OPEN COUNTRY EVER NEAR AT HAND, AND RAPID COMMUNICATION BETWEEN OFF-SHOOTS.
COUNTRY
HIGH ROAD
GARDEN CITY
CENTRAL CITY
INTER-MUNICIPAL RAILWAY
POPULATION 32,000
POPULATION 58,000
COUNTRY
HIGH ROAD
INTER-MUNICIPAL RAILWAY
COUNTRY
COUNTRY
CONCORD
COUNTRY
32,000 POPULATION
HIGH ROAD
COUNTRY

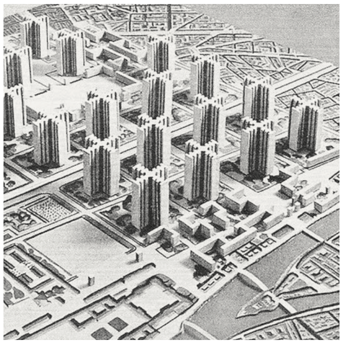
Ebenezer Howard's Central City and Garden Cities diagram, (adapted from Howard 1898)


WARD AND CENTRE
GARDEN - CITY
Nº 3.
SIDINGS
MAIN LINE RY
BOULEVARD
GRAND AVENUE
COLUMBUS
CENTRAL PARK
CRYSTAL PALACE
NEWTON
GARDEN
TOWN HALL
CONCERT HALL
THEATRE
LIBRARY
HOSPITAL
RAILWAY STATION
SCHOOL
ALLOTMENTS
LARGE FARMS
DAIRY FARMS
CYCLE WORKS
ENGINEERING
JAM FACTORY
BOOT FACTORIES
CLOTHING FACTORY
PRINTING WORKS
N.B.
A DIAGRAM ONLY.
PLAN MUST DEPEND UPON SITE SELECTED.
SCALE

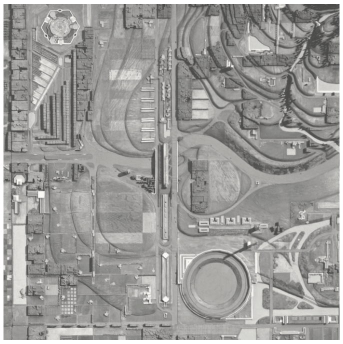
Ebenezer Howard's Garden City diagram, (adapted from Howard 1898)

Garden City Movement

Near the end of the nineteenth century, urban planner Ebenezer Howard (1898) presented their vision for The Garden City Movement. The central strategy was to separate living from working through the use of functional zones. Howard's Garden City was imagined as nodes of self-sufficient towns encircled by a belt of agricultural land. Howard envisioned a cluster of Garden Cities as satellites radiating from a central city of 58,000 inhabitants connected by roads and railways. Each garden city would house 32,000 people on a site of 9,000 acres and was to be planned on a concentric pattern with open spaces, public parks, and six radial boulevards extending from the center. For its inhabitants to earn a living, industry was to be placed within The Garden City in its planned zone. Housing, schools, and green space in planned living zones; and in the center were to be commercial, civic, and cultural places. Although Howard's Garden City operated on the separation of living and working, these functions occurred within close proximity to one another in a closed systematic way.



Le Corbusier's Ville Radieuse (Radiant City), (adapted from Corbusier 1978)



Frank Lloyd Wright's Broadacre City, (adapted from Wright 1932)

Ville Radieuse

A few decades later, near the middle of the twentieth century, modernist architect Le Corbusier (1978) developed Ville Radieuse (Radiant City). Born directly from Howard's Garden City, Corbusier's strategy also relied on the separation of living and working by placing residential, commercial, and industrial in strictly separate zones in an effort aimed to reduce congestion, noise, and air pollution. Corbusier advocated for the construction of twenty-four sixty-storey modernist skyscrapers to maximize density whilst minimizing how much land these buildings would occupy. The strategy was for the towers to only occupy five percent of the land, leaving the remaining ninety-five percent open for ample green space and transportation infrastructure. Historian Lewis Mumford criticized Corbusier's Radiant City stating that in practice, it may become "buildings in a parking lot" (Kunstler 1993, 79). Modern urbanist, James Howard Kunstler further criticized Corbusier's strategy, stating, "the space between high-rises floating in a superblock became instant wastelands, shunned by the public" (Kunstler 1993, 79).

Broadacre City

Shortly after Le Corbusier's Radiant City was presented, architect Frank Lloyd Wright (1932) conceived of the Broadacre City planning strategy. Wright's plan was for a sprawling, decentralized urban environment in which each nuclear family would own one square mile of land containing a house, garden, and agricultural land with access to local services and amenities. Wright believed his strategy would offer a new model for social organization, one that would be based on individual freedom and responsibility and on a decentralized and democratic society. As historian Dolores Hayden noted, “Wright’s Broadacre City was a potent image that stimulated debates about decentralization, low-density living, and virtues of the American landscape” (Hayden 2003, 168). Although Wright’s strategy included some degree of in situ living and working, it most clearly presents an emerging principle that is fundamental to modern housing, namely the principle that defines the household as an individual private unit separated from the public realm of the city.

The Productive Character of Housing

Within all of these examples lies a common logic: the reliance on separating living from working and the individuating of the household as a socio-economic unit. However, it is within this dichotomous logic that lies a paradox, as with the rise of the modern capitalist city, the reproduction of life becomes the most essential form of production. French philosopher Michel Foucault defines this as "biopolitics" — namely, the governance of life as such, and therefore the very goal of modern politics (Aureli and Tattara 2015). Italian philosopher Paolo Virno polemically addresses Foucault’s biopolitics and argues that the goal of it is to govern life to create an exploitable laboring population,

> Capitalists are interested in the life of the worker, in the body of the worker, only for an indirect reason: this life, this body, are what contains the faculty, the potential, the dynamis. The living body becomes an object to be governed not for its intrinsic value, but because it is the substratum of what really matters: labor-power as the aggregate of the most diverse human faculties (the potential for speaking, for thinking, for remembering, for acting, etc.). Life lies at the center of politics when the prize to be won is immaterial (and in itself non-present) labor-power. For this reason, and this reason alone, it is legitimate to talk about “bio-politics.” The living body which is a concern of the administrative apparatus of the State, is

> the tangible sign of a yet unrealized potential, the semblance of labor not yet objectified; as Marx says eloquently, of "labor as subjectivity[,]" [t]he potential for working, bought and sold just like another commodity, is labor not yet objectified, "labor as subjectivity." One could say that while money is the universal representation of the value of exchange—or rather of the exchangeability itself of products—life, instead, takes the place of the productive potential, of the invisible dynamis. (Virno 2003, 82–83)

Aureli and Tattara conclude from this, "If labor power—that is, a population's potential to produce—was and is the most important form of 'production,' the most central productive space is the house itself" (Aureli and Tattara 2015). Thus, revealing the productive characteristic of housing itself and the significance of the workhouse.

Working Together, Apart

Modern housing is conceived as a space disconnected from the realm of production; its programming being solely focused on reproduction. Corbusier infamously wrote, "A house is a machine for living in. Baths, sun, hot-water, cold-water, warmth at will, conservation of food, hygiene, beauty in the sense of good proportion. An armchair is a machine for sitting in and so on" (Le Corbusier 2014, 95). This condition has contributed to the notion that views the house as refuge from the world of production (Aureli and Tattara 2015). Yet, today, with radical advancements in technology and new forms of work, production transcends the boundaries that have separated the house from the workplace. New forms of production imply an overlap between domestic labor and productive work to the point where they become nearly indistinguishable. Aureli and Tattara state, "When work is no longer confined within the nine-to-five schedule, it seems difficult to maintain the illusion that the domestic sphere is a refuge from the reality of production" (Aureli and Tattara

2022, 6). The 2020/2021 global pandemic that we have endured—and in many ways are still experiencing—has undoubtedly heightened our awareness of this notion of living and working in situ and the many social and spatial challenges associated with modern home-based work. Albena Yaneva, Professor of Architectural Theory at the University of Manchester, notes the effects the pandemic had on the bespoke attachments that designers have to tangible material within the practice of architecture,

> Group meetings around models or renderings, or visits to the construction site have become forgotten rituals, missed by many. Instead, architects are faced with the task of pragmatically remodelling the working 'habitat' of their practice, turning domestic spaces into workspaces, kitchen tables into drawing boards. (Yaneva 2023, 12)

Though, this condition is not unique only to the architectural profession, as many people across varying professions have and continue to modify their daily rituals and spatial conditions to accommodate these shifting social structures and the changing nature of work. Not dissimilar from earlier forms of living and working, today, domestic spaces, namely, living rooms, kitchens, and bedrooms, have become transmutations of makeshift offices, studios, and other workspaces where people conduct their home-based work. Ultimately, this condition has ironically allowed us to return to earlier principles of dwelling.

Critical Position

In contrast to ancient workhouses, where domestic space and the workplace were often combined, modern housing is conceived as a space disconnected from the realm of production; its programming being solely focused on reproduction. Yet, despite radical technological and social changes that have ironically allowed us to return to earlier principles of dwelling, today, domesticity in its most traditional format of the suburban family house remains the prevalent idea of inhabitation. Housing itself has become devoid of any sense of social reciprocity that is culturally embedded in ancient ways of living and working. Therefore, the modern spatial separation of living and working has reinforced the seclusion of the nuclear family house. Houses continue to be designed as places where domestic activities occur, nothing more, and workplaces rarely incorporate residential space for those who work there (Holliss 2015, 11). Thus, there is substantial scope for innovation and reformation for understanding the house as a place for both production and reproduction: the workhouse. Critical inquiry into the evolution of domesticity through the lens of the workhouse can be used to extract a series of spatial principles that are exemplified by ancient workhouses. These principles can be used to form an architectural lexicon that can ultimately be utilized to inform a new composition of living and working in the city.

Thesis Question

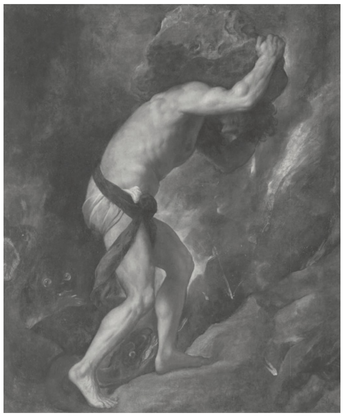
Can critical inquiry into the evolution of the workhouse be used to develop an architectural lexicon that informs a new composition of living and working in the city?

Chapter 2: A Brief Architectural History of Living and Working

(Re)Production

Throughout history, domestic space has always been a place of work, as it is the place where we reproduce ourselves. However, to conduct a study on domesticity and its spatial relationships within the workhouse requires a clear distinction between living (reproduction) and working (production). In their book *The Human Condition*, Hannah Arendt makes the well-known distinction between labor and work. Though these terms are etymologically unrelated—in both ancient and modern European language—they have become almost synonymous in present-day vocabulary. Arendt defines labor as,

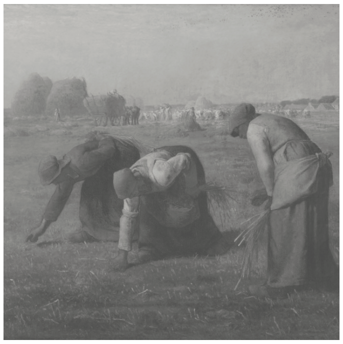
> The activity which corresponds to the biological process of the human body, whose spontaneous growth, metabolism, and eventual decay are bound to the vital necessities produced and fed into the life process by labor. (Arendt, Allen, and Canovan 2018, 7)



Sixteenth-century oil painting depicting Greek mythological figure Sisyphus, emblematic of unending labour (adapted from Titian (Tiziano Vecellio) 1548-49).

By this definition, one's intangible reproduction of themselves is the very definition of labor. Therefore, labor is seen as the unending business of the reproduction of our species: eating, sleeping, cleaning, giving birth, raising children, et cetera. Thus, labor is life itself. Furthermore, Arendt defines work as,

> The activity which corresponds to the unnaturalness of human existence, which is not imbedded in, and whose mortality is not compensated by, the species' ever-recurring life cycle. Work provides an 'artificial' world of things, distinctly different from all natural surroundings. Within its borders each individual life is housed, while this world itself is meant to outlast and transcend them all. (Arendt, Allen, and Canovan 2018, 7)



Nineteenth-century painting depicting the rural working-class (adapted from Millet 1857).

By this definition, the production of tangible material objects is the very definition of work. Therefore, work is identified as the production of lasting material objects: a table or a building, but also art, as in the form of poetry or painting. Thus, work is worldliness. If work leaves behind material objects that may outlive human existence, labor is bound for immediate dissipation by virtue of reproduction.

While working today in the context of a capitalist society describes the remunerated tasks performed, typically in exchange for a wage. At the same time, it connotes the creation of lasting material objects. To create becomes the very ethos of work. This notion is revealed even in modern vocabulary, as people often use phrases such as “a lot of work went into this” to describe the process of creating, or the simple use of the word “work” to describe the objects in which they create: a piece of writing, a drawing, a textile, et cetera. Philosopher Martin Heidegger wrote in an essay titled "Building, Thinking, Dwelling," “Living among things is the basic principle of human existence” (Zumthor, Oberli-Turner, and Schelbert 2015, 36). In this context, “things” can be understood as work itself.

Living and Working on the Land

The notion of living and working pre-dates the spatial organization predicated by the house as an architectural form. Reflecting on the Homo sapiens’ 300,000–year history, the permanent home only emerged about 18,000 years ago (Aureli and Tattara 2022, 6), suggesting that the human species had spent roughly ninety-four percent of its existence in nomadic conditions. During this time, the dichotomous separation between reproductive and productive activities—that is, living and working—did not exist. This condition of an in situ cycle of living and working is revealed through the life of ancient hunter-gatherers. American archaeologist Lewis

Binford examined ethnographic accounts of traditional cultures, including modern and ancient hunter-gatherers. One distinct (albeit obvious) conclusion of Binford's study was that all hunter-gatherers built some form of shelter, even at camps they occupied for a single night (Binford 1990, 119–52). Furthermore, the study highlights the relationship hunter-gather settlements had with a sense of temporality and how this had been translated architecturally. Binford observed that the shelters hunter-gatherer communities built reflect their broader adaptations to the physical environment, depending on the climate and their degree of mobility. Anthropologist Jerry Moore reflects on Binford's observations, stating,

> First, hunters and gatherers vary in their mobility. Fully nomadic groups move camps throughout the year, while seminomadic hunters often construct a substantial dwelling each winter, but spread out to seasonal camps when the weather is less severe. Semisedentary hunters and gatherers construct residences that they regularly reoccupy, although venturing out from those hubs and constructing temporary shelters before returning home. Sedentary hunters occupy dwellings year-round, although hunting parties or foraging groups may journey out to find key resources and bring them back home. Second, mobility shapes the form and construction of hunter-gatherer houses. More nomadic groups built circular or semicircular dwellings. More sedentary groups build rectangular houses. (Moore 2012, 35–36)

Whether fully nomadic or semi-nomadic, hunter-gatherers possessed placemaking skills far more sophisticated than sedentary people. As a result of the impermanence of the hunter-gatherer's house, most of their lives would unfold under the eyes of their peers (Aureli and Tattara 2022, 8). Anthropologist Peter J. Wilson argues that this condition of life in full visibility and the ephemeral boundaries between reproduction and production gave hunter-gatherers a strong sense of focus and attention (Wilson 1988, 28–30). It was explicitly this heightened focus and attention that endowed hunter-gatherers with a profound sense of reciprocity and spatial order, which was reflected in the meticulous way they would temporally settle (Aureli and Tattara 2022, 8). In many cases, hunter-gatherer settlements included shelters meant only for rest. At the same time, most activities would occur in the open, exemplifying one of the main characteristics of their way of life, sharing (Aureli and Tattara 2022, 8). This notion gives insight into how hunter-gatherer communities perceived living and working. The non-binary relationship between living and working, where reproductive and productive activities were socialized amongst all members of the community, suggests that the in situ cycle of living and working, by nature, is an inherently socially reciprocal act.

By no means a linear process; the establishment of the house was a gradual back-and-forth process between nonesedentary, semisedentary, and sedentary forms of life (Aureli and Tattara 2022, 6). The time scale of this process is so vast that as a result, this thesis paints a broad stroke over the evolution of domesticity to understand the relationship between living and working and how it has been historically been negotiated and translated into domestic space.

Chapter 3: An Architectural Lexicon

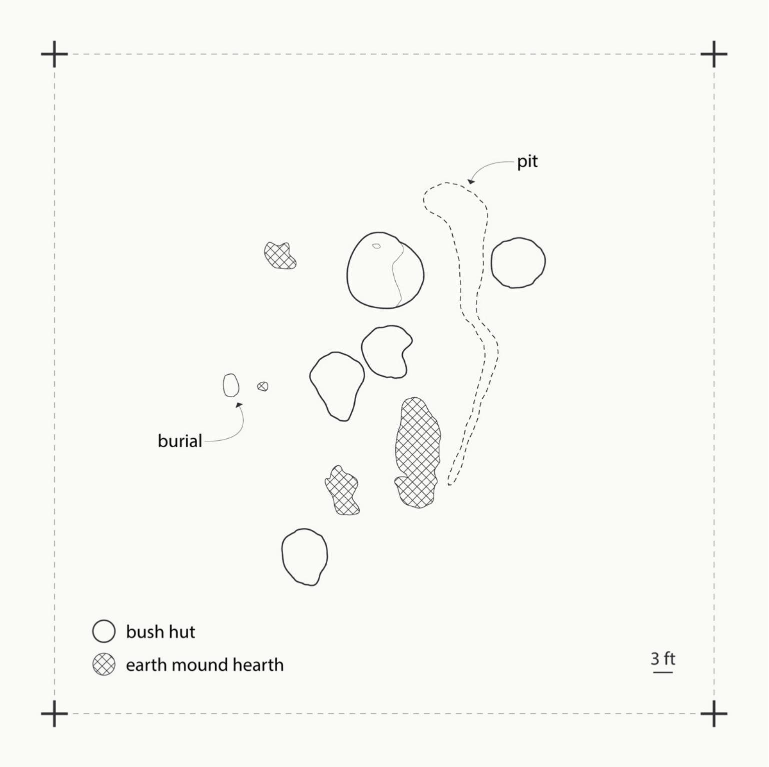
A Spatial Translation of Living and Working

> ...of all the arts of design, architecture while ostensibly having the least in common with what is known as the art of writing or literature, has nonetheless adopted the sort of metonymy which once associated the intellectual expression of ideas, with the notion of the instrument that was initially only intended to trace their signs. (Quatremère de Quincy and Younés 1999, 37)

It is well known that typology has a long-standing tradition within the study and practice of architecture. Discourse on typology in architecture emerged in the nineteenth century as a method to classify buildings not in terms of their style or image, but rather, their spatial and structural organization (Aureli and Tattara 2022, 4). The earliest definition of type in architecture comes from Antoine Chrysostome Quatremére de Quincy's *Dictionnaire historique d'architecture*. To Quatremére de Quincy, type represents not an image or model to be replicated, but an idea that can serve as a rule for the model (Quatremère de Quincy and Younés 1999). Following the framework laid out by Quatremére, this thesis attempts to rethink the architecture of domestic space not in terms of its image, but rather, in terms of its spatial relationships. To achieve this, the thesis analyzes four existing workhouses, two prehistoric hunter-gatherer settlements: Ohalo II and Nahal Oren; and two ancient vernacular types: the medieval longhouse and the traditional Japanese machiya.

Ohalo II

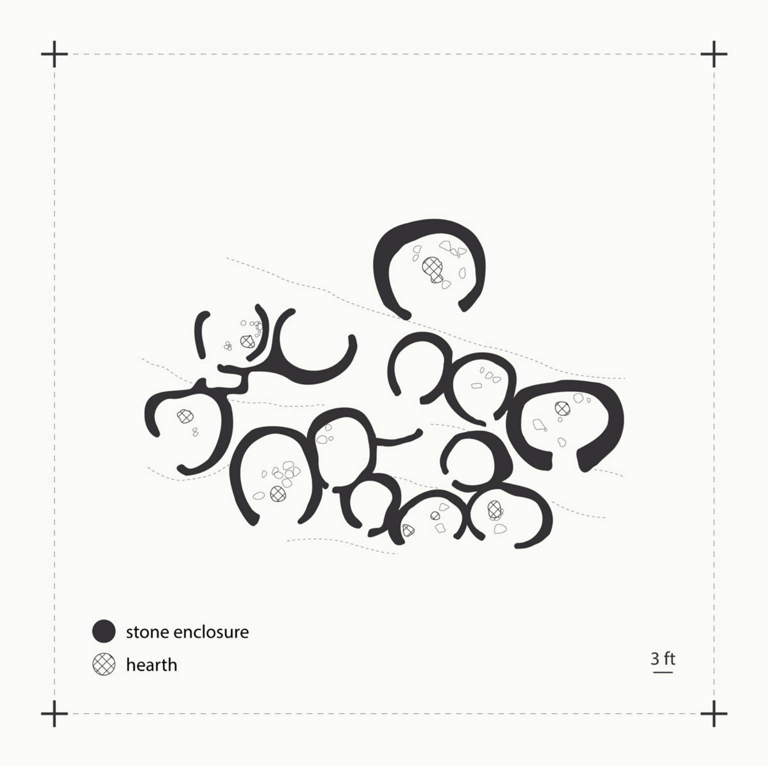
Olaho II, an ancient open-air hunter-gatherer settlement in Israel dated 23,000 BCE, consisted of six brush shelters, a burial site, and distributed between them, a half-dozen open-air hearths (Moore 2012, 41). There is evidence that suggests the inhabitants who settled at Ohalo II were not living there for long periods but were engaged in some form of cereal cultivation. The brush shelters featured floors recessed slightly below grade and contained beds made from the stems of alkali grasses (Moore 2012, 41). Evidence found within the huts suggests that their primary function was for rest, though traces of grinding inside the huts reveal some degree of work took place as well. The location of the hearths between the huts suggests that people would be outside their shelters most of the time, indicating that many domestic activities, such as cooking and eating, were shared amongst members of the community. At the same time, productive activities such as food processing and tool crafting were performed side-by-side with domestic activities.



Plan, Ohalo II, (adapted from Nadel and Werker 1999, 757)

Nahal Oren

Nahal Oren, dated 11,500-10,000 BCE, is a typical Natufian settlement of circular dwellings constructed of stone (Grosman, Ashkenazy, and Belfer-Cohen 2005), revealing greater permanence than the brush huts found at Ohalo II. The hearths located inside the shelters indicate how these were 'privatized' within each house. In the Natufian dwelling, the house seems to individuate a household whose main reproductive activities have been internalized within the enclosure of its walls (Aureli and Tattara 2022, 8). In contrast to the social nature of living and working evident at Ohalo II, Nahal Oren represents an emerging principle that is fundamental to the sedentary way of dwelling found today in many parts of the world, namely, the principle that views the house as a refuge from the world of production.

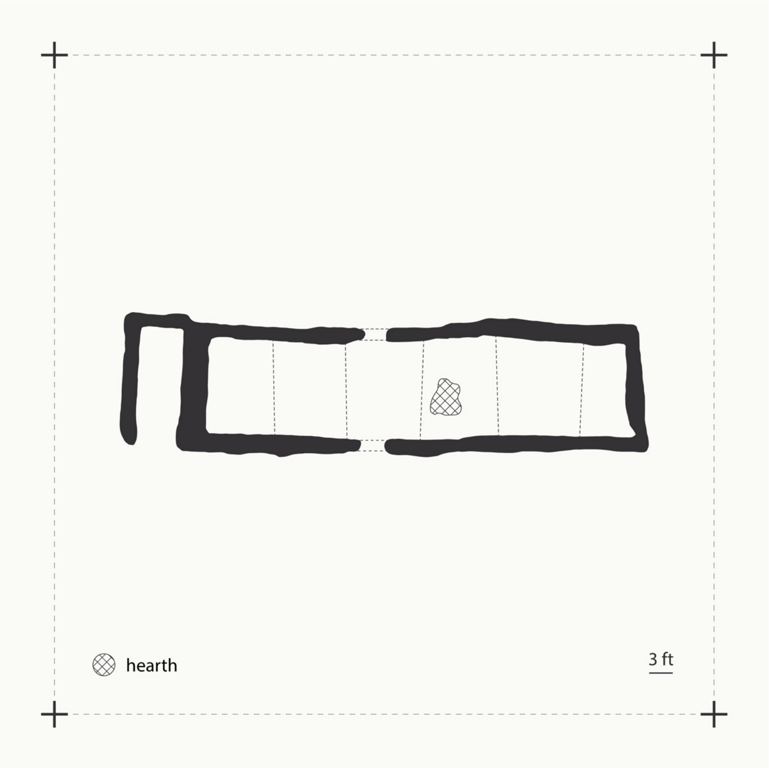


Plan, Nahal Oren, (adapted from Hofmann and Smyth 2013, 23)

The Medieval Longhouse

As its name suggests, the longhouse designates a long and narrow structure. Akin to many premodern domestic spaces across the globe, houses in medieval Europe were places for both living and working (Aureli and Tattara 2022, 20). The spatial division between domestic labour and productive work was minimal or, in some cases, nonexistent. This condition is visible in medieval agrarian houses found at the Wharram Percy village site in Yorkshire, dated between the eleventh and fifteenth centuries, that were both houses and workplaces for peasant families (Holliss 2015, 14). Single-storied and constructed of local materials, these houses consisted of a single open-plan space where animals would live at one end and people at the other, separated by a cross-passage. This condition was due to the need to protect livestock from predators and harsh climatic and seasonal conditions. At the same time, the warmth of the animals' bodies contributed to the comfort of the people inhabiting the longhouse (Holliss 2015, 14–15). At the core of the longhouse was the hearth, often located close to the entrance. Both the entrance and hearth gave the inhabitants a sense of orientation, as they were devoid of any windows. Thus, the daily interior life of the workhouse’s inhabitants would unfold around the hearth’s light and heat (Aureli and Tattara 2022, 20). All of the activities of this daily life, including cultivating the land, tending to animals, spinning wool, weaving and mending clothing, food preservation, cooking, cleaning, and child-rearing, were woven seamlessly together in and around this unobstructed space. (Holliss 2015, 15). With an increase in agricultural production and, as a result, the need to store surplus goods and shelter additional livestock, the medieval longhouse could expand

and develop some form of partitioning that subdivided the open space into one or two additional rooms, to separate the spaces reserved for people from those reserved for livestock (Aureli and Tattara 2022, 20). This condition was required to increase the reproductive and productive capacity of the workhouse by creating additional spaces for living and working to occur. Peasants' lives were not only dictated by the seasons, weather, and the rhythms of day and night but also by the need to work for the local lord to pay their rent and to attend the Manor Court (Holliss 2015, 15). The villagers lived and worked in a state of relative autonomy—despite their obligation to their landlord—where they would collectively cultivate the fields surrounding their workhouses and exercised control over many aspects of their lives (Holliss 2015, 15).



Plan, medieval longhouse, (adapted from Aureli and Tattara 2022, 21)

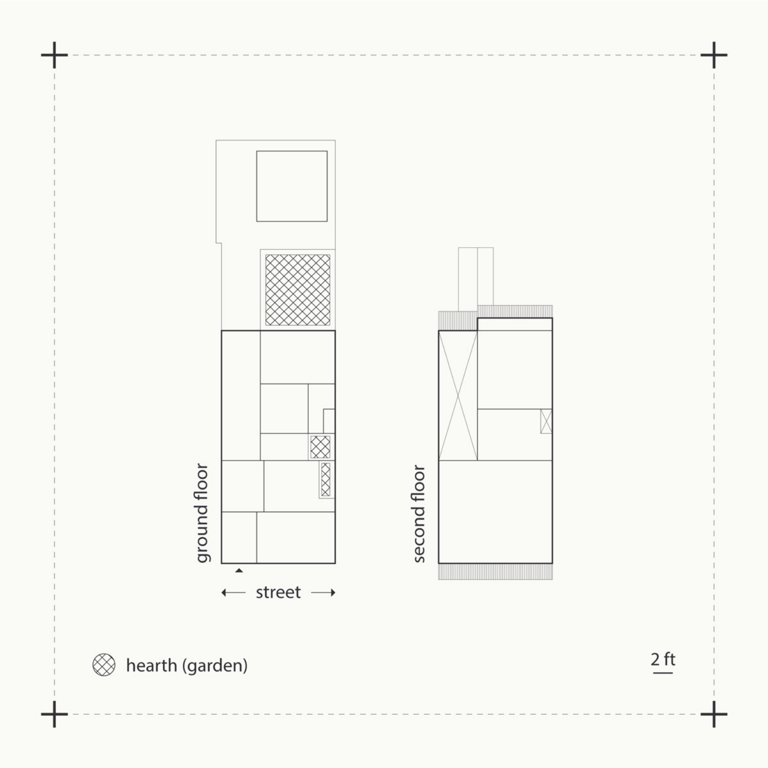
Traditional Japanese Machiya

> Looking at the bustle of the town, we also got used to its way of life and the many stores and workshops that lined its streets in an unbroken chain […] The displays of every kind of merchandise, as well as the entire interior life of the store and workshop were open to the eyes of the passers-by […] A little way back the matted living-part adjoined the shop… When the paper sliding doors were pulled apart one could often see the family at their meal or the children at their studies. Sometimes you could see right through these rooms into the small garden beyond. One night, we drove home very late and all the houses that at day-time were so free and open had been shut up like wooden boxes. Without exception all the wooden shutters had been drawn close […] (Taut 1937, 43–44, 45)

From the twelfth century until the late nineteenth century, Japan was a feudal society ruled by warlords. Akin to medieval England, living and working in situ was the typical condition, and Japanese workhouses were in almost universal use (Holliss 2015, 39)—one of the most notable workhouses being the traditional Japanese machiya. The machiya—or townhouses—were both a place of living and working for merchants and artisans and their intergenerational families. Machiya were constructed side by side independently and ran, more or less, continuously along the main street (Shelton 1999, 52). These workhouses consisted of a shop, office, or workshop in the front and living quarters beyond. Not dissimilar in form from the medieval longhouse, a key characteristic of the machiya was its narrow street frontages relative to its depth, typically being three or four times deeper than they are wide. This formation earned some of Kyoto's machiya the nickname of "unagi no nedoko" or "eel's bedrooms" (Shelton 1999, 52). The façade of the machiya was constructed of a latticed timber screening device that made it difficult to see into the workhouse but easy to see out (Holliss 2015, 41). When the shop was open during the day, the screen would be slid to a partially open position or removed altogether, allowing the shop to become part of the street, and, in turn, the street became part of the workhouse (Holliss 2015, 41). In his writings, Frank Lloyd Wright describes the machiya,

> Along all the highways and byways are the shops; all the second stories lining the upper sides of the swarming streets are dwelling-places. The sliding paper closure of the openings is usually protected by vertical wooden slats in so many clever geometrial patterns. As evening falls these screens become luminous from within as in daylight they were luminous from without. Charming silhouettes are all the time flickering on them, the play to and fro made as human figures pass […] The lower stories of buildings lining the labyrinth of earthen highways and byways are all shops and wide open to the street from side to side. (Wright 1943, 184)

The spaces within the machiya open progressively off each other, separated only by sliding timber and paper screens (Holliss 2015, 42). This sequence is punctuated by a number of small gardens with open verandas surrounding them to



Plan, traditional Japanese machiya, (adapted from Fieve and Waley 2003, 382) allow natural light and ventilation into the machiya (Holliss 2015, 42). Each machiya included a narrow circulation and service corridor, containing spaces for domestic activities such as cooking and bathing. The service corridor was double in height and open to the roof structure, allowing light and ventilation from above. The solid floor of the service corridor was in line with the grade and ran alongside the tatami rooms that were separated by a change in floor level and material. Patrons would remove their shoes and enter by stepping up into the shop (Holliss 2015, 42).

Living and Working Today

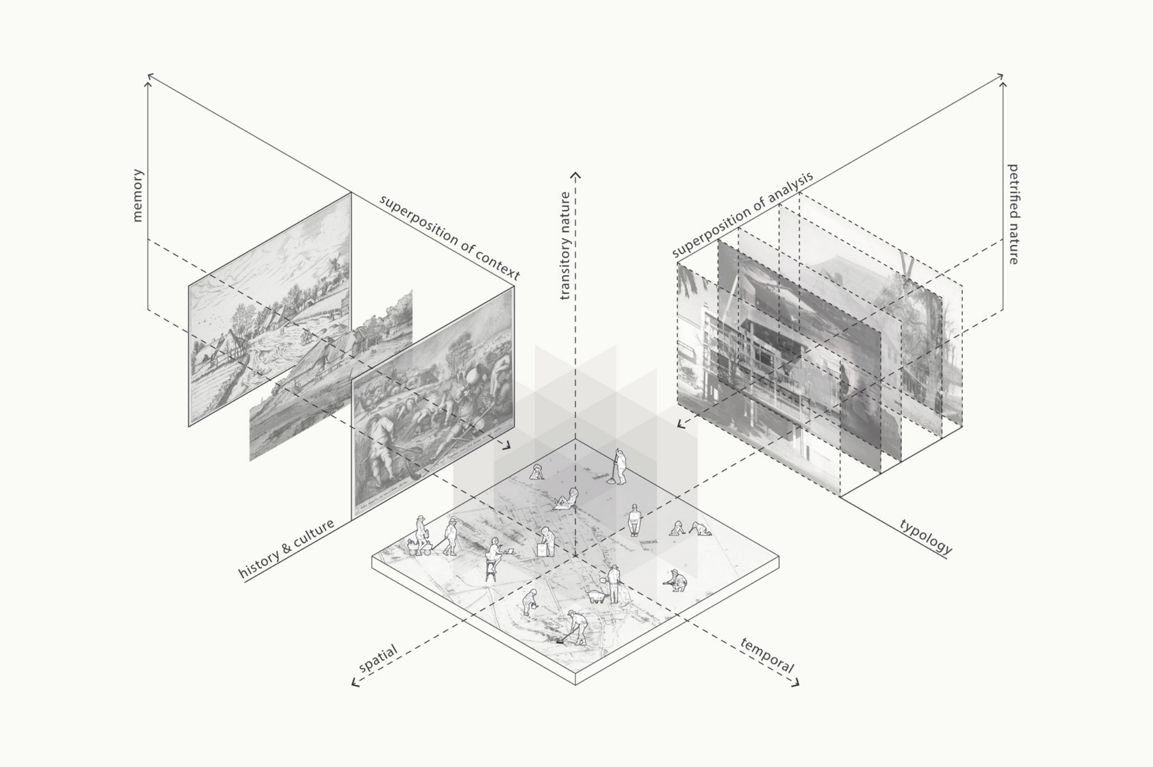
The term ‘live/work’ entered the English language in the 1970s (Holliss 2015, 101). Initially live/work was seen as a grassroots transformation of former industrial structures into houses that combined residence and workspace—as is the case of the loft—but soon, it was appropriated by real estate and transformed into a commercially successful, albeit controversial, housing type (Aureli and Tattara 2022, 4). Today, live/work is typically expressed through the transmutation of common dwelling spaces into makeshift offices, studios, workshops, et cetera, within our homes.

Framework Matrix

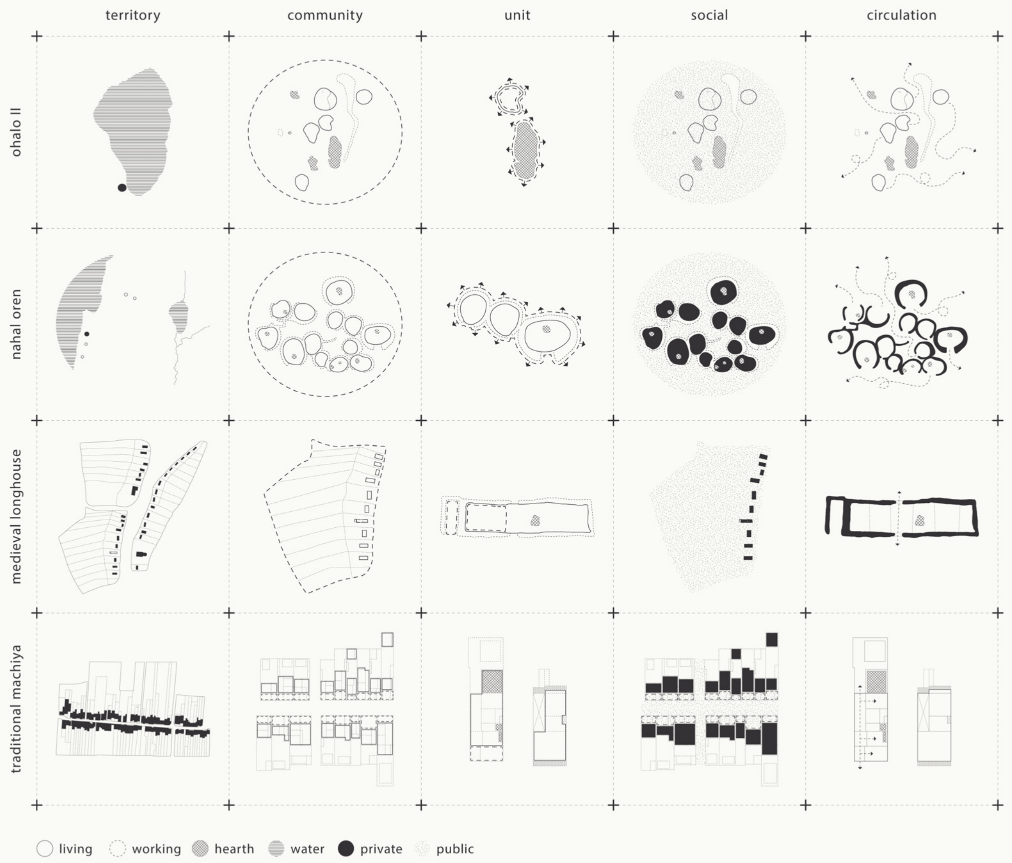
A series of rules have been identified through a spatial analysis of the four workhouse case studies. The analysis is performed through a series of drawings—both in plan and section—of varying scales, as a method of understanding spatial characteristics within each workhouse example.

Each tile in the matrix represents a graphic definition of a rule for how living and working were negotiated spatially within the workhouse and beyond.

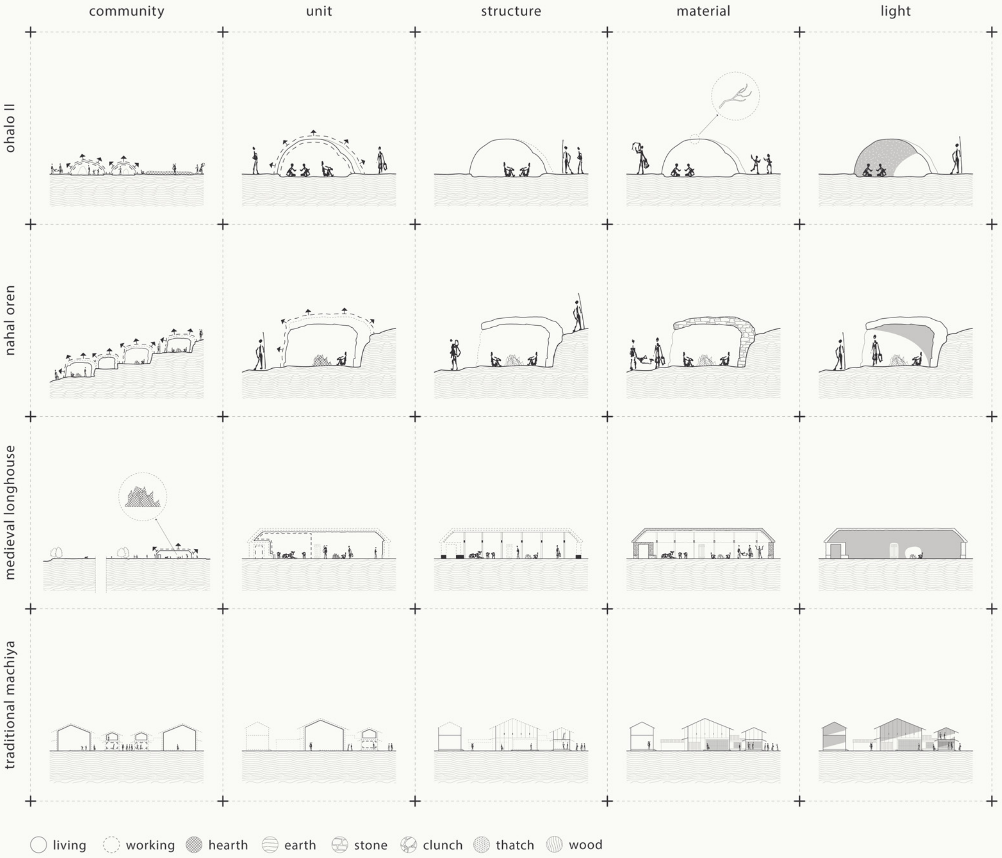
This design proposal does not pose as a literal translation of these rules, but rather, adopts them as concepts that can be translated to form a new composition of living and working. By revisiting the research, the matrix can accept additional workhouses to present additional rules for translation or to reinforce existing ones.


memory
superposition of context
transitory nature
superposition of analysis
petrified nature
history & culture
typology
spatial
temporal

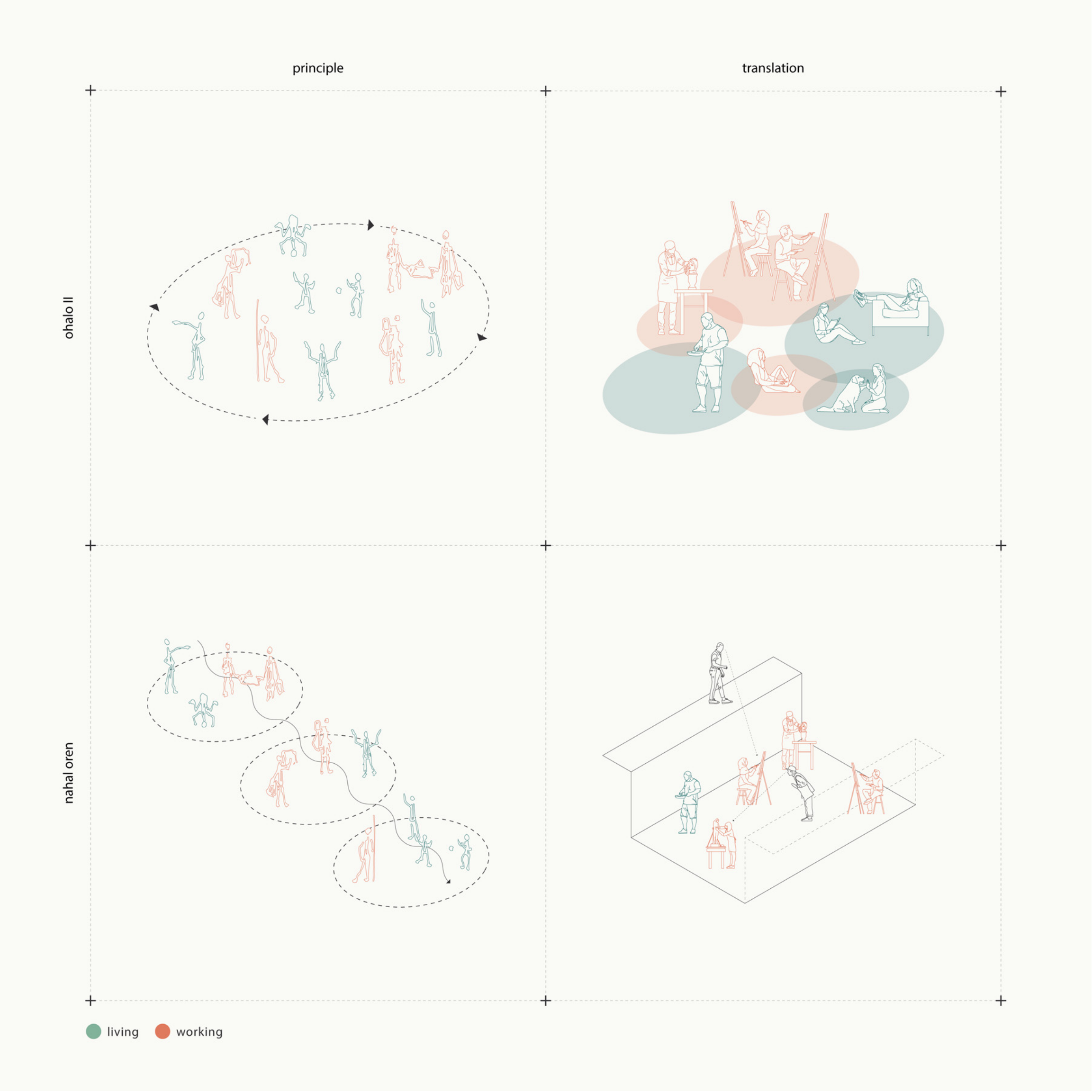
Diagram, living and working understood as a dwelling condition through the layering of history and culture, and as a building type through the layering of spatial analysis of existing workhouse types.


territory
community
unit
social
circulation
ohalo II
nahal oren
medieval longhouse
traditional machiya
living
working
hearth
water
private
public

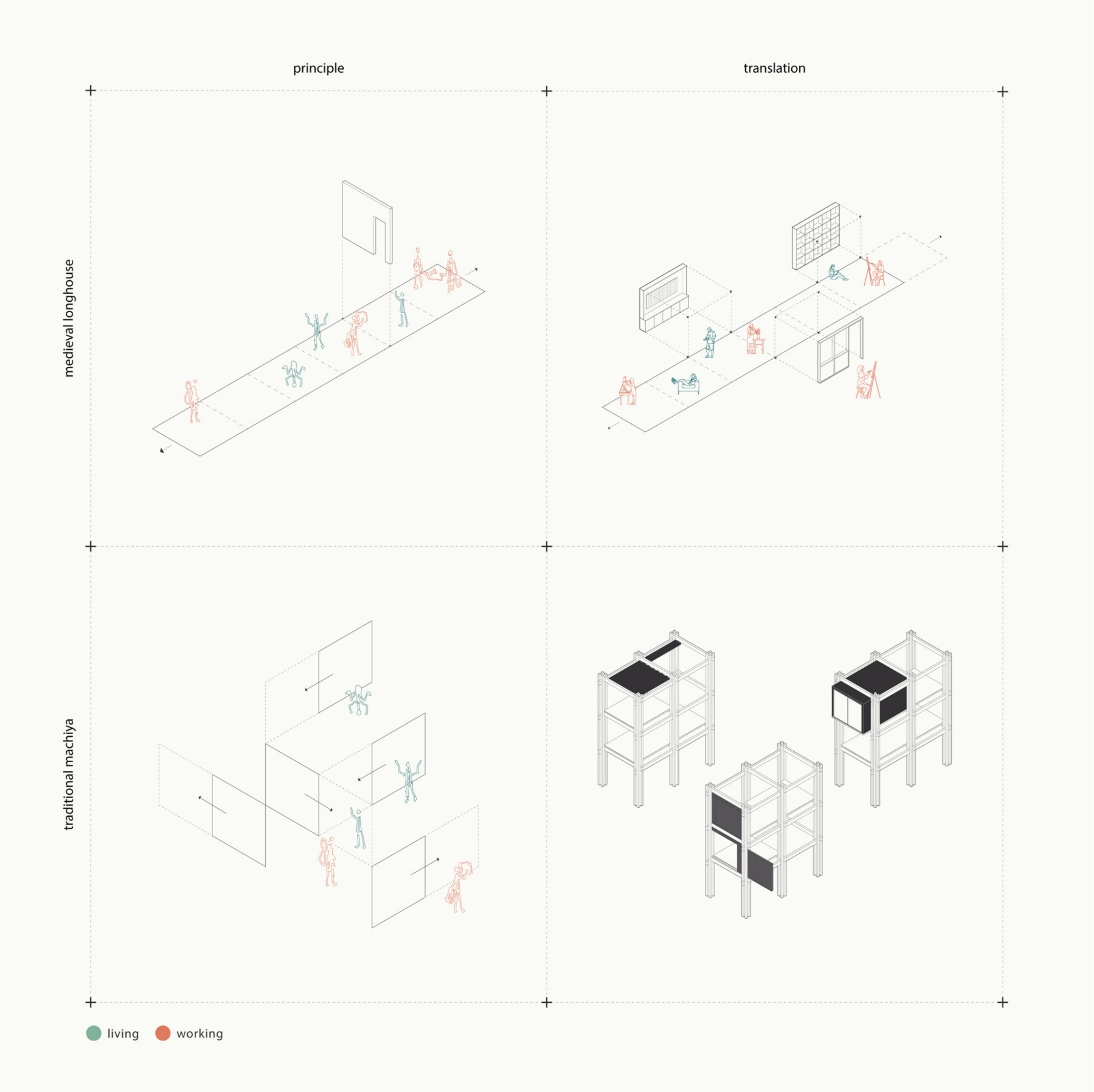
Diagram, workhouse analysis matrix (plan)


community
unit
structure
material
light
ohalo II
nahal oren
medieval longhouse
traditional machiya
living
working
hearth
earth
stone
clunch
thatch
wood

Diagram, workhouse analysis matrix (section)


principle
translation
ohalo II
nahal oren
● living
● working

Diagram, translation matrix


principle
translation
medieval longhouse
traditional machiya
● living
● working

Diagram, translation matrix

Chapter 4: Toward a New Composition of Living and Working in the City

Historically, we have always lived with this condition where the transient boundaries between reproductive and productive activities endow a strong sense of social reciprocity. Yet, the onset of modernity brought with it shifts in social structures and new urban living conditions that rely on the spatial separation between living and working. Today, our collective understanding of the house as a form of architecture still relies on its spatial separation between reproductive labour and productive work. Thus, this thesis expands on the notion of living and working beyond its literal interpretation as live/work and questions the relationship between the house and workplace, as an attempt to move past the given parameters within architecture conventionally conceives of housing today. Utilizing the design framework matrix, learning from the past to inform the future, the project aims to form a new composition of living and working in the city, a new workhouse.

Live + Work + City

> We are, all of us, architects, of a sort. We individually and collectively make the city through our daily actions and our political, intellectual and economic engagements. But, in return, the city makes us. ...
>
> But new rights can also be defined: like the right to the city which, as I began by saying, is not merely a right of access to what the property speculators and state planners define, but an active right to make the city different, to shape it more in accord with our heart's desire, and to re-make ourselves thereby in a different image. (Harvey 2003)

Historically, cities have always been built around some form of work. However, with the onset of the Industrial Revolution in the nineteenth century, the city became a place of unhealthy living conditions. This prompted city dwellers to flee to the countryside to live, while the city became a place solely to conduct work. Yet, it was Aristotle who regarded the household as the basic unit of the city,

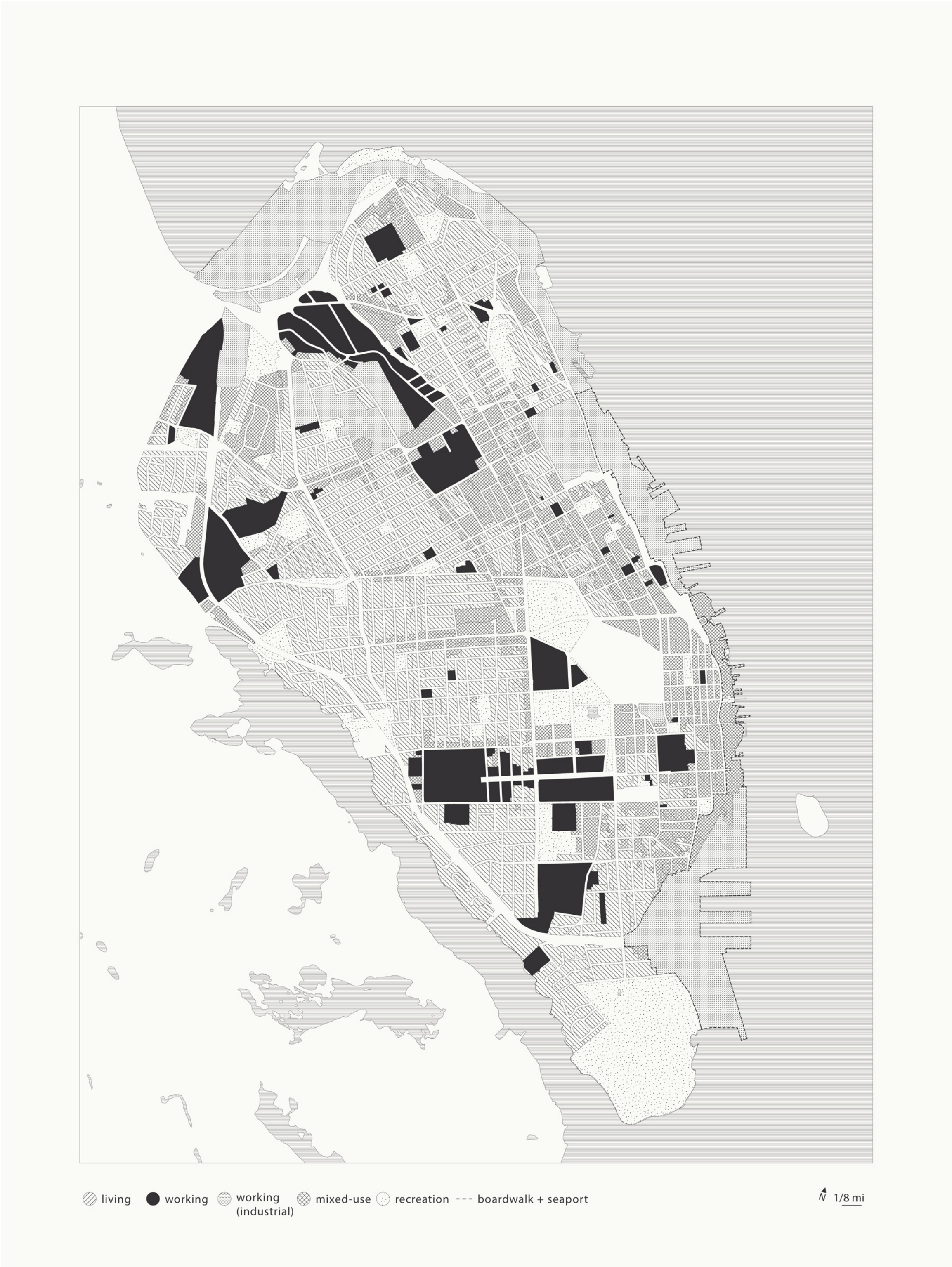
> The term oikos addresses the organization of the house as a household, namely a group of people sharing a common residence. By virtue of their life in common, the household becomes a clearly discernible social-econmic unit whose role in the organization of the city is fundamental. Despite its exclusion from the political life of the city, the latter would not exist without the functioning of the oikos, a fact acknowledged by Aristotle who regarded the household as the basic unit of the polis. (Aureli and Tattara 2022, 10)

While a response to the plight of the nineteenth-century slum-dwellers was urgently needed, the primary problems of the slum were overcrowding, poor sanitation, and poverty, not home-based work (Holliss 2015, 154). Although urban living conditions have significantly improved since the nineteenth-century, and more people are choosing to live in cities, home-based work remains a largely forgotten practice. However, this in situ cycle of living and working was one of the key ingredients that had formed busy, lively, sociable neighborhoods (Holliss 2015, 152). The loss of this form of inhabitation consequently results in a loss of social capital. Cities continue to be designed around functional zones that continues to separate living and working. If modern cities were designed to reflect and accommodate the in situ cycle of living and working, they would take a radically different form. The spatial separation of living and working emerges as a basic premise that, prior to the 2020 global pandemic, was seldom inquired about. As a result, the workhouse becomes ripe for rediscovery.

The Halifax waterfront becomes the testing ground for the project. Historically a working port, today, the Halifax waterfront is seen as a highly public area within the city that in recent years, has become punctuated by private housing developments and expensive retailers. This is reflected in its current mixed-use zoning that is book-ended by two large industrial zones. The project is concerned with the spatial qualities of architecture where living and working overlap and make their contribution to the city. The project is also concerned with the gradations and thresholds between the public and private spheres and questions the nature of how living and working can be arranged. The idea is to challenge the relationship between the public and the private, and how it can become renegotiated to address how living and working have been socially codified.

A Return of the Workhouse

The modernist planning strategies presented during the nineteenth and twentieth centuries that have perpetuated the notion that views the house as a safe haven from the world of production can be thought of as a deconstruction of the workhouse. As a resonse, this thesis poses a reinstatement and a recontextualization of the workhouse, so to speak. Though, in the context of this project, the workhouse does not represent the dystopian ideologies of a mass-production capitalist machine. Rather, the workhouse is viewed as a place where small-scale communal production can occur and where the burden of reproductive activities can be socialized amongst dwellers.


living
working
working (industrial)
mixed-use
recreation
--- boardwalk + seaport
N
1/8 mi

Map, Halifax (present-day), living and working, base map data from (HRM 2014; NSTDB 2022c)

Chapter 5: An Urban Collective Living and Working Model

Proposal Introduction

The proposed project addresses the in situ cycle of living and working by allowing production to become a civic endeavor and where reproduction can be socialized beyond the family. The project offers flexibility where dwellers are free to negotiate daily how to live and work. Aureli and Tattara discuss the risk involved in proposing a model such as this,

> There is a risk, however, in proposing typologies where “living” and “working” can unfold in the same space. This scenario represents the complete fulfillment of a condition that already exists in which labor is the totality of human existence and where there is no space and time left free from the “fate” of productivity. Yet a space that does not separate production and reproduction not only makes evident the crucial political role (in spite of Arendt’s and Aristotle’s depoliticization of the oikos) of reproduction within production, but also allows inhabitants to reorganize both production and reproduction in a way that can free their time. By countering the fragmentation of domestic space and its atomization into “family houses,” architecture can support a scenario in which it is possible to share and thus minimize the burden of domestic labor, but also make possible the self organization of working activities by cooperation and mutual help, for example by sharing cleaning, cooking, but also childcare. Moreover, living and working in the same space means to drastically reduce commuting time and may allow dwellers to more easily limit work time and reclaim time beyond both production and reproduction. (Aureli and Tattara 2015)

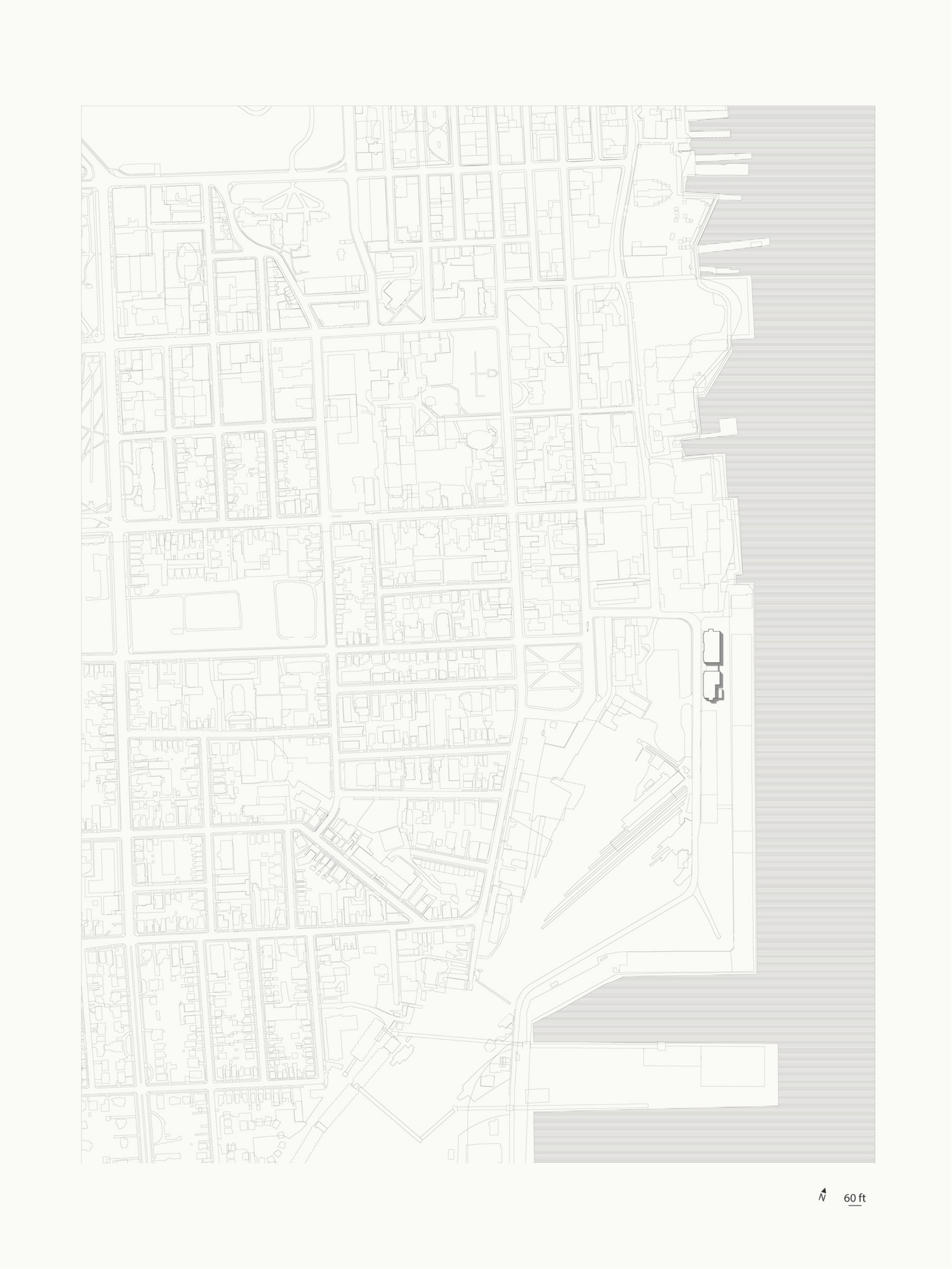
There exists a need to move beyond the given parameters within which architecture conventionally conceives of housing. Aureli and Tattara argue that housing needs to be re-politicized as a truly public sphere, where alternative forms of life are no longer enclosed by the individual house but can—and should—be openly confronted, discussed, and reorganized. Issues of domestic space cannot be reduced to mere architectural questions. Yet, the architectural project can serve as a place of reflection and offer opportunities to unveil the relationship between the politics of housing and its spatialization. Such a shift in thinking is not just a matter of architecture, but a more considerable social reform that would challenge the current economic and political regime.

> Above all, trying to reunite spaces for living and working as one space where sharing and solidarity is spatially allowed may counter the fundamental logic of our capitalistic society that is the disciplining of housing as a place that makes “natural” the reproduction of life. Opening up the home beyond the nuclear family living habitus means to challenge the dwelling habits that for centuries have hidden the role of the reproduction from political discussions. (Aureli and Tattara 2015)

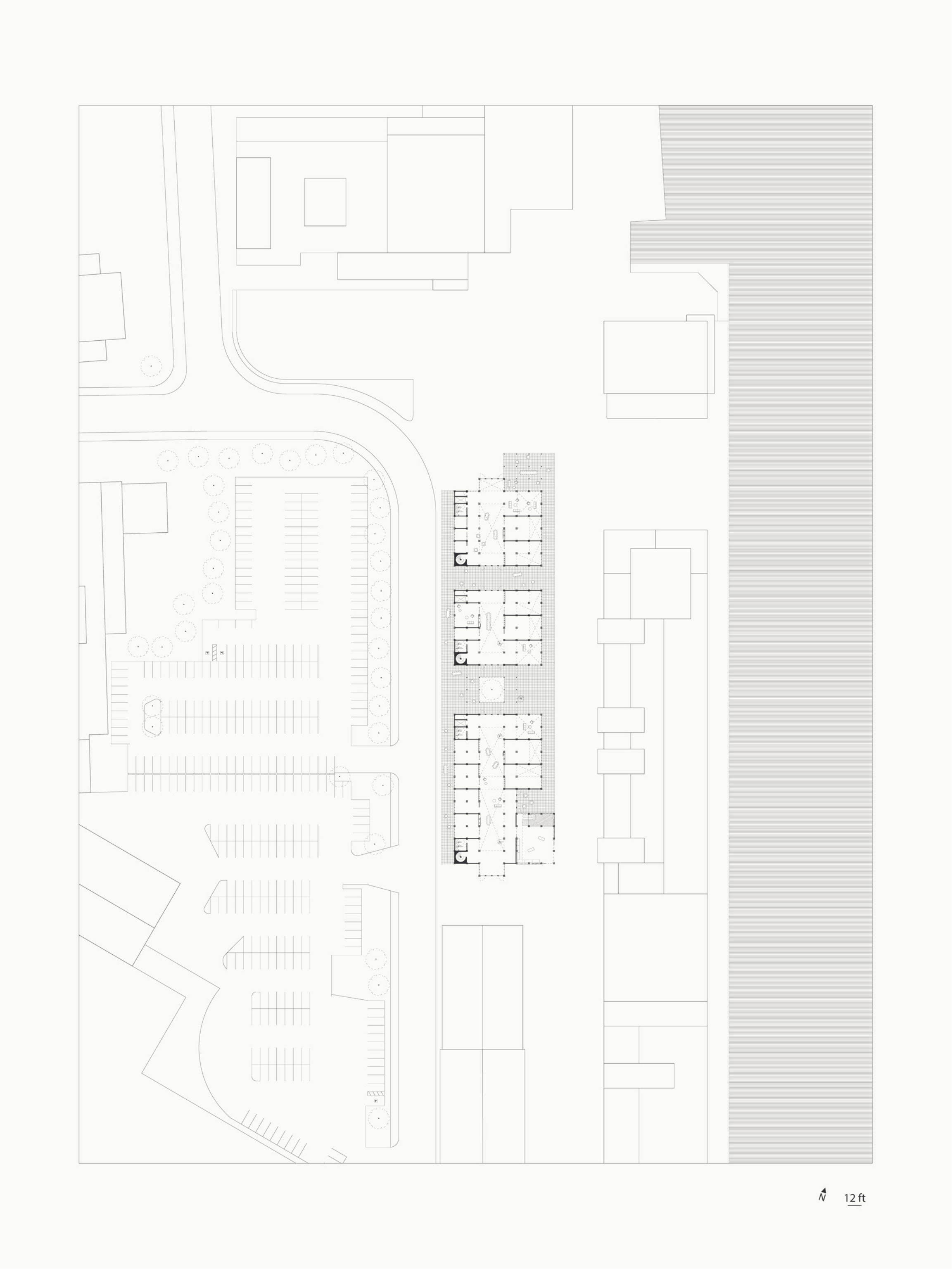
This project thus serves as an attempt to rethink the role of the house beyond its contemporary understanding as a private domain. Utilizing the framework matrix in chapter three, the project serves as a recontextualization and translation of earlier forms of living and working. Some rules appear more discernible, while others present themselves as subtle and more nuanced.

Site: Halifax Seaport

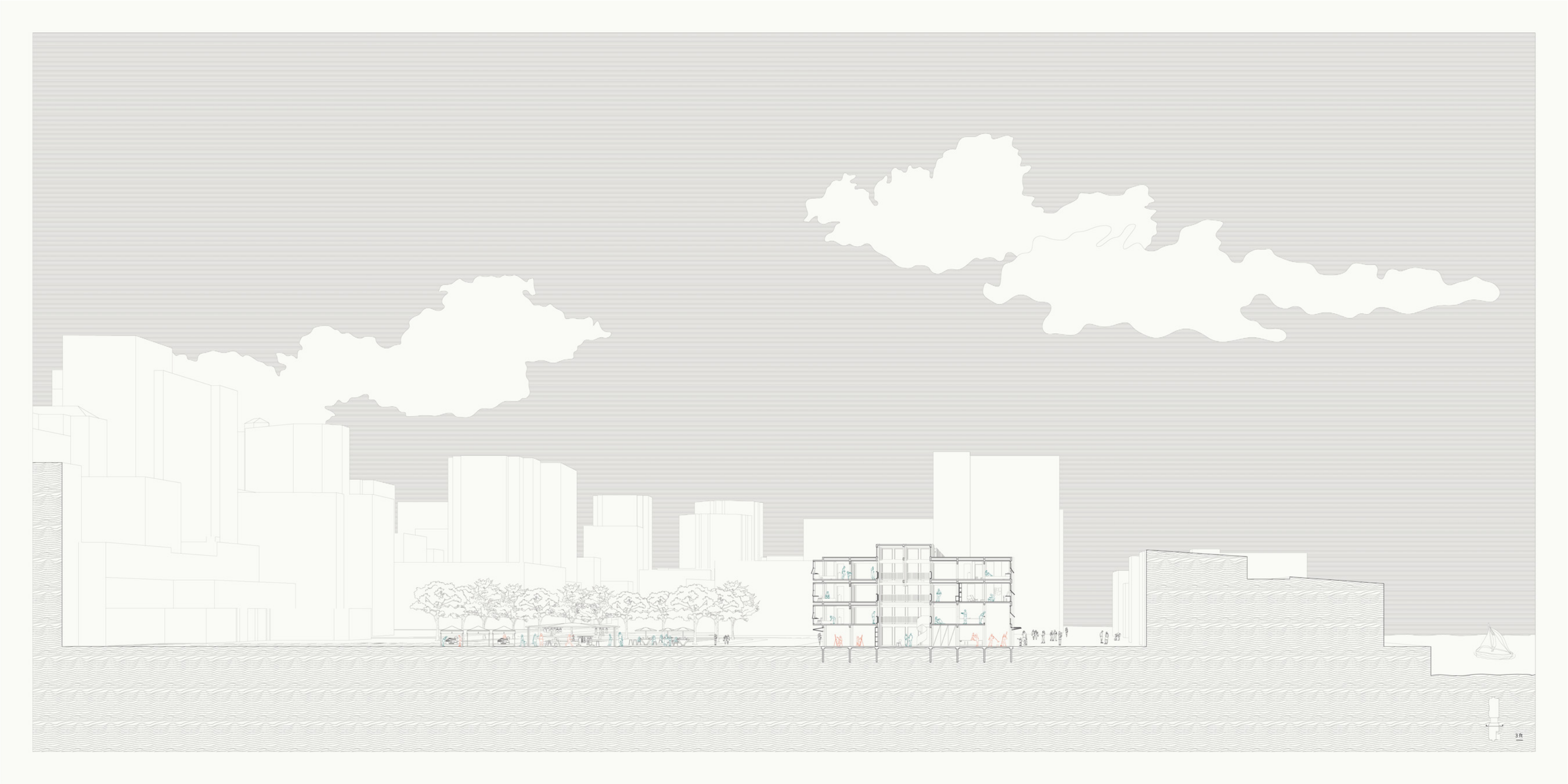
The site for the proposed project is located on a large lot on the Halifax Seaport, a primarily industrial area within the city. Initially imaged as an art district, today, this area resembles that of a failed public space that has been observed as feeling disconnected from the rest of the city. The building is well situated between Marginal Road, an active transport route for freight vehicles, and the former Seaport Market building, now turned offices. The linear formation and orientation of the building resemble that of the medieval longhouse, a direct response to the narrow and long site. This effectively creates a public promenade condition that can be viewed as an extension of the boardwalk to draw people into the site, effectively reinstating this site as a public space where the building serves as a new social aggregator.



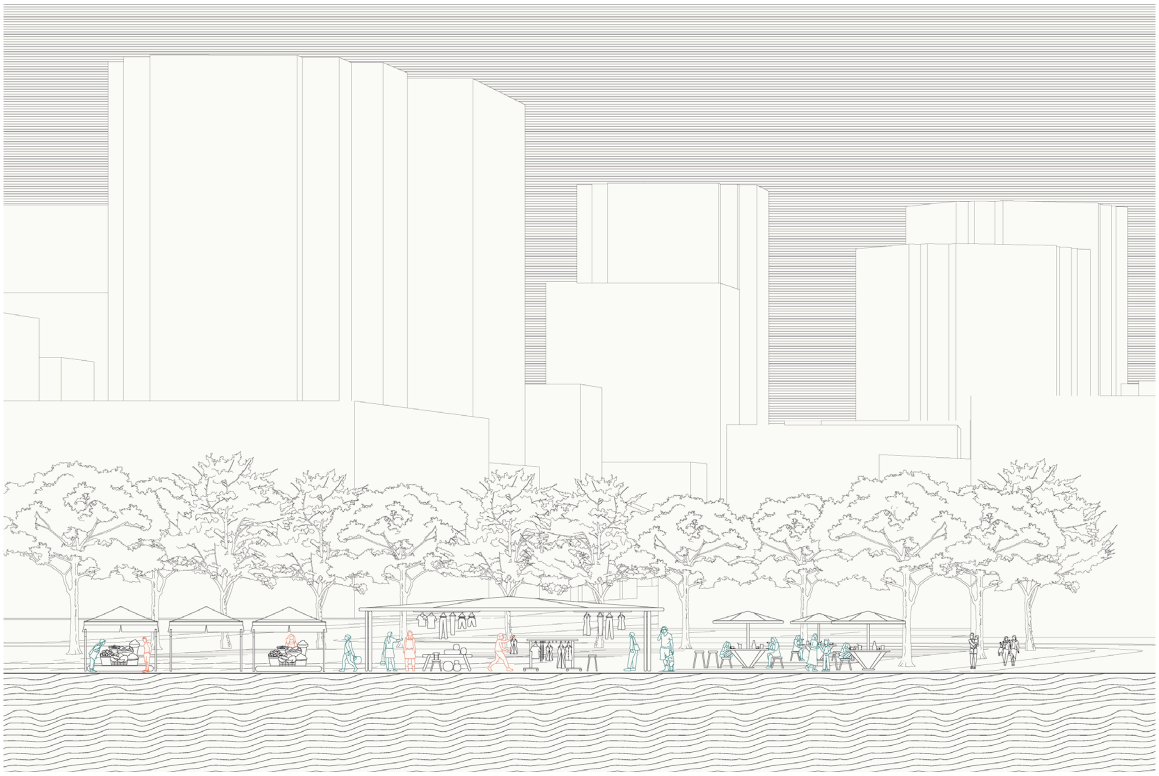
Plan, site context, base plan data from (NSTDB 2022a, 2022b, 2022c)



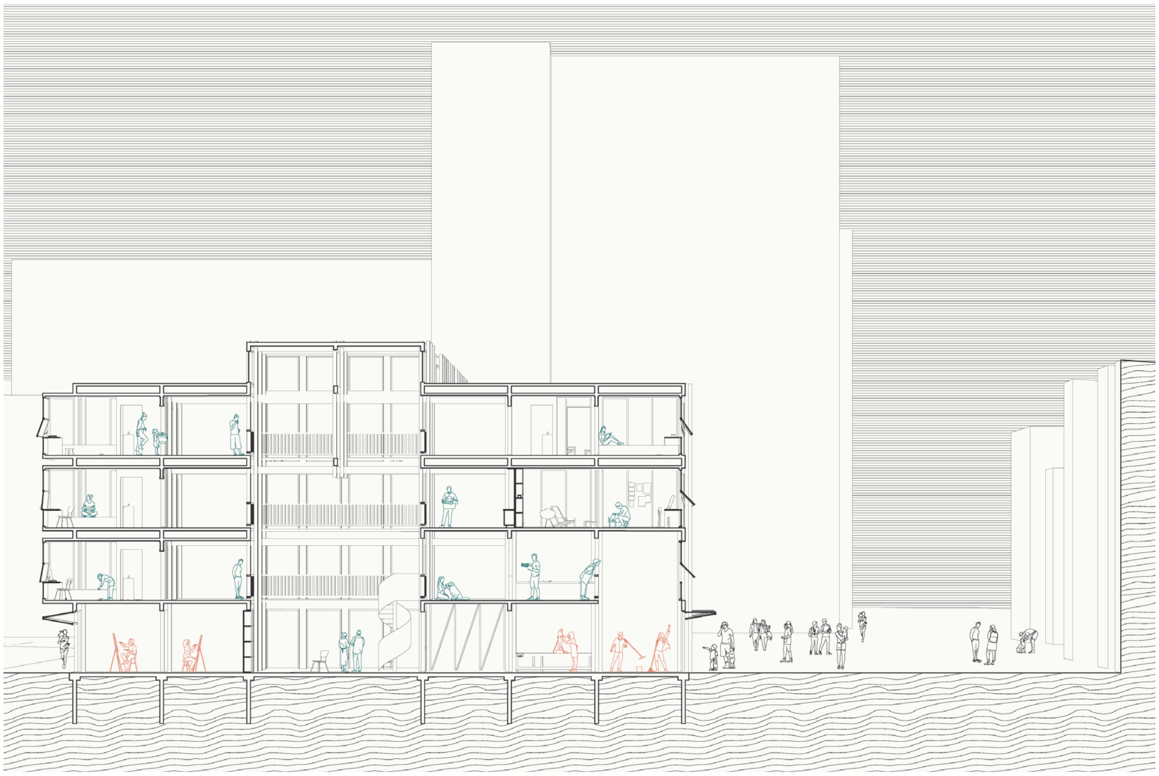
Plan, urban context



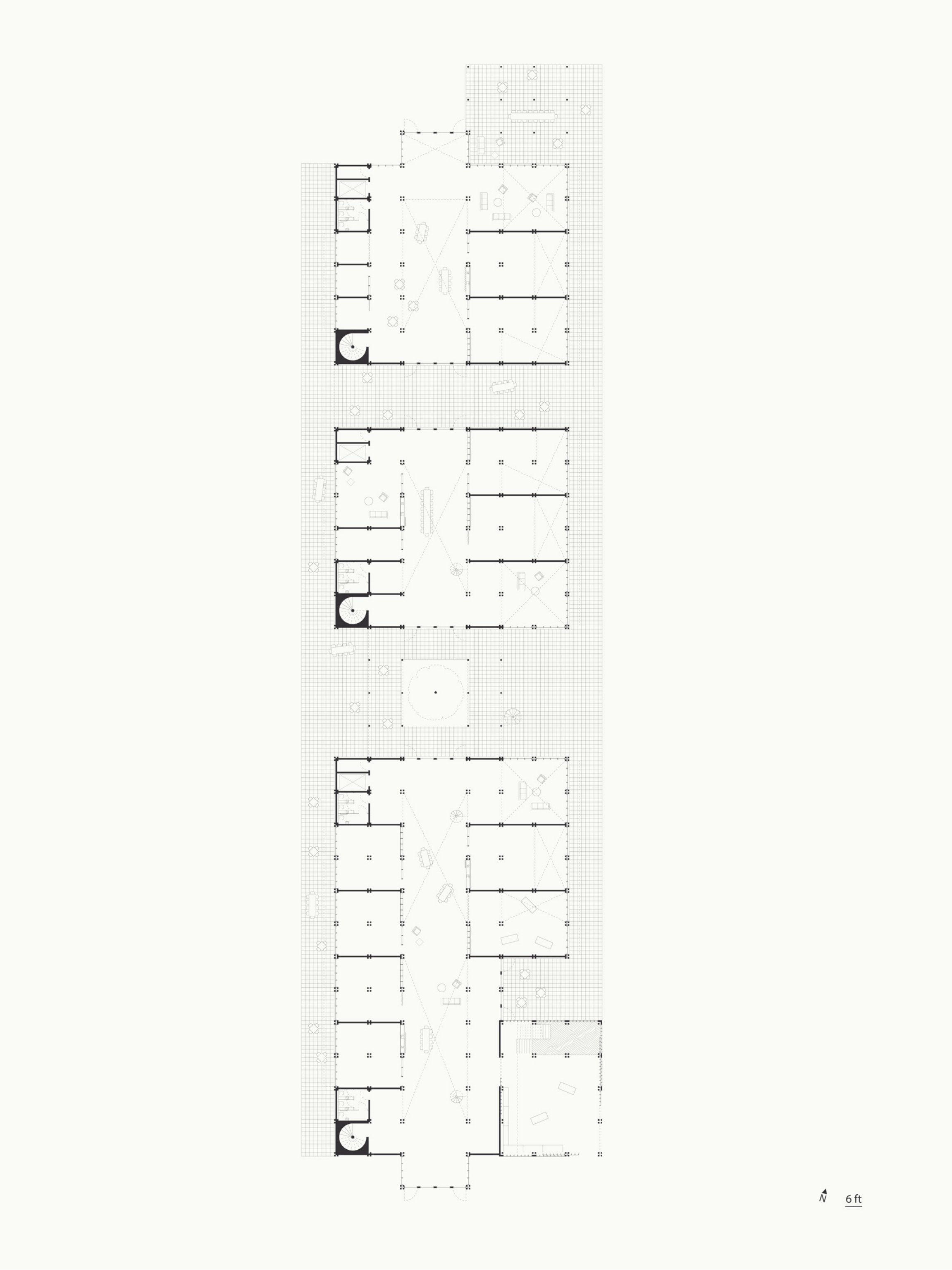
Section, site



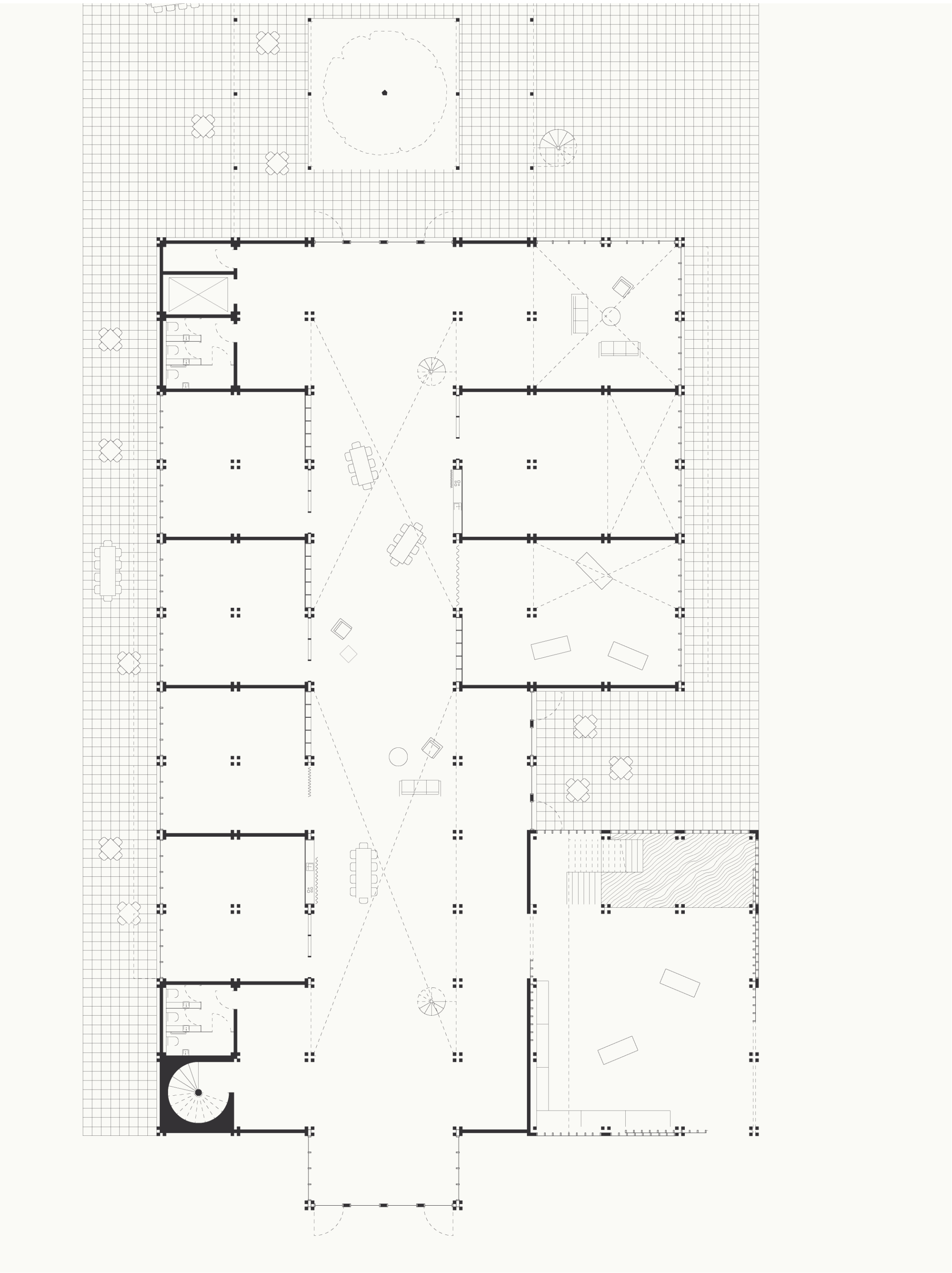
Section (enlarged), site, seasonal market, (1/2)



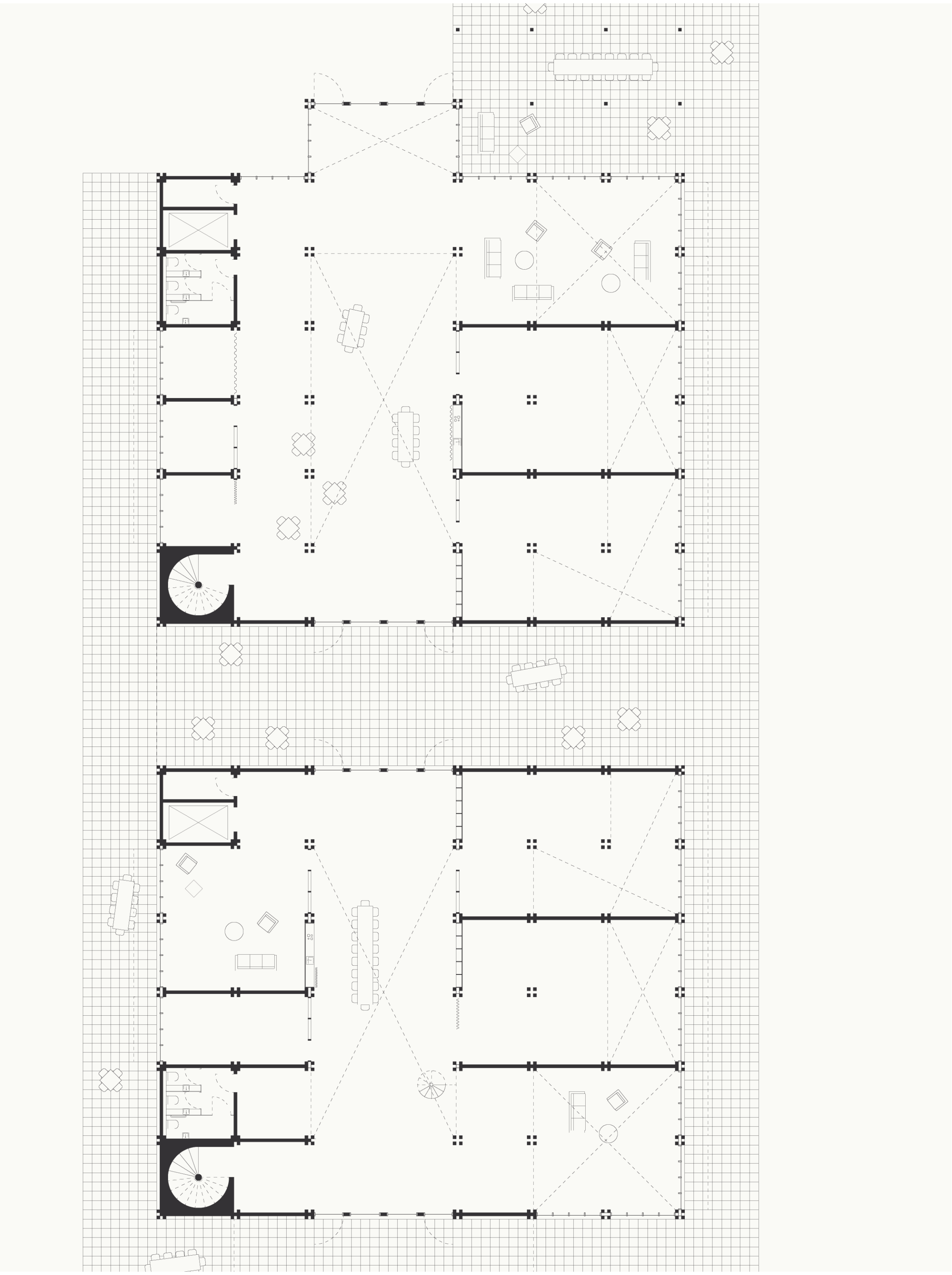
Section (enlarged), site, pedestrian promenade (2/2)



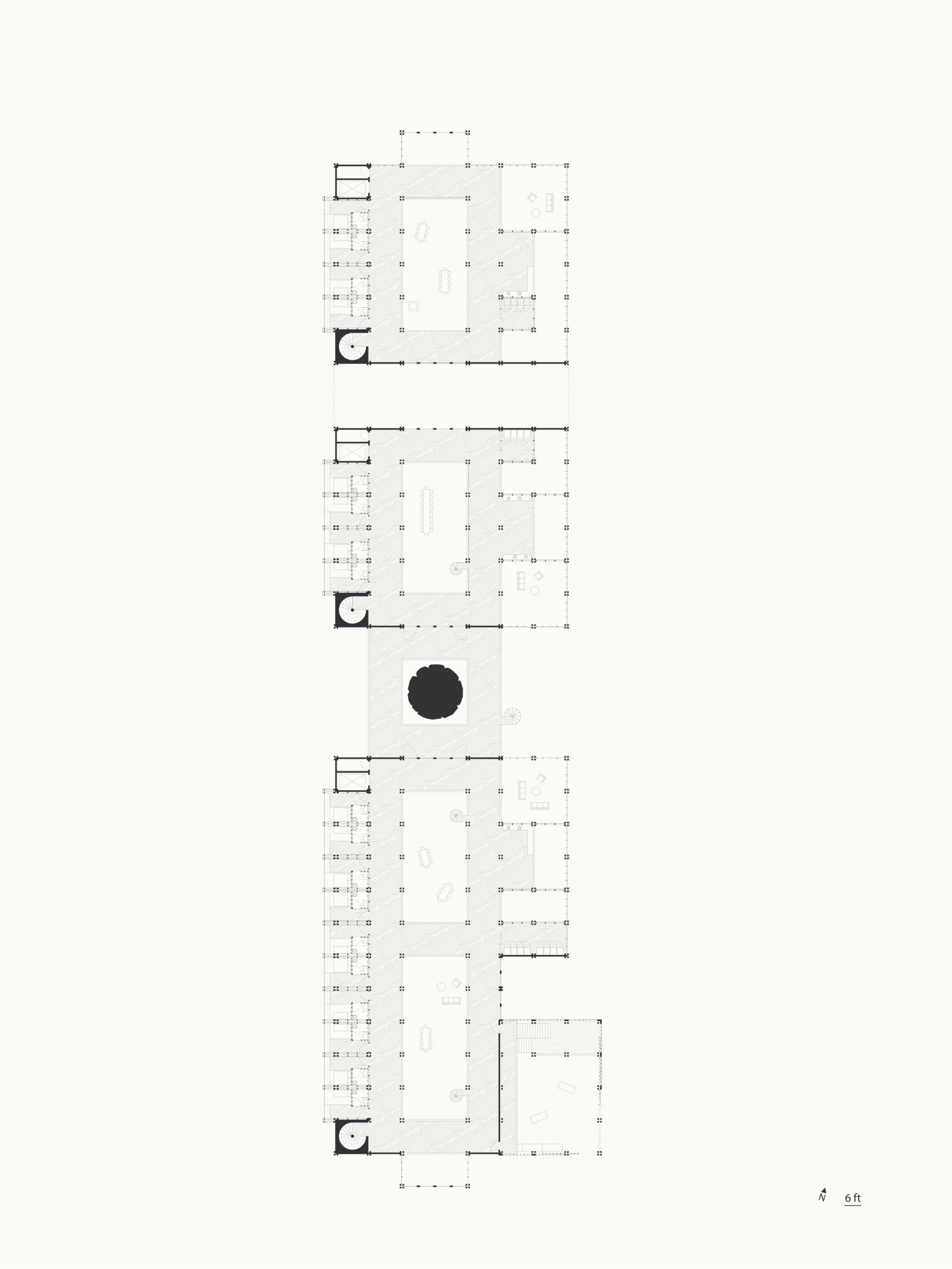
Plan, ground floor



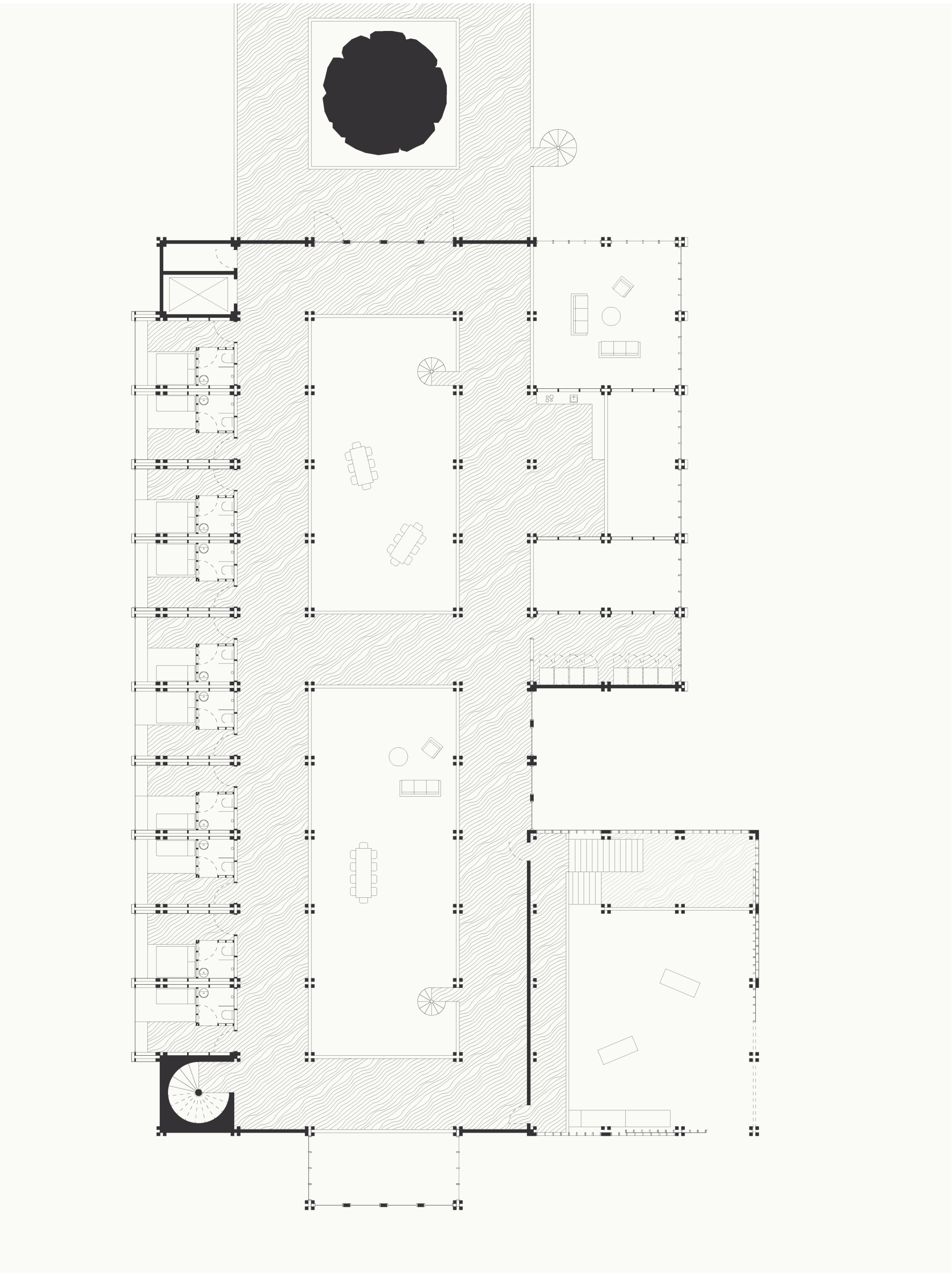
Plan (enlarged), ground floor (1/2)



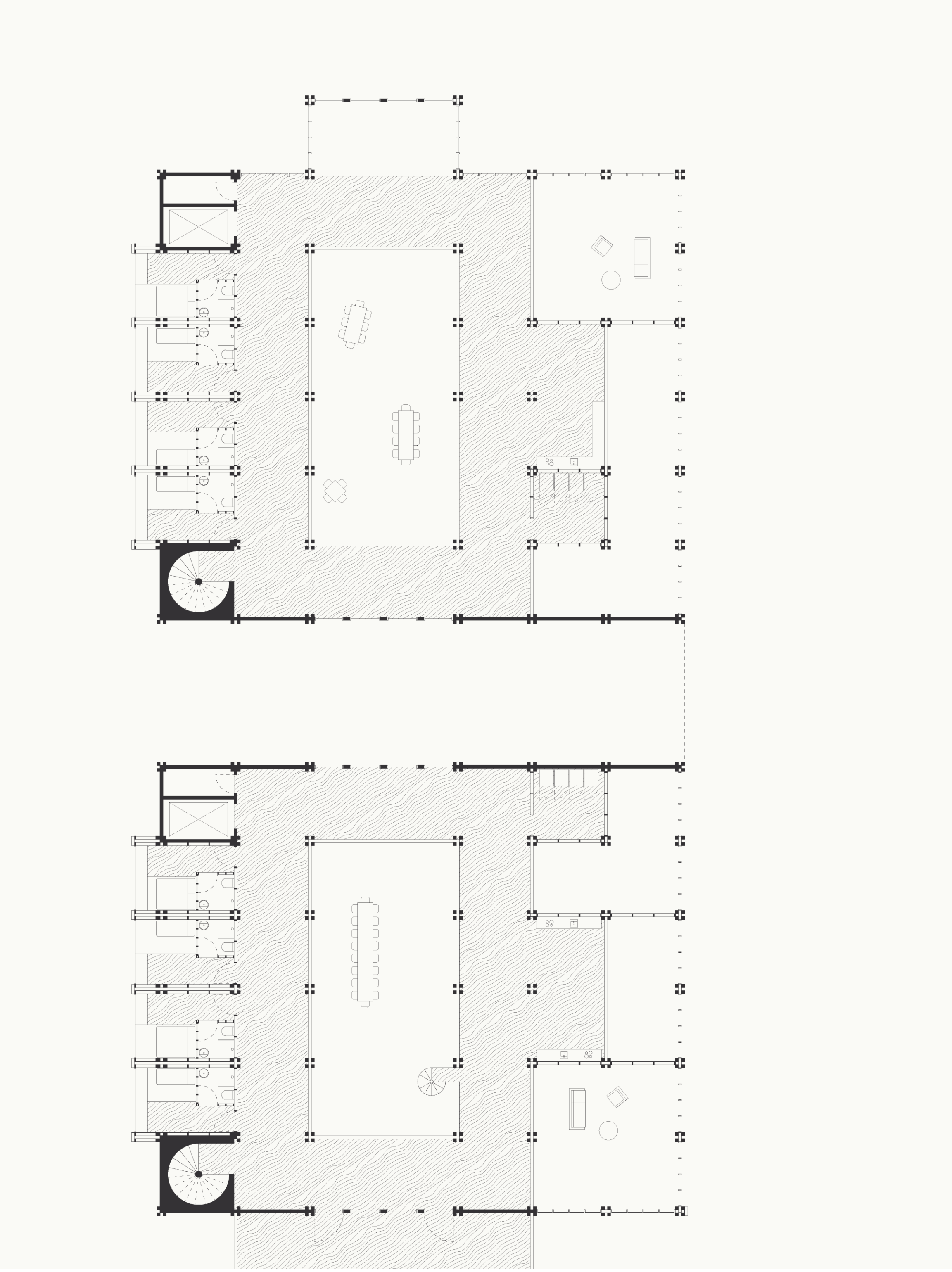
Plan (enlarged), ground floor (2/2)



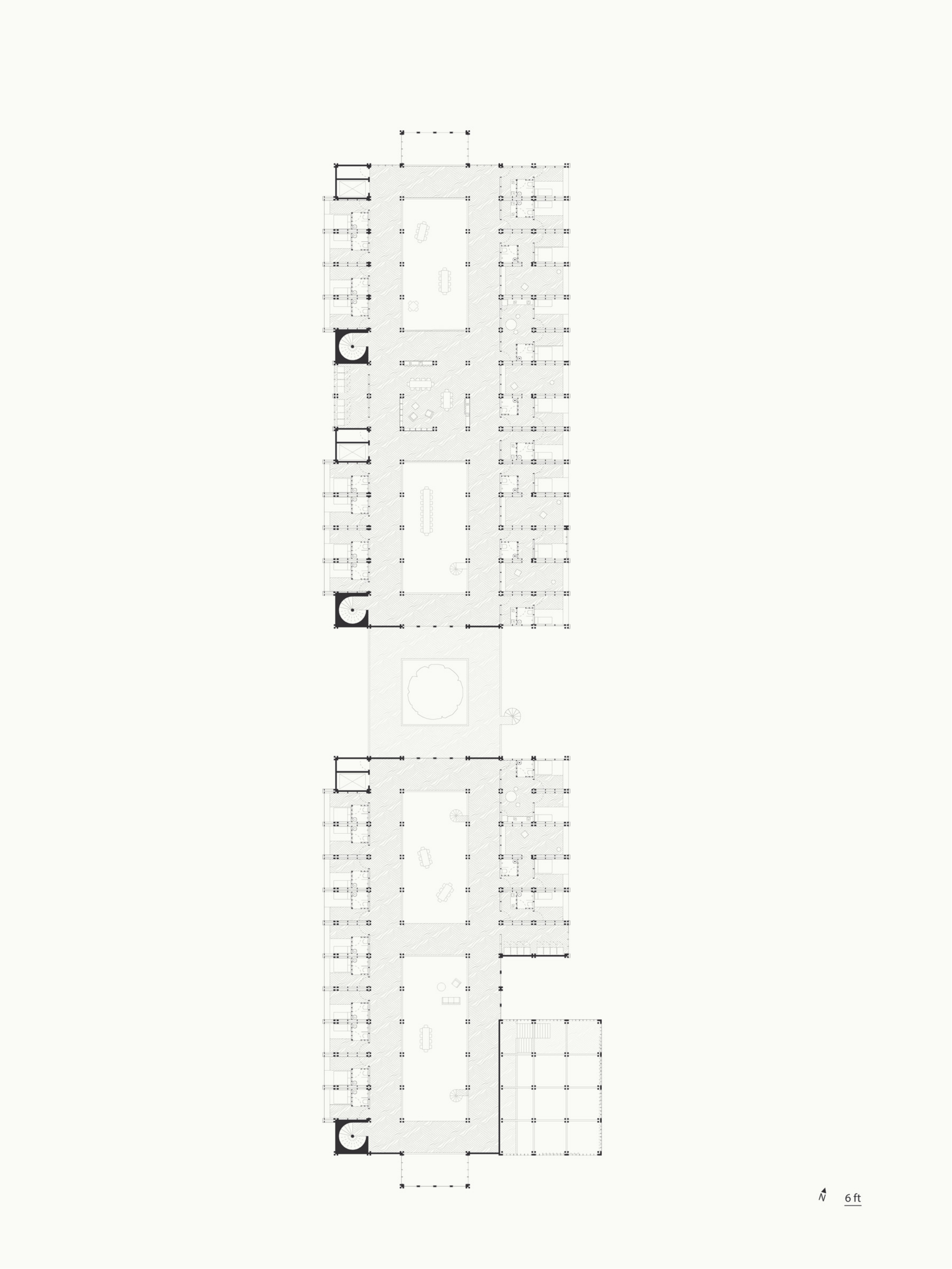
Plan, first floor



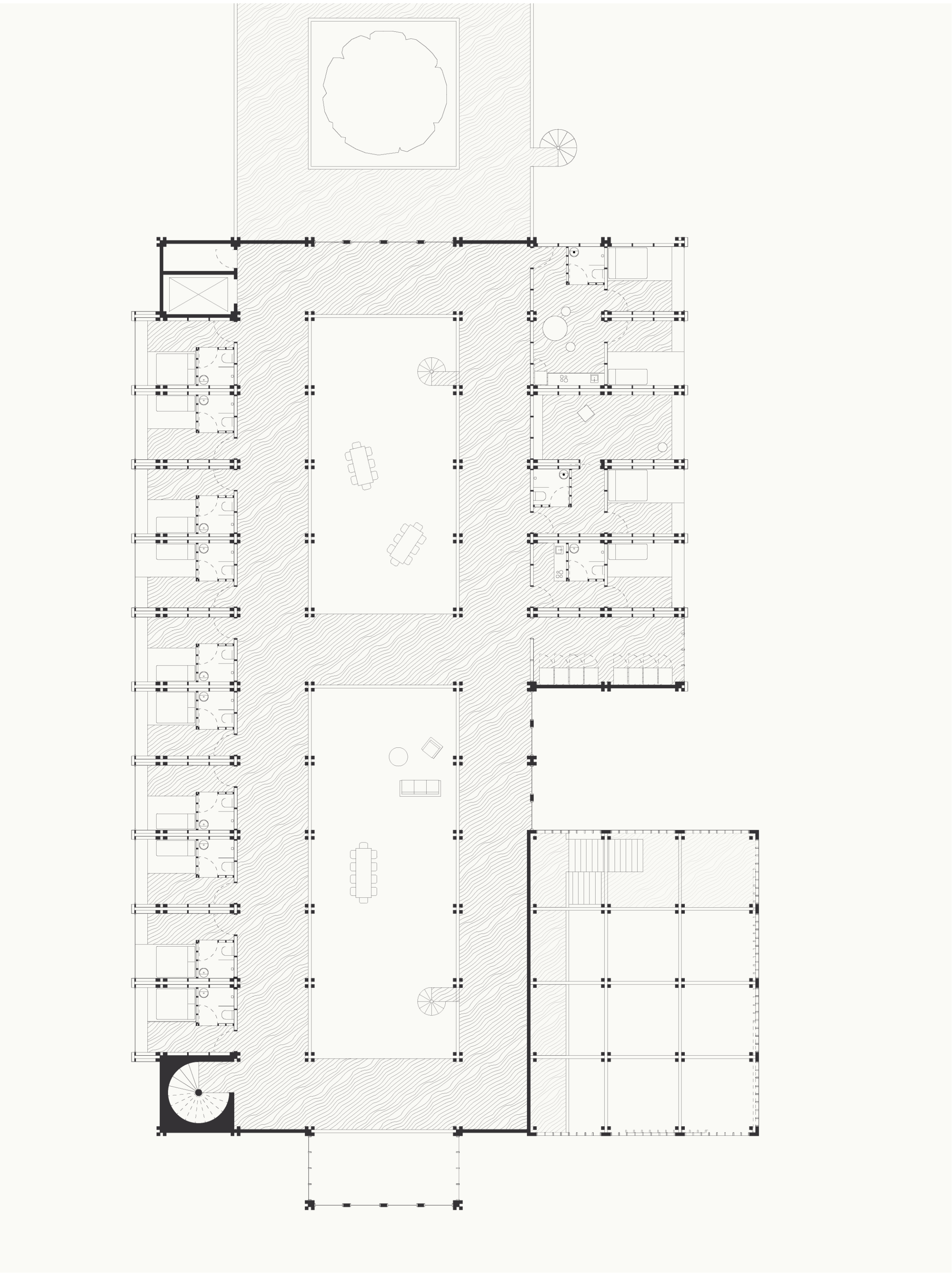
Plan (enlarged), first floor (1/2)



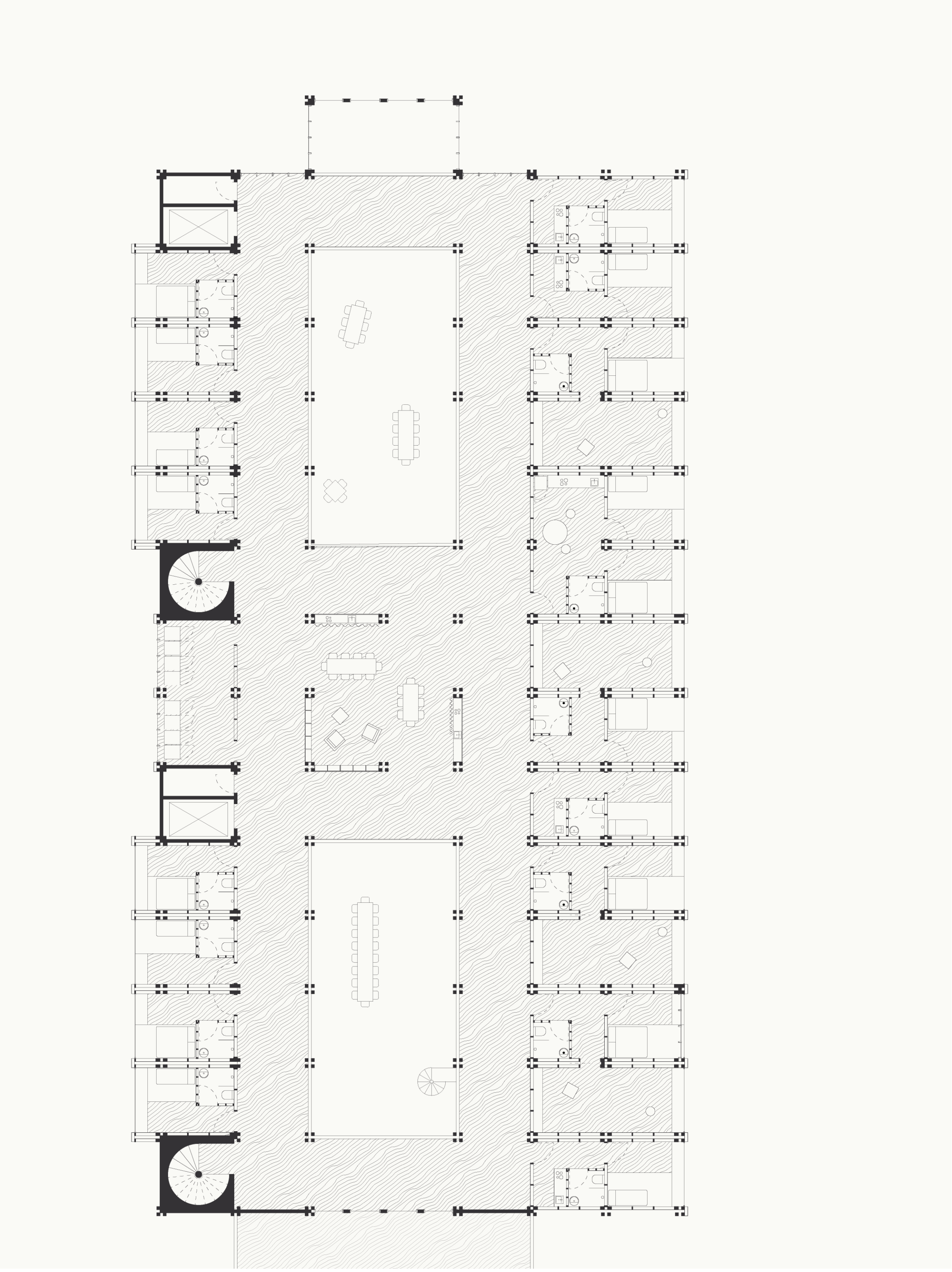
Plan (enlarged), first floor (2/2)



Plan, second/third floor



Plan (enlarged), second/third floor (1/2)



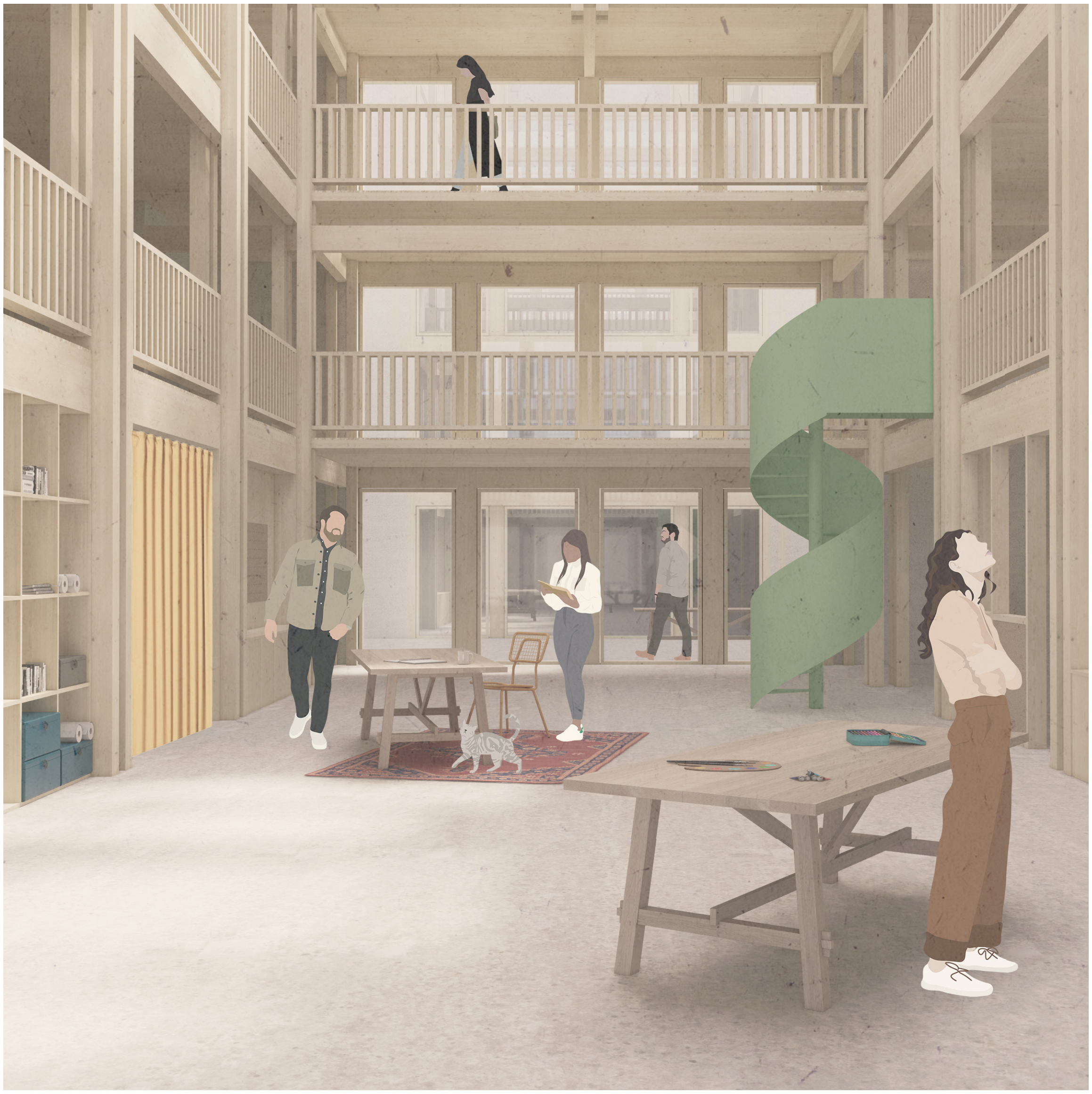
Plan (enlarged), second/third floor (2/2)

Design Translation

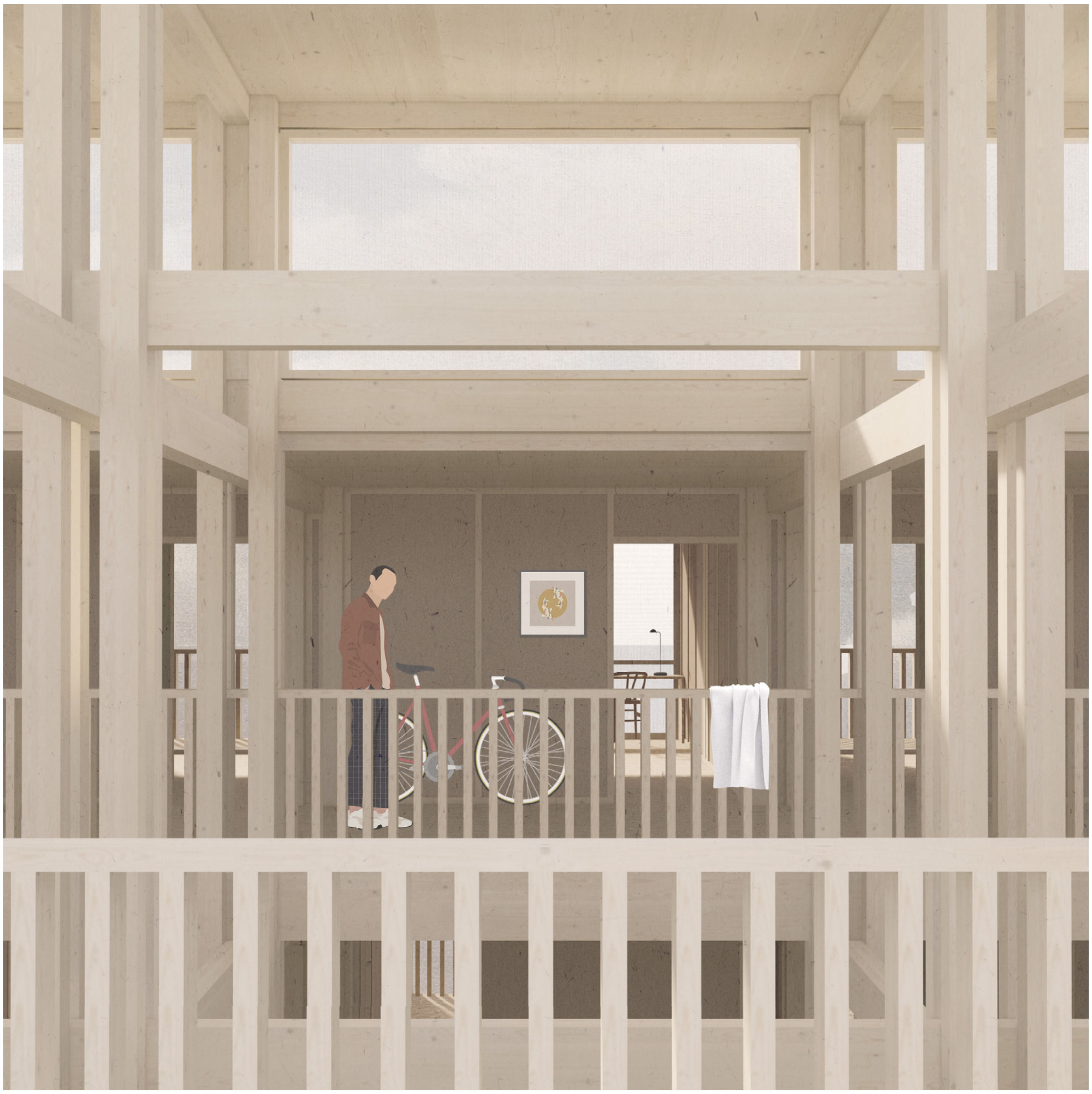
Ohalo II: Communal

The project takes the form of an urban collective housing model centered around communal living and working. The goal of the project is to recognize not only the ephemeral boundaries between living and working but also the productive characteristic of housing itself.

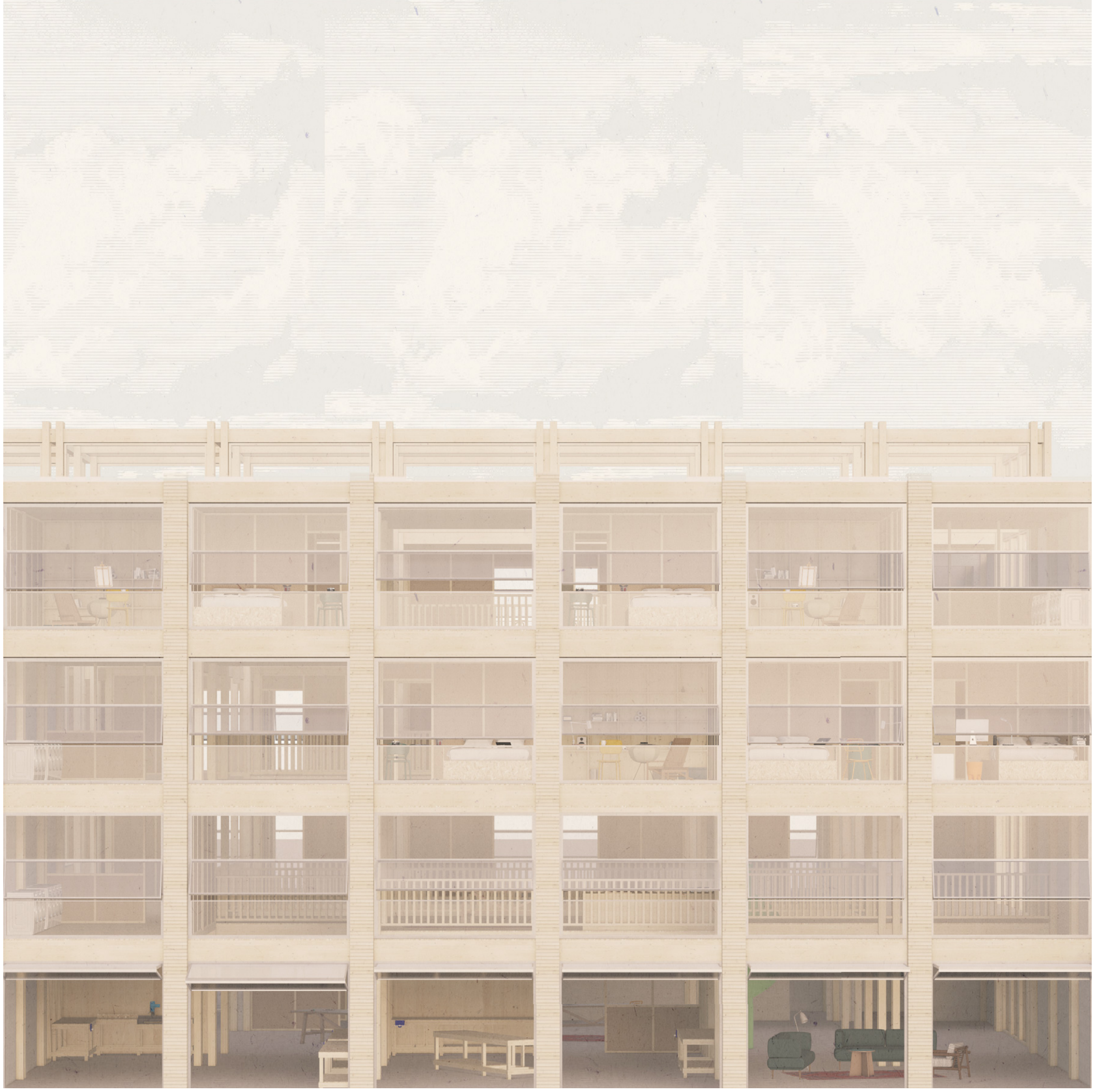
The building is organized around two collective housing blocks, each conceived as its own household. This organization can accommodate multiple household formats, supporting networked families and a multitude of living and working arrangements. At the ground level exists an expansive full-height public atrium that acts as an internal street where everyday life can unfold. This space serves as the intersection between living and working, where reproductive and productive activities can spill onto it, acting as a space of social confrontation and community. The abutting perimeter spaces are flexible living and working spaces that can be rented by building tenants, local business owners, and artisans or become open to the atrium to create larger rooms for entertaining or events. The linear spatial organization allows dwellers to use the rooms closer to the pedestrian promenade as a workshop, studio, shop, office, or for any other work-related activities to engage with the public realm, while the rooms on the marginal street side are reserved for residential purposes or work that requires a greater degree of privacy or noise separation. On the upper floors exists the housing units, creating a gradient of privacy from the ground floor level up to the third floor.



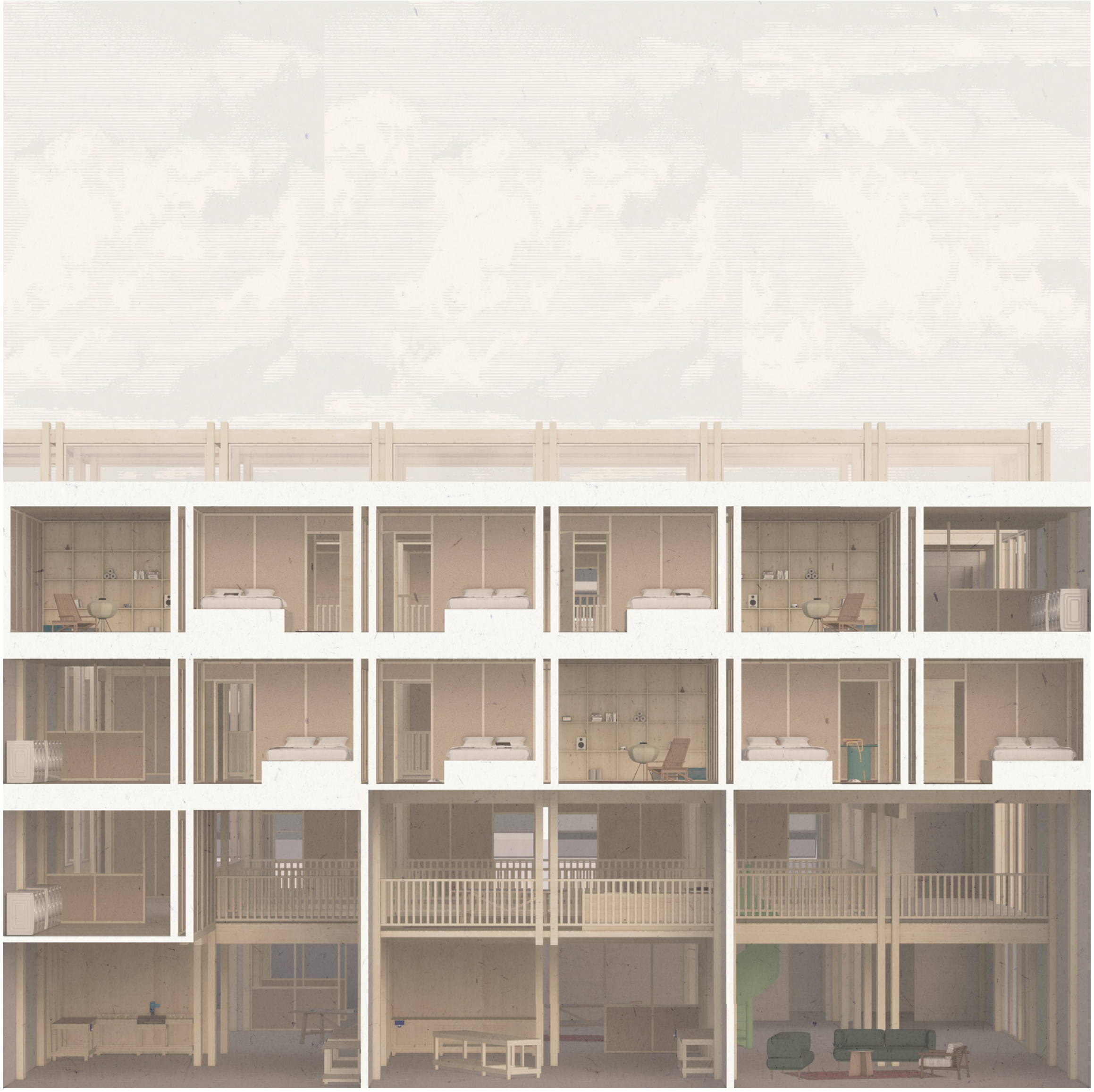
Render collage, atrium as a space of social confrontation and community.



Render collage, collective housing unit



Render collage, composition of living and working, facade

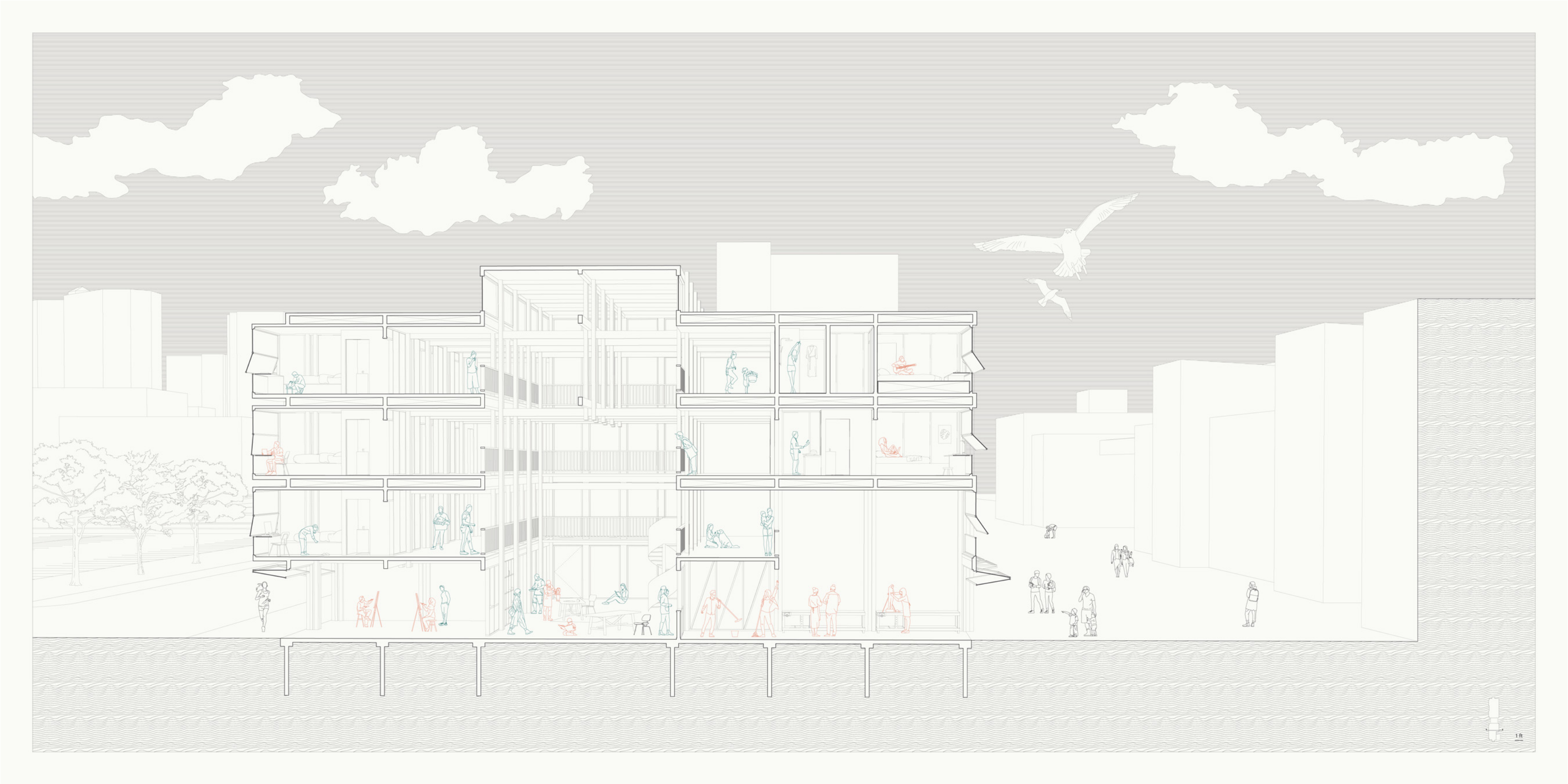


Render collage, composition of living and working, section

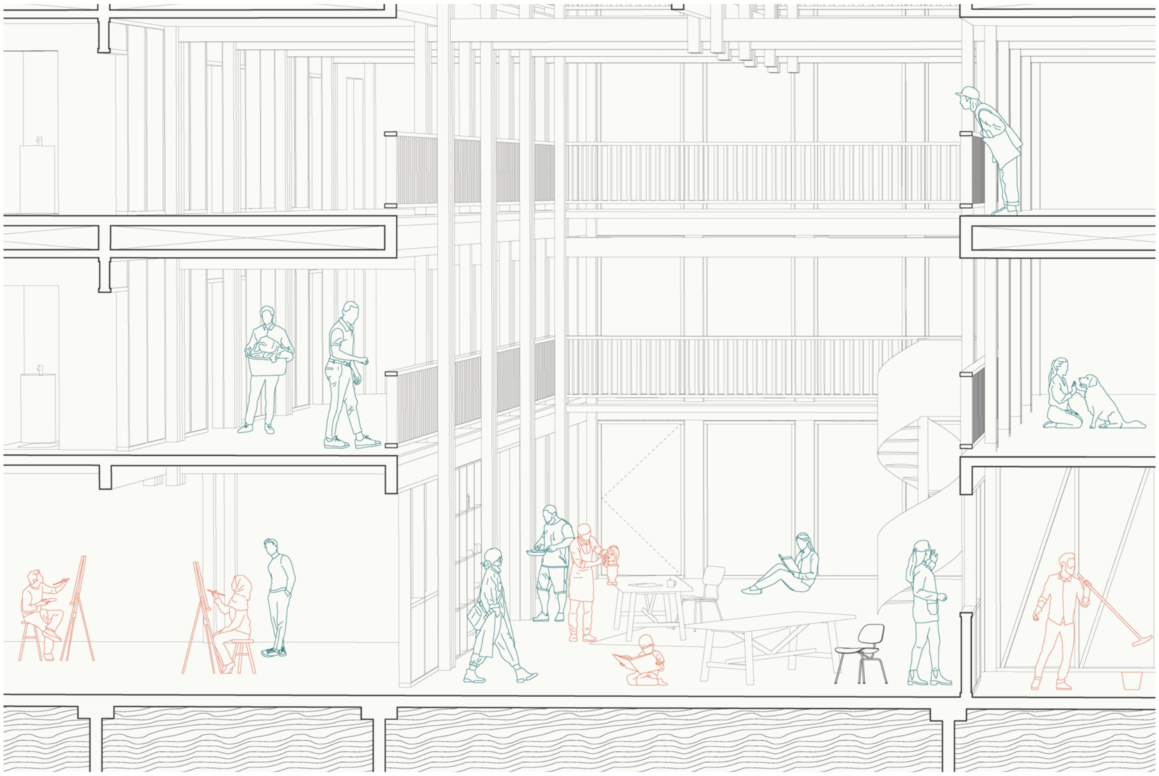
Nahal Oren: Spectacle

The project aims to celebrate living and working by creating opportunities for it to become spectacle. A twelve-foot wide circulation core runs along the perimeter of the atrium space, allowing the activities that occur within this space to be on full display at any given time of day. This becomes revealed through the section of the building. To allow for moments of privacy, movable partitions are used to close space or to open them up to create a social environment and to make activities become performance.

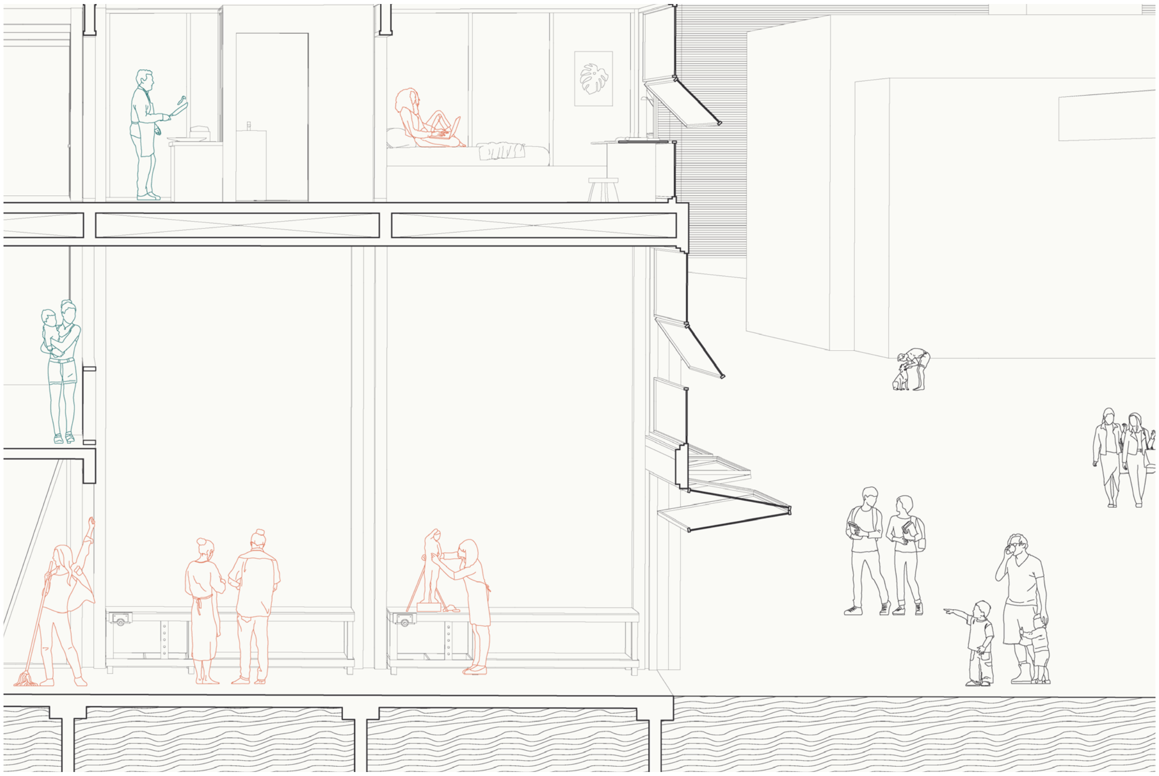
By allowing for everyday life to unfold under the eyes of dwellers, it endows them with a strong sense of curiosity and social reciprocity. Allowing for reproductive and productive activities to be visible prompts spontaneous social interaction amongst dwellers. It is precisely these spontaneous social interactions that ensure inhabitants have fuller lives living within the city.



Section, building



Section (enlarged), dwellers looking into the atrium space while daily life unfolds, (1/2).

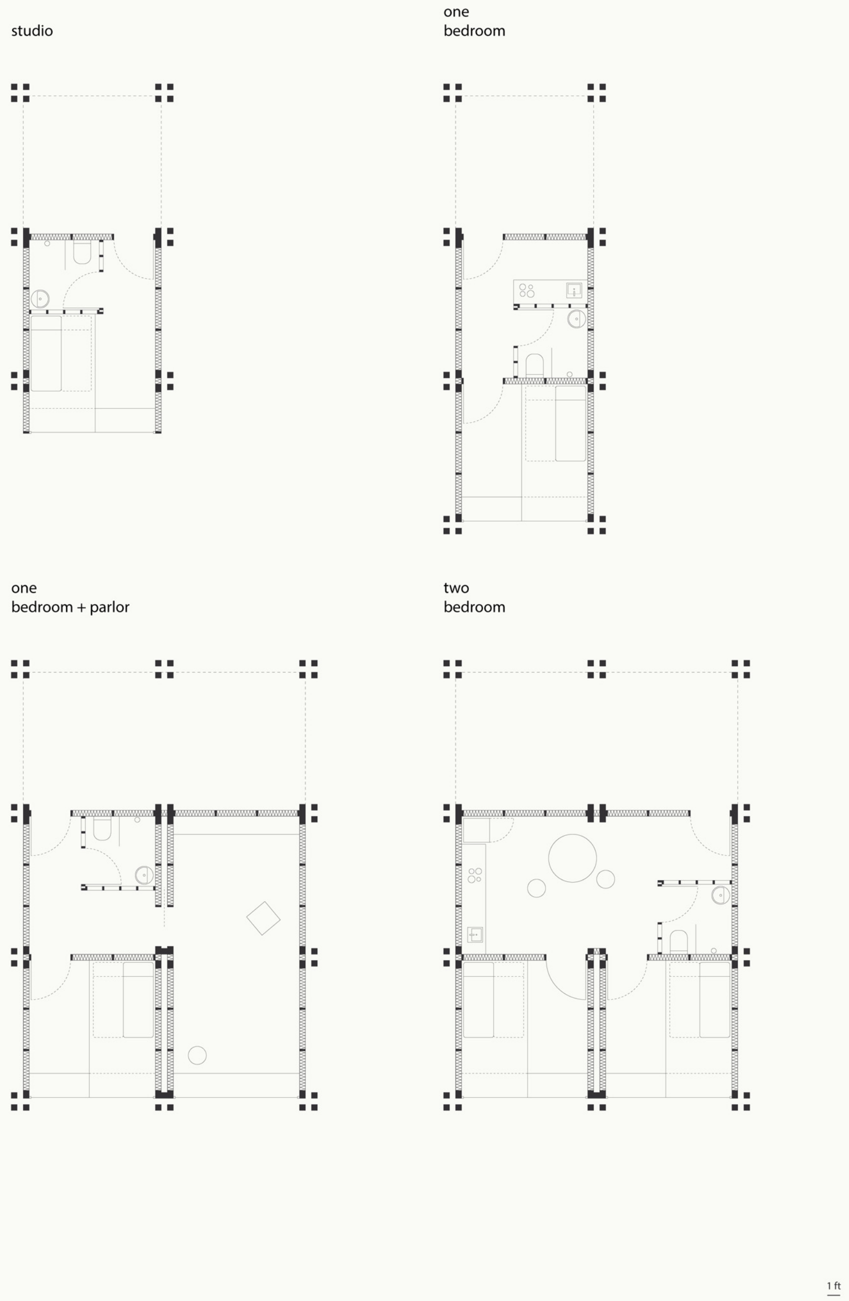


Section (enlarged), the public looking into a workspace as dwellers conduct work, (2/2).

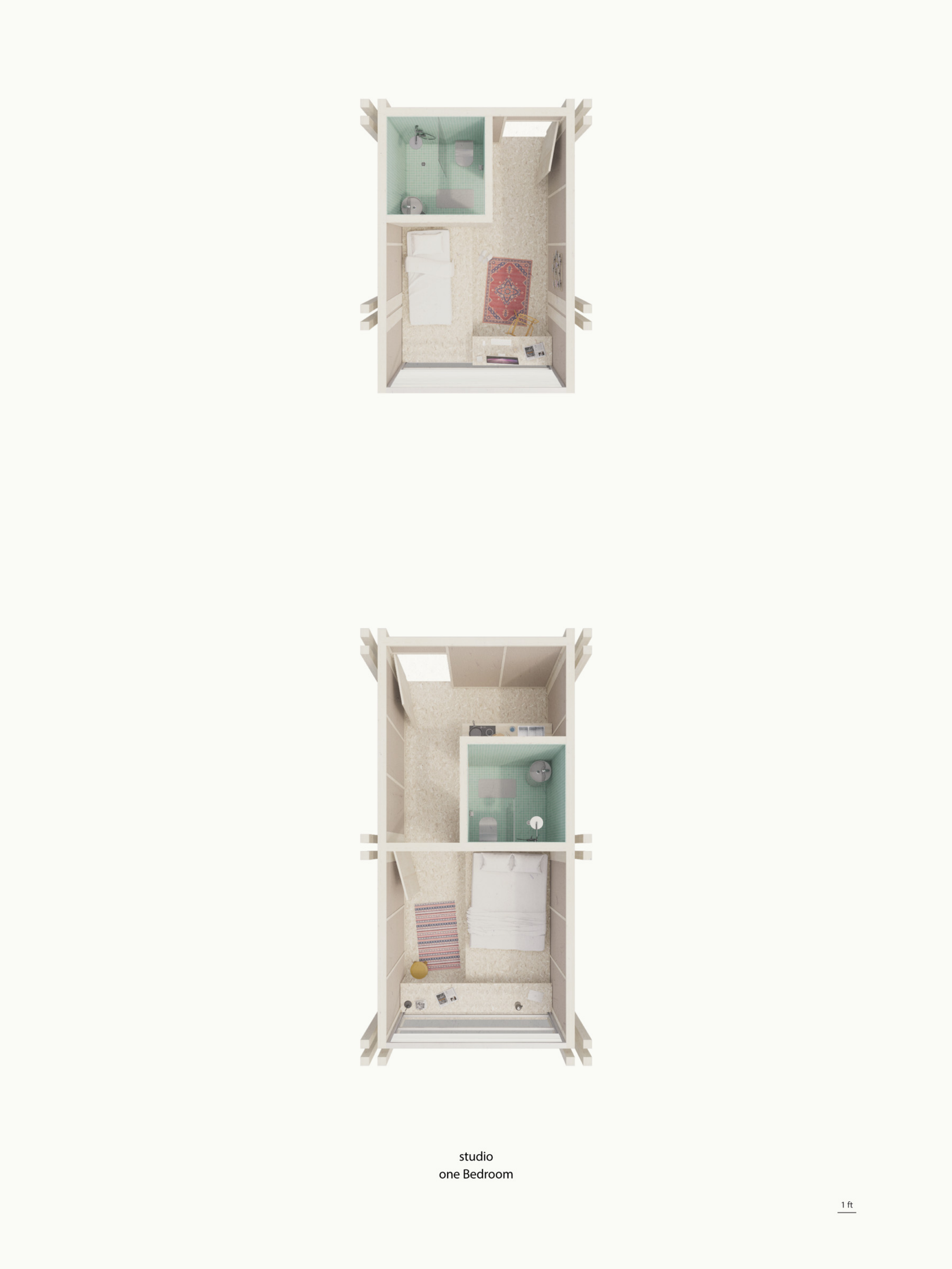
Medieval Longhouse: Flexibility

Echoing the medieval longhouse, a common rhythm is established through a repeatable structure that offers maximum flexibility. The structure of the building operates on a twelve-foot by twelve-foot grid with three-foot threshold spaces to accept openings, millwork, and partitions. The structure is designs to allow for things to be slotted in, as needed, in a sort-of kit-of-parts type fashion. The columns are constructed of six-inch by six-inch glue-laminated timber posts with six-inch wide by twelve-inch deep glue-laminated timber beams weaving between them. This condition creates the opportunity to use double-stud framed partition walls that perform as acoustic and fire separation assemblies. The linear formation of the workhouse allows for its extension, in time. As the building ages and household needs change, dwellers can continuously negotiate spatial solutions that suit their diverse needs and the changing nature of work.

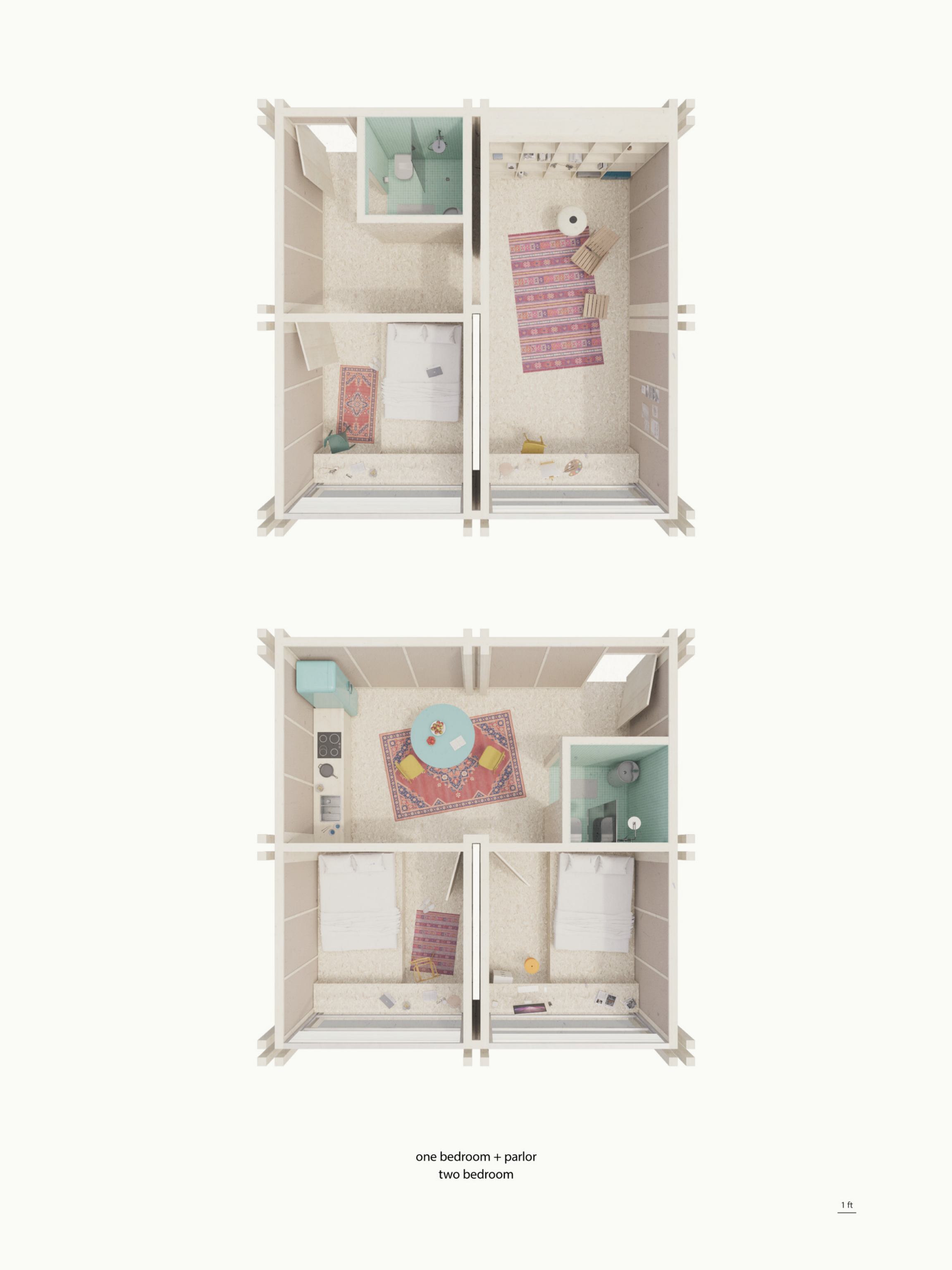
Multiple housing unit layouts were designed to accommodate a variety of dwellers. Each layout includes space for reproductive and productive activities. Within the context of collectivity, each individual unit presents itself as a luxury. Studio units offer housing for those who do not require much individual space or privacy. One bedroom units are large enough to accept a small kitchenette and a greater degree of privacy, as well as, offer the opportunity for a parlor if the tenant requires additional flexible space for living and working. Finally, two bedroom units offer the greatest degree of autonomy given the larger kitchenette and greatest level of privacy.


studio
one bedroom
one bedroom + parlor
two bedroom
1 ft

Diagram, composition and variation of housing units


studio
one Bedroom
1 ft

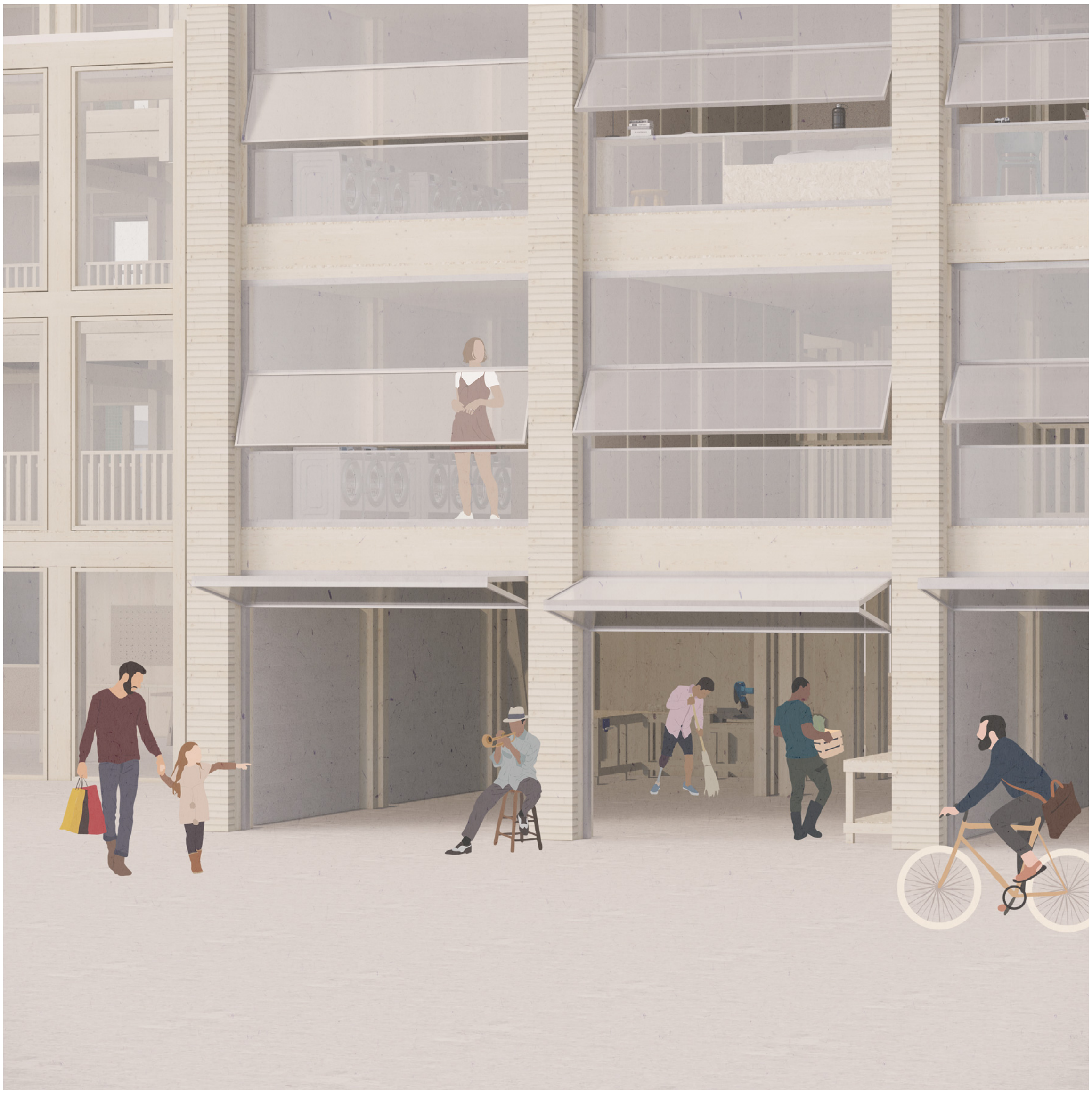
Render collage, housing units


one bedroom + parlor
two bedroom
1 ft

Render collage, housing units

Traditional Machiya: Adaptability

The use of movable and temporary partitions not only creates opportunity for living and working to become spectacle, it also allows for the transmutation of spatial conditions, resulting in architecture that can adapt to change. This adaptability allows for a multitude of spatial conditions that satisfy the diverse needs of the household and mediates between the gradations and thresholds between private and public. During the daytime, the building has the ability to open to the street, effectively allowing the public realm into the building and, in turn, allowing reproductive and productive activities to become part of the street. During the nighttime, it becomes closed off and the interior space becomes primarily for household use. This temporality can be thought of as a wake/sleep cycle of the building.



Render collage, building, daytime / awake

Render collage, building, nighttime / asleep

Chapter 5: Conclusion

> There is an increasing interest in more socially-oriented ways of living such as co-housing or sharing domestic space beyond the compound of the family apartment. But what is seldom discussed is that this way of life requires some effort. To live together requires less individual freedom, although that may be no bad thing. The question is whether such a way of life might only be developed out of economic necessity, or because it is only by sharing and coexisting that we can reclaim the true subjectivity that Marx beautifully described with the oxymoron 'social individuals' - individuals who only become so among other individuals. Here, less means precisely the recalibration of a form of reciprocity that is no longer driven by possession but by sharing; the less we have in terms of possessions, the more we'll be able to share. To say enough (instead of more) means to redefine what we really need in order to live a good life - that is, a life detached from the social ethos of property, from the anxiety of production and possession, and where less is just enough. (Aureli 2013, 59)

The historical evolution of domesticity remind us that the house is far from being considered a private space. Houses are not mere vessels of everyday life, but rather, apparatuses that translate politics and economics into spatial conditions. It is crucial to reconsider the role of the house beyond its understanding as a private domain. This thesis does not reject privacy or the notion of family, but argues that there is a need to break the logic of domesticity which individuates the household. By proposing a model that contests the logic of a capitalist society, through the recontextualizing of earlier forms of inhabitation through the lens of ancient workhouses, architecture can support a scenario in which it is possible to share, thus minimizing the burden of reproductive labour, but also enable the autonomy of productive work through cooperation and mutual help.

Today, housing is primarily conceived as a space where reproductive activities take place, kept separate from the world of production. In recent housing models, "sharing" or "collectivity" are terms that are typically applied to amenities, hobby rooms, meeting spaces, and gyms; they are hardly used to refer to forms of reproductive labour such as child-rearing, elderly care, cooking, cleaning, et cetera. Against the clichés of collectivity, the house should also be considered as a space of work, in which both production and reproduction can unfold in situ. By not separating public from private, production from reproduction, housing has the potential to allow inhabitants to reorganize dwelling in a way that can be mutually beneficial and self-valorizing.

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