

## Learning from Amateurs

*How Madrid Balcony Appropriations  
can Instruct Architects and Future Housing*

## The Places We Make Home

*Housing Proposal that Embraces  
Adaptive and Appropriative Living*



**Introduction**  
*Spatial Appropriation*



a.



b.



c.

- a. *Helmet Holder*, Barcelona, Spain
- b. *Stair Stool*, Rome, Italy
- c. *Pot-holder*, Madrid, Spain



## Introduction

### *Spatial Appropriation*



a.

a. *Nakagin Capsule Tower*. Tokyo, Japan.  
Image by Charlie Koolhaas.

b. Lara-Hernandez, Antonio. *"Institute of Mobility and Urban Territorial Development in Yucatan, Urban Resilience Research."* IMDUT, Yucatan, Mexico.

## Spatial Appropriation

The act in which people use public [or private] spaces to carry out individual or collective activities other than the purpose that the space was originally designed for.

b.



## Introduction

### Examples of Appropriations

public



a.

semi-private



b.

private



c.

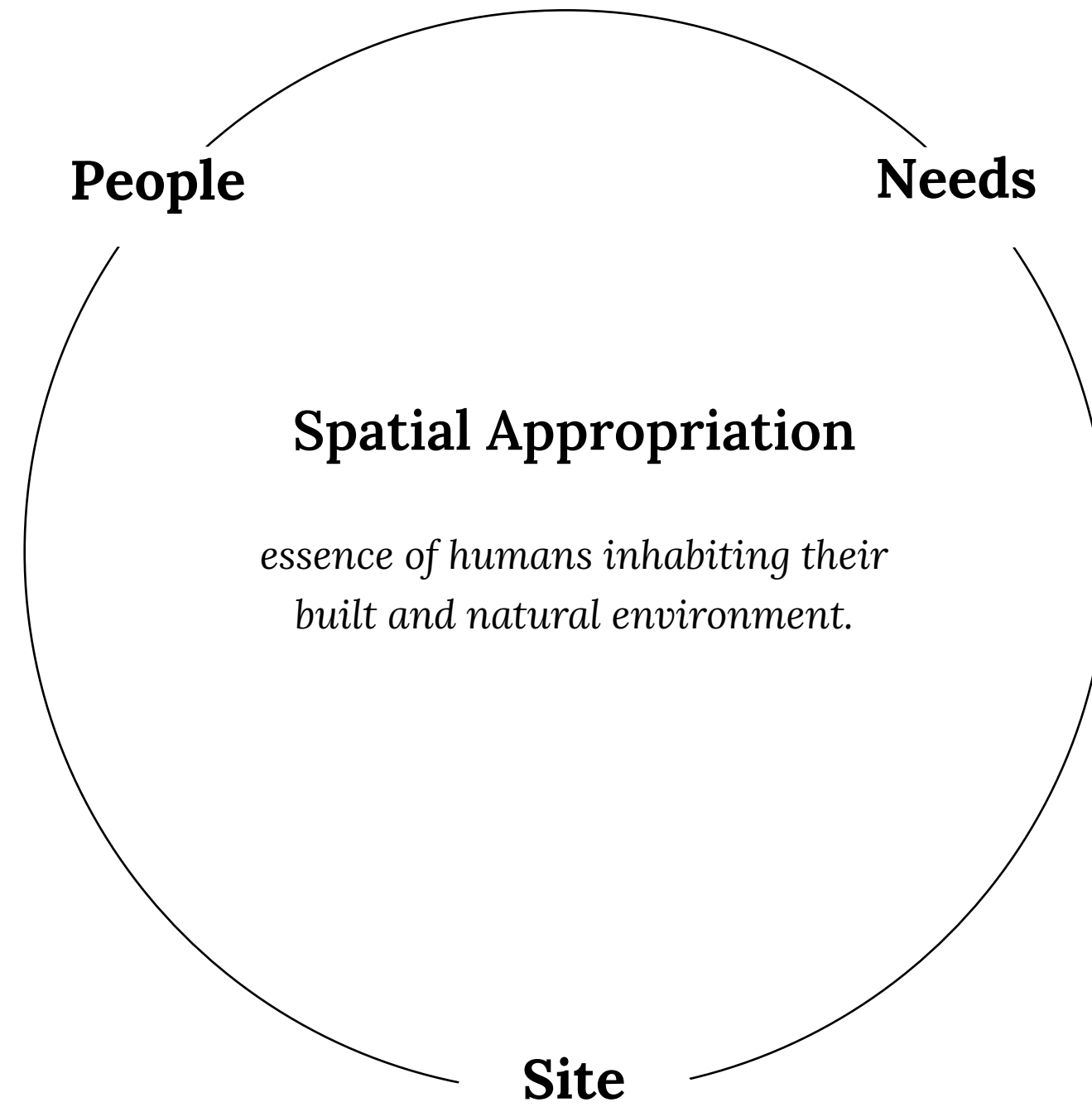
a. "The Quest for Better Public Space: A Critical Review of Hong Kong," pg.185, Charlie Xue and Kevin Manuel.

b. "New Delhi Informal Settlements" United Nations Department of Economic and Social Affairs, Population Division of the World's Cities, 2018.

c. Ikea Room Divider, [www.ikea.com/us/en/ideas/home-furnishings](http://www.ikea.com/us/en/ideas/home-furnishings)



**Introduction**  
*Spatial Appropriation in Site*



a. *Makeshift Constructed Table on Balcony During COVID*, <https://covid-19archive.org/files/>

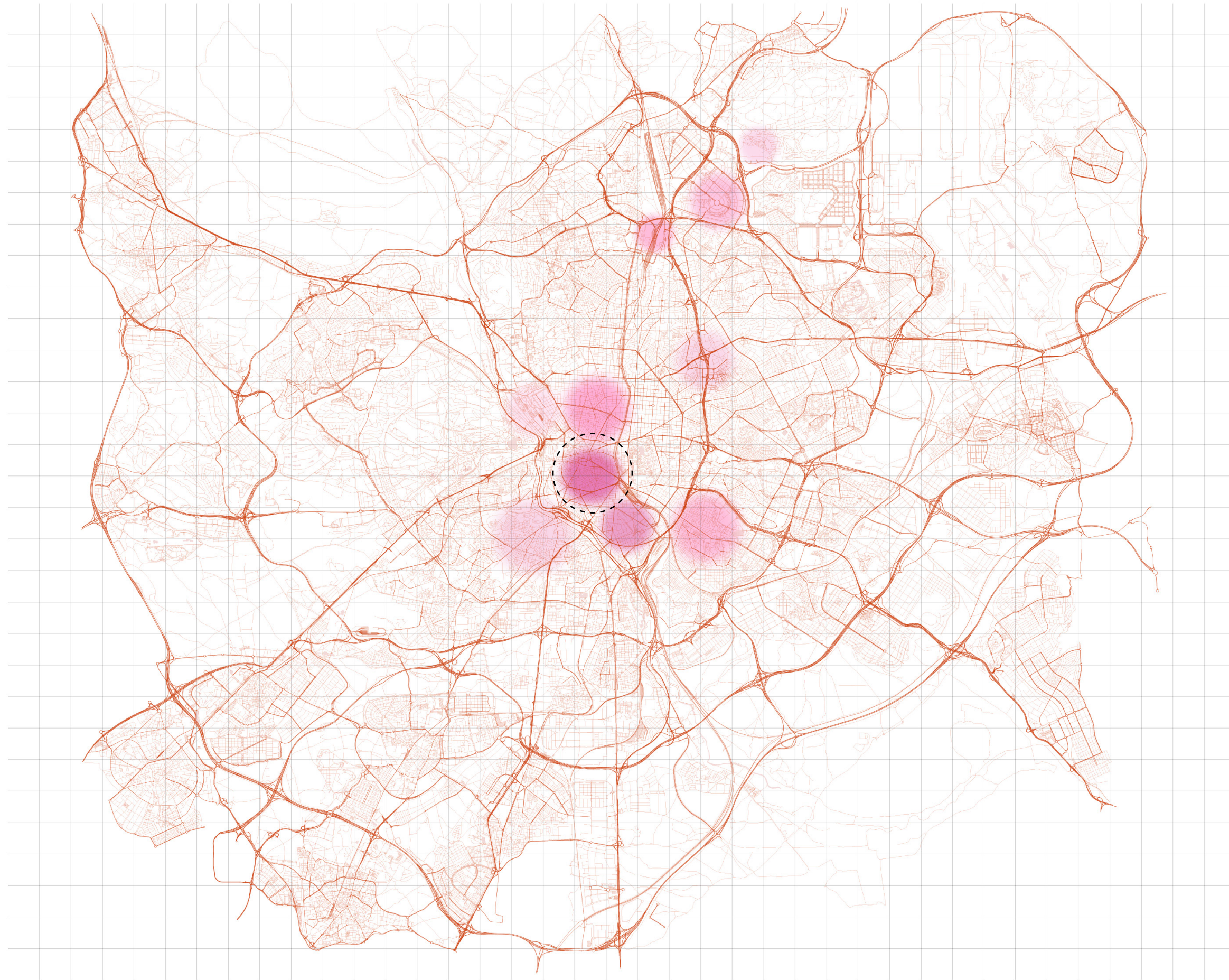


**Introduction**  
*Spatial Appropriation in Site*



a. *Makeshift Constructed Table on Balcony During COVID*, <https://covid-19archive.org/files/>





**a. Locations of Appropriations**  
*Documented. Perez, Mary. 2024*





a. Locations of Appropriations  
Documented. Perez, Mary. 2024

**Introduction**  
*Problem Statement*

The **abundance** of balcony appropriations demonstrate people's ability to  
**reinterpret** and **adjust** their surroundings to create **tailored** and  
**self-expressive** spaces.....**but does architecture permit and facilitate this?**





a.



b.



c.



d.



e.



f.



g.



h.



i.



j.



k.



l.



m.



n.



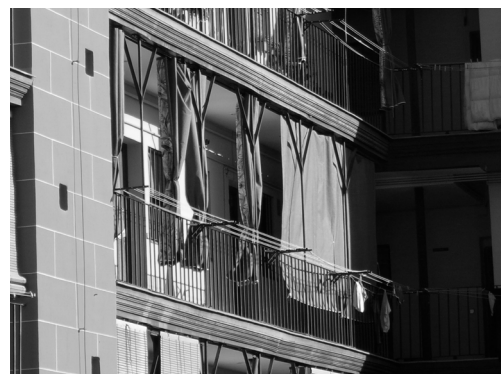
o.



p.



q.



r.



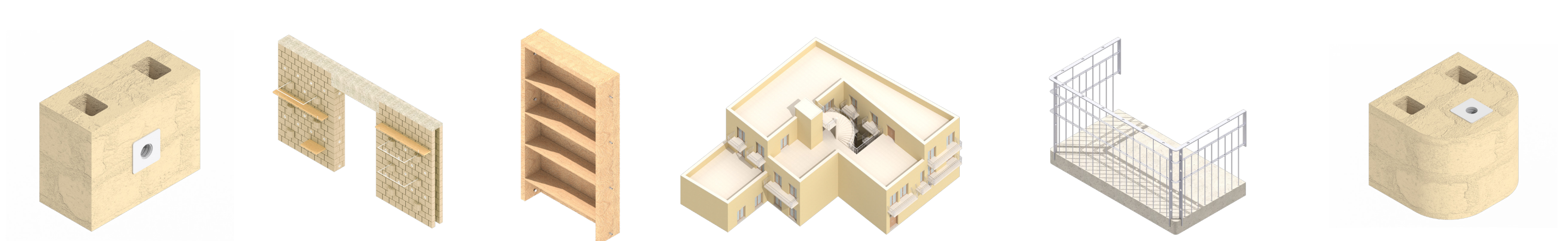
s.



t.

## Introduction

### Mission Statement



Learn from the Lavapies locals and their ‘*amateur*’ *approach* and applying it to housing that *embraces an adaptive culture*.

To create a building that serves as a *lifestyle tool*, *enhances quality of life*, and constantly *evolves* to suit the *user’s needs*.



## Introduction

*Approach of “Learning From Amateurs”*







a.



b.



c.



d.



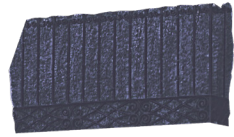
e.



f.



g.



h.



i.



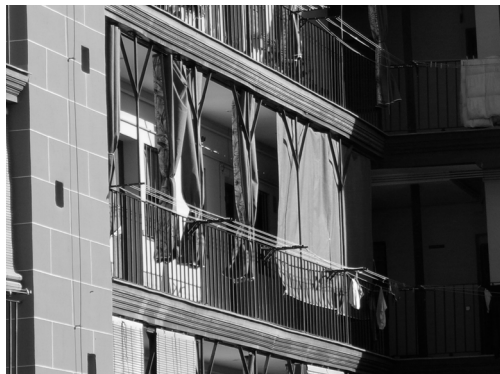
j.



k.



l.



m.



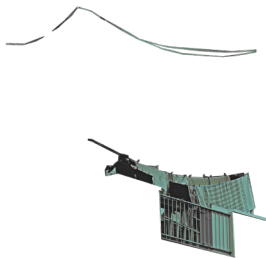
n.



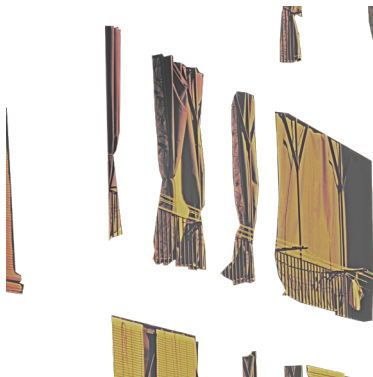
o.



p.



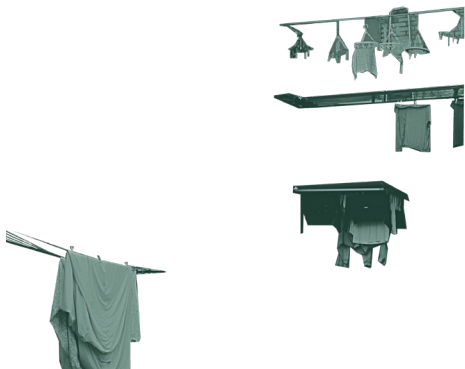
q.



r.




s.




t.



Seven Spatial Qualities  
Process



appropriation identity			
number	40	strategy	leisure, privacy, climate
location	t,18	title	sun tent
existing condition			
balcony type	private residential balcony, three-sided		
architectural condition	balcony features an iron railing with typical spanish detailing and extends from a single unit.		
approach			
user interaction	resident creates a makeshift sun shade device, similar to the one featured in the store below, and attaches it to the top of the existing steel shutter and places a plastic rod to weigh it down.		
analysis			
user intention & appropriation origin	this instance captures resident ingenuity and cleaver usage of common items. moments like this showcase the comfort that users find in their informal appropriative solutions. this appropriation origin is climatic (climate refuge) and economic (affordable).		



appropriation identity			
number	50	strategy	privacy, space limitation
location	cc,16	title	split dwelling
existing condition			
balcony type	private residential balcony, three-sided		
architectural condition	balcony features an iron railing with typical spanish detailing and extends from a single unit.		
approach			
user interaction	it's apparent that there is a partition added to the center apartment, which inevitably affects how the balcony is split.		
analysis			
user intention & appropriation origin	this instance showcases how future architectural and construction interventions affect appropriations and vice-versa. this appropriation likely stems from programmatic faults (need for a flexible space).		



Seven Spatial Qualities  
Corresponding Colors



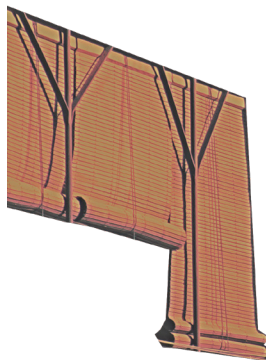
space limitation



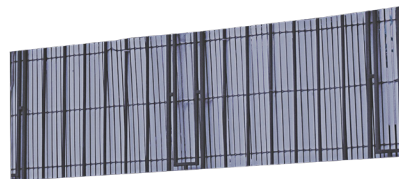
productivity



leisure



climate



privacy



security



community



## Seven Spatial Qualities

### *Space Limitation*



Balconies and galleries are **extensions of indoor storage**.

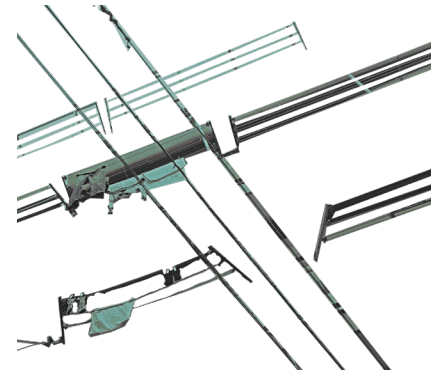
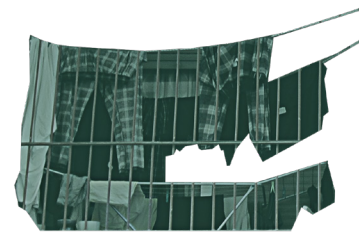
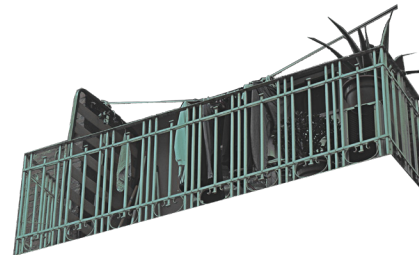
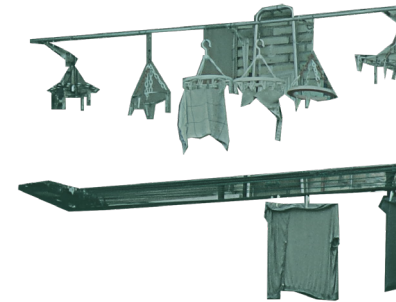
**Limited and restrictive space** leads to **adaptive solutions**, such as nailing items, and **storage solutions** such as bookshelves, cabinets, and closets to be placed outdoor.

The rising social importance of **material goods** makes it challenging to downsize or find affordable storage solutions that reduce accessibility to these items.



## Seven Spatial Qualities

Productivity



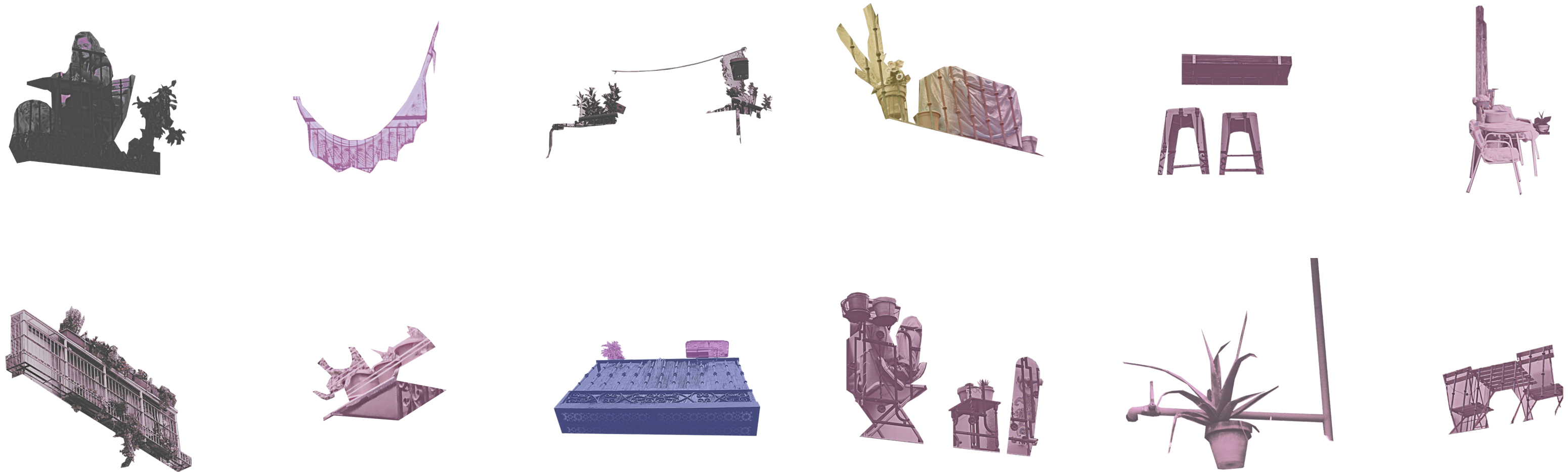
The user has a **constant need to accomplish daily tasks** in spatially limiting housing conditions

**Drying laundry** is the **most notable appropriation** in Madrid - whether store-bought or makeshift solutions, all approaches **utilize existing architectural or structural features**

For other productive goals like cleaning, items such as vacuums and mops are **often shared between neighbors** and **stored in common areas** like corridors and galleries

## Seven Spatial Qualities

### *Leisure*



The balcony serves as an outdoor **private retreat** and **space for self-expression**.  
The balcony showcases the user's need for **relaxation, hobbies, and personal time in a private outdoor space**.

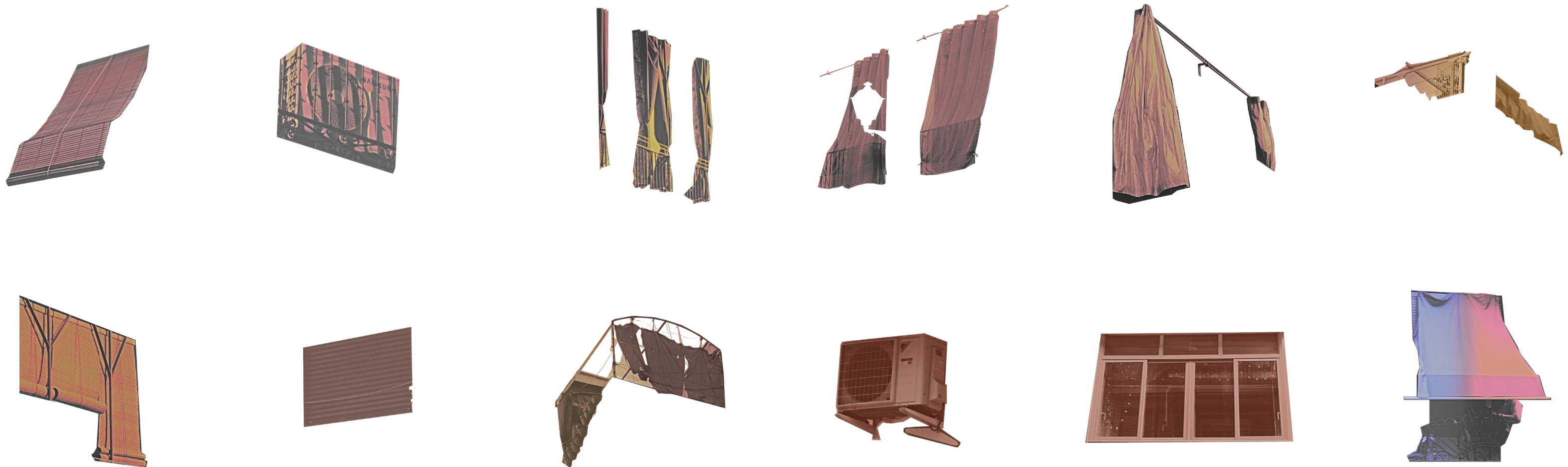
Spanish social culture revolves around outdoor third places, like parks and cafes, and personal leisure spaces are limited to homes and **the only private outdoor space: the balcony**

Often, **railings** and other **existing structural elements** serve as the foundation for these appropriations.



## Seven Spatial Qualities

### *Climate*



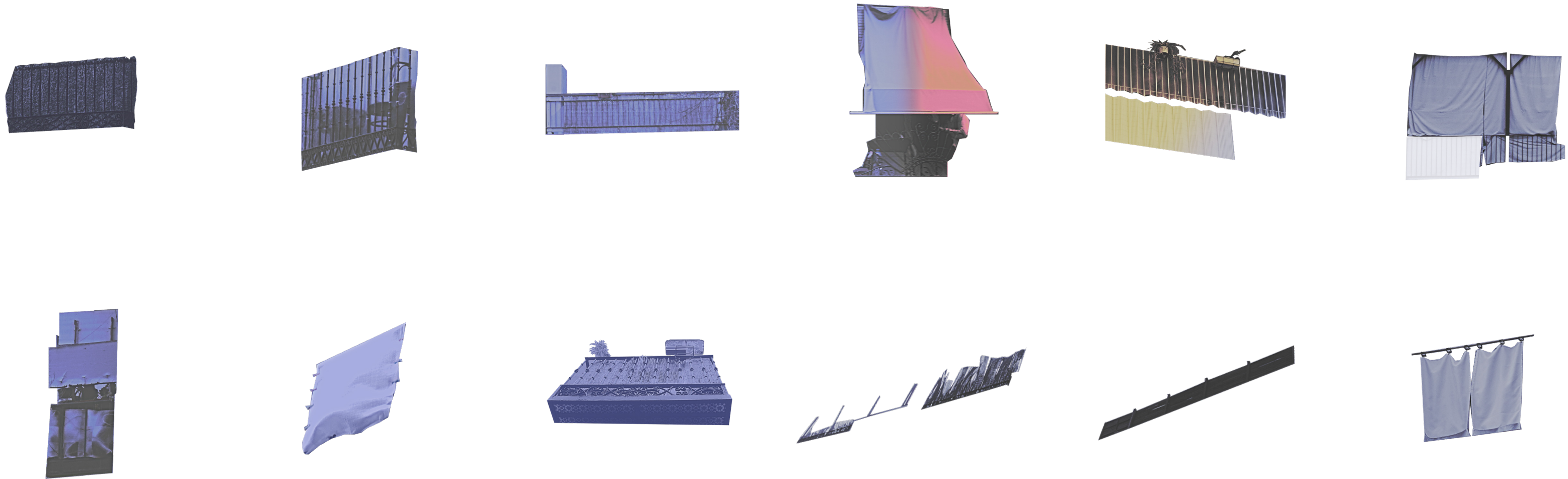
Residents need **comfort and protection** due to the rapidly changing environment.

Adjusting **shutters, persianas, and curtains** becomes a daily ritual that connects residents with the city and its climate.

As the climate evolves, residents adapt with creative solutions, allowing them to comfortably enjoy **private or shared outdoor spaces** ranging from balconies, galleries, rooftops, and courtyards.

## Seven Spatial Qualities

### Privacy



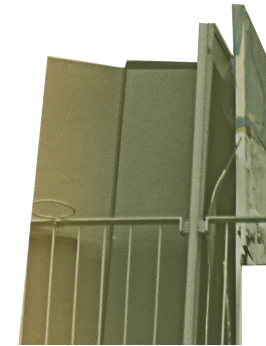
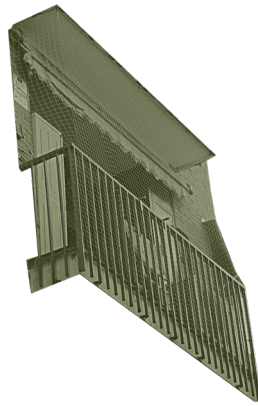
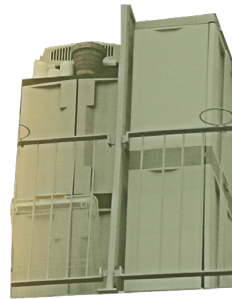
In this ***dense metropolitan*** area, users have a strong need for ***confidentiality and solitude***. Interviews revealed that climate solutions, like ***persianas***, also serve as tools for privacy.

Users modify their balcony spaces with ***store-bought*** or ***makeshift railing screens*** to ***block visibility***, tailoring them to ***suit the balcony's condition***.



## Seven Spatial Qualities

### Security

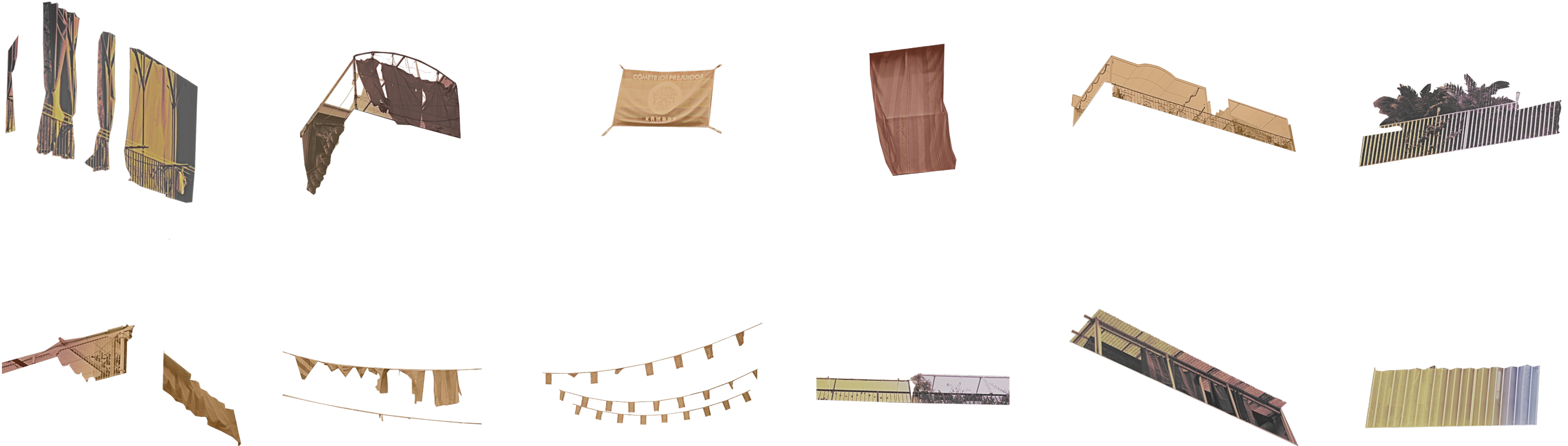


Lavapies local's need to **feel safe** in this evolving social dynamic - **40% of Madrid's police** is stationed in this area.

Common crimes in the area, such as **pickpocketing, break-ins, and vandalism**, are addressed with measures like **barred windows, secured balconies**, and **surveillance cameras**.

Interviews revealed that **security overlaps with storage solutions**, as heavy and large cabinets help prevent trespassers from accessing gallery balconies.

## Seven Spatial Qualities Community



**Shared items and tools in communal areas** ranging from corridors, streets, rooftops, and across balconies.

Community is fostered through the creative use of **shared spaces** like galleries and courtyards, where features such as **railings and columns** are often used to **attach communal items** like laundry drying racks and ropes.

Interviews with locals revealed another communal space beyond the gallery and balcony: **semi-private courtyards**.

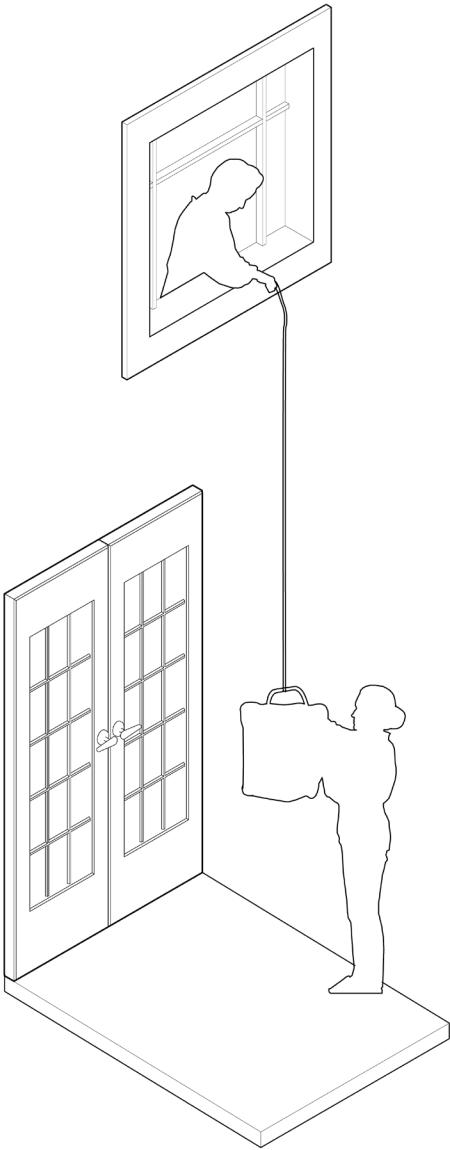
Neighbors share these courtyards, finding ways to either **divide** or **coexist** within the space.



Seven Spatial Qualities  
Community



a.



b.



c.

a. *View from Maria's Apartment Window.* Lavapies, Madrid. Image by Mary Perez.  
b. *Maria and Neighbor Interaction.* Lavapies, Madrid. Image by Mary Perez.  
c. *Dani Tattoo from Home.* Lavapies, Madrid. Image by @sebbbaaa instagram

Seven Spatial Qualities  
Corresponding Colors



space limitation

*extentions of  
indoor storage*

*bookshelves,  
cabinets, and closets*

*adaptive solutions to  
existing architecture*

*need for storage  
in densifying  
metropolitan*



productivity

*Drying laundry is the most  
notable appropriation*

*need for space to  
accomplish daily tasks*

*utilize existing  
architectural or structural  
features*

*vacuums, mops, and other  
items shared between  
neighbors in galleries*

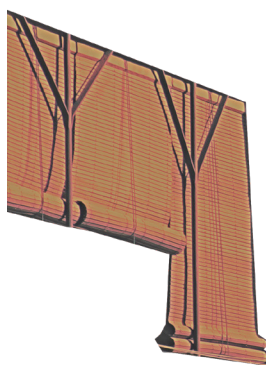


leisure

*private retreat and space  
for self-expression,  
relaxation, hobbies, and  
personal time*

*Spanish social culture  
revolves around outdoor  
third places (parks & cafe)*

*railings and existing  
structural elements serve  
as the foundation for  
these appropriations.*

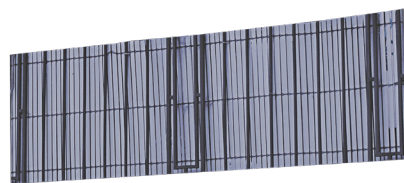


climate

*comfort and  
protection*

*shutters, persianas,  
and curtains become  
a daily ritual*

*private or shared  
outdoor spaces  
ranging from balco-  
nies, galleries, roof-  
tops, and courtyards*



privacy

*confidentiality  
and solitude.*

*climate solutions also  
serve as privacy tools*

*store-bought or  
makshift railing screens*



security

*evolving social dynamic  
with high police presence*

*barred windows, secured  
balconies, and surveillance  
cameras and systems.*

*security overlaps with  
storage solutions to pre-  
vent trespassing*



community

*shared items from  
cooridors, steets, roof-  
tops, and balconies*

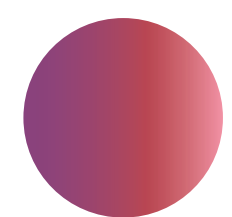
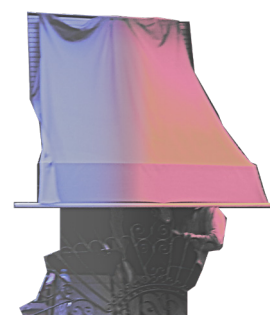
*semi-private  
courtyards.*

*finding ways to divide  
or coexist within the  
space.*

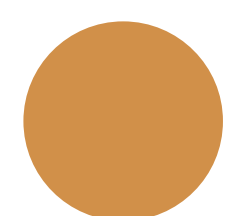


**Solutions Addressing Multiple Needs and Desires**  
*Appropriative solutions more often than not overlap and address more than two spatial needs*

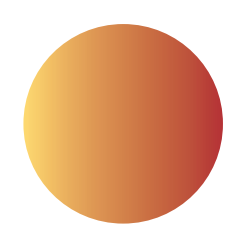
*privacy  
& climate*

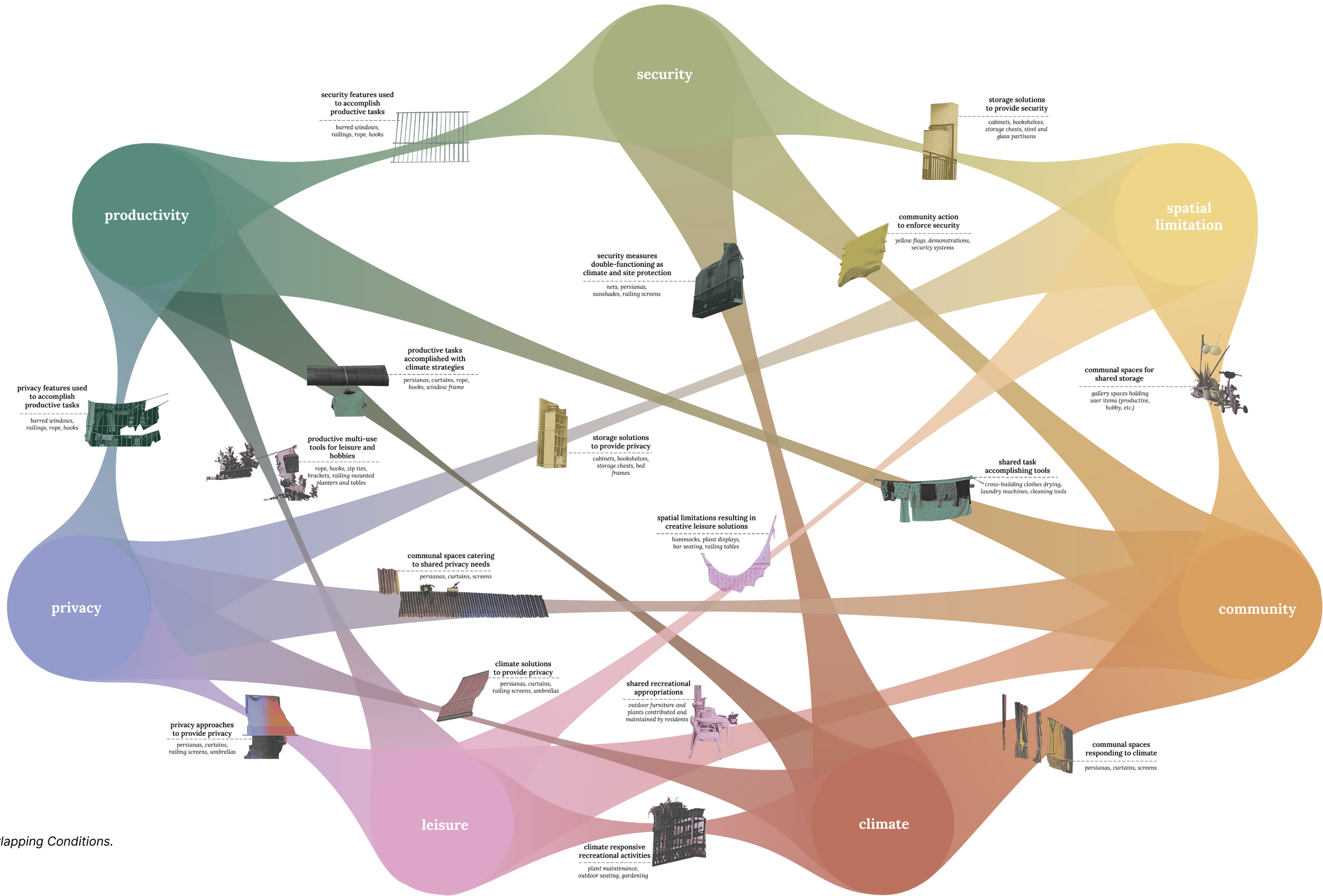


*community*



*spatial limitation  
& climate*





a. Seven Spatial Qualities Overlapping Conditions.  
Perez, Mary. 2024



**Overarching Themes**  
*Conclusions from Seven Spatial Qualities*

**1. The Existing Conditions Neglect User's Ever-Changing Needs and Desires**

**2. User Modification of Architectural and Structural Features**

**3. Indoor-Outdoor Program Interchangeability**

**4. Appropriation in Shared Spaces Thrive in Limited Access**



## The Places We Make Home





**Overarching Themes**  
*Conclusions from Seven Spatial Qualities*

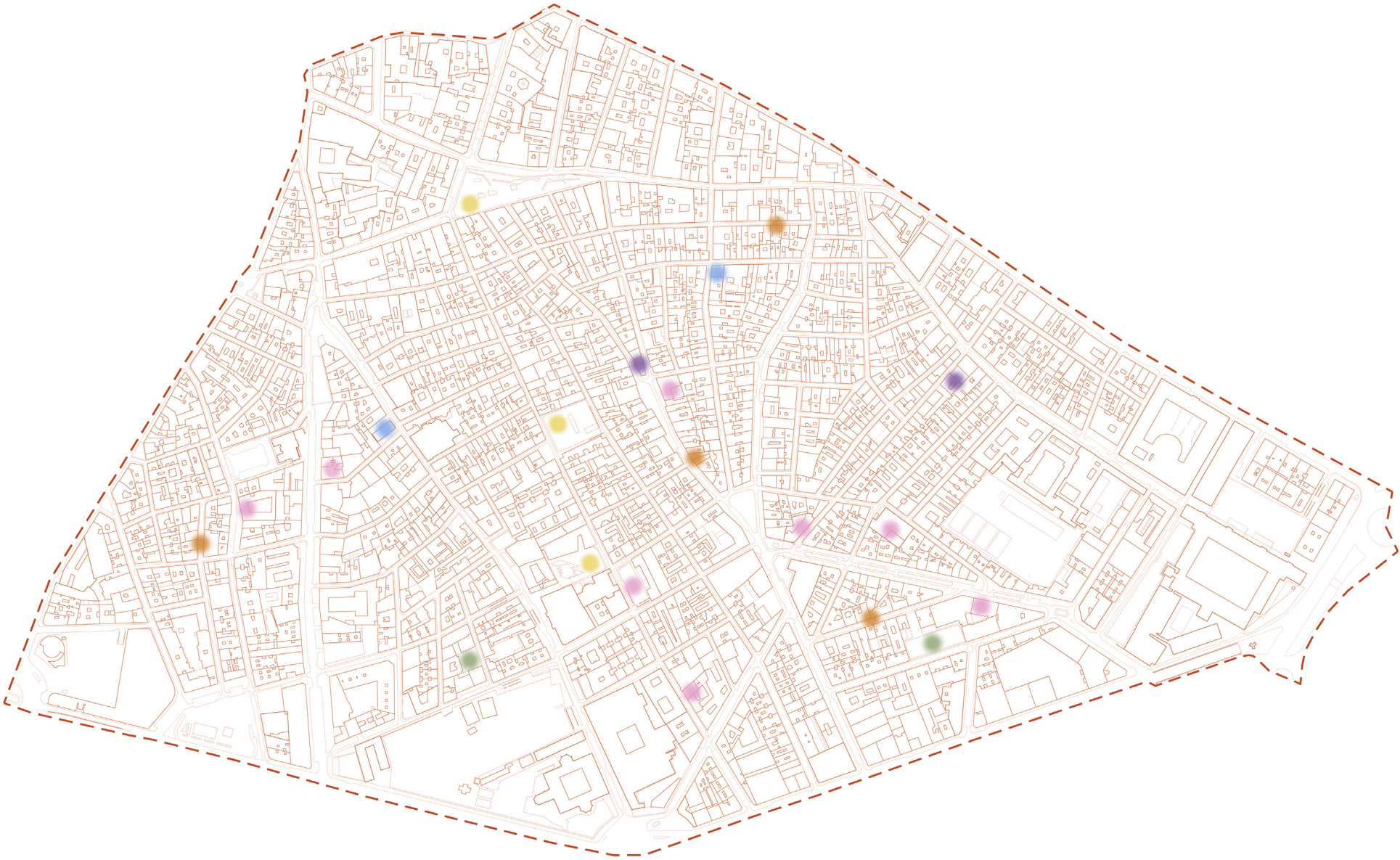
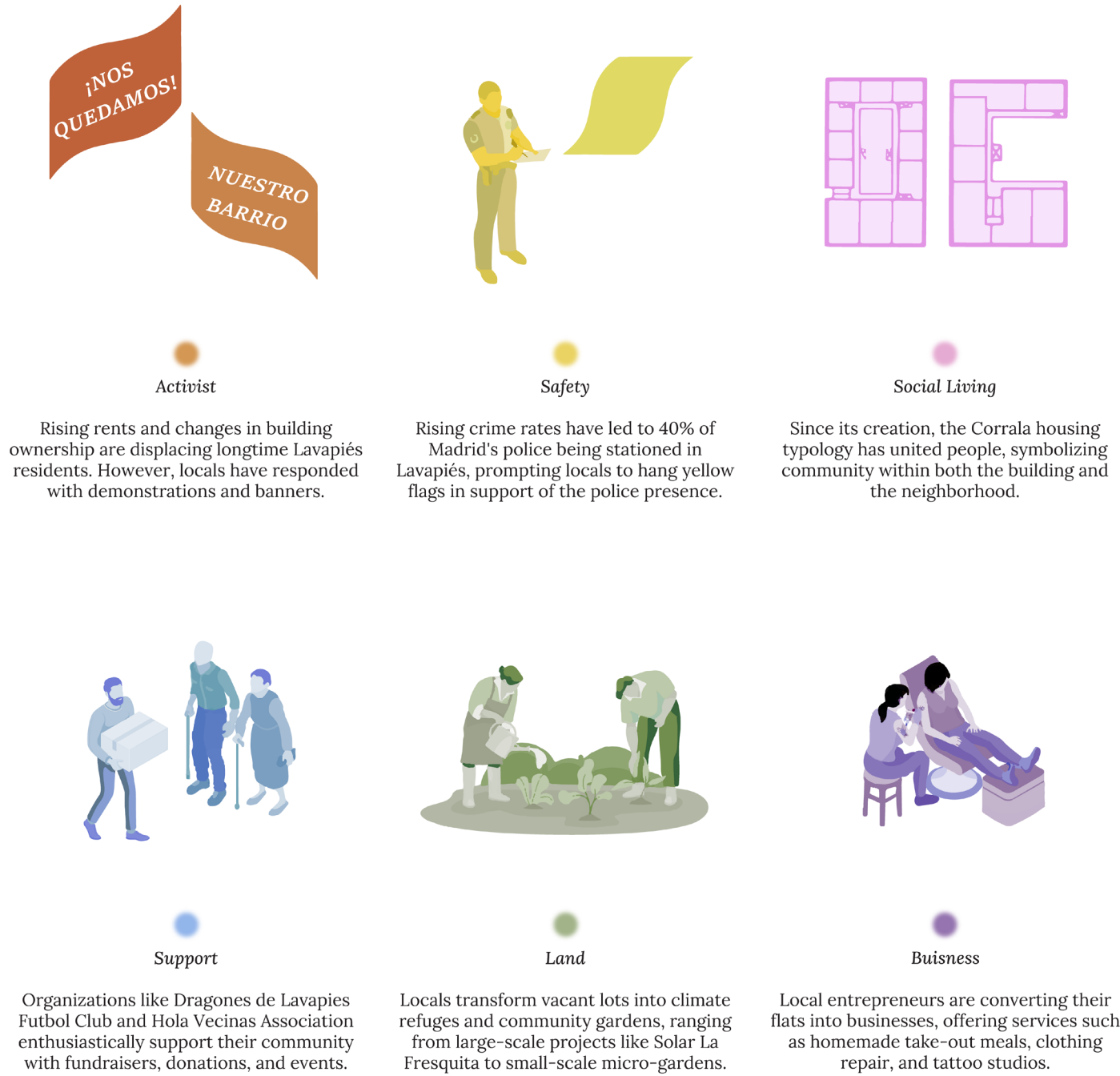
**1. The Existing Conditions Neglect User's Ever-Changing Needs and Desires**

*existing conditions will never fully cater to the user, therefore  
architecture must be convertible and adjustable.*

*Must understand the site to propose an adjustable building catered to it*

1. The Existing Conditions Neglect User’s Ever-Changing Needs and Desires

Site Analysis  
Lavapiés Local’s Needs and Desires

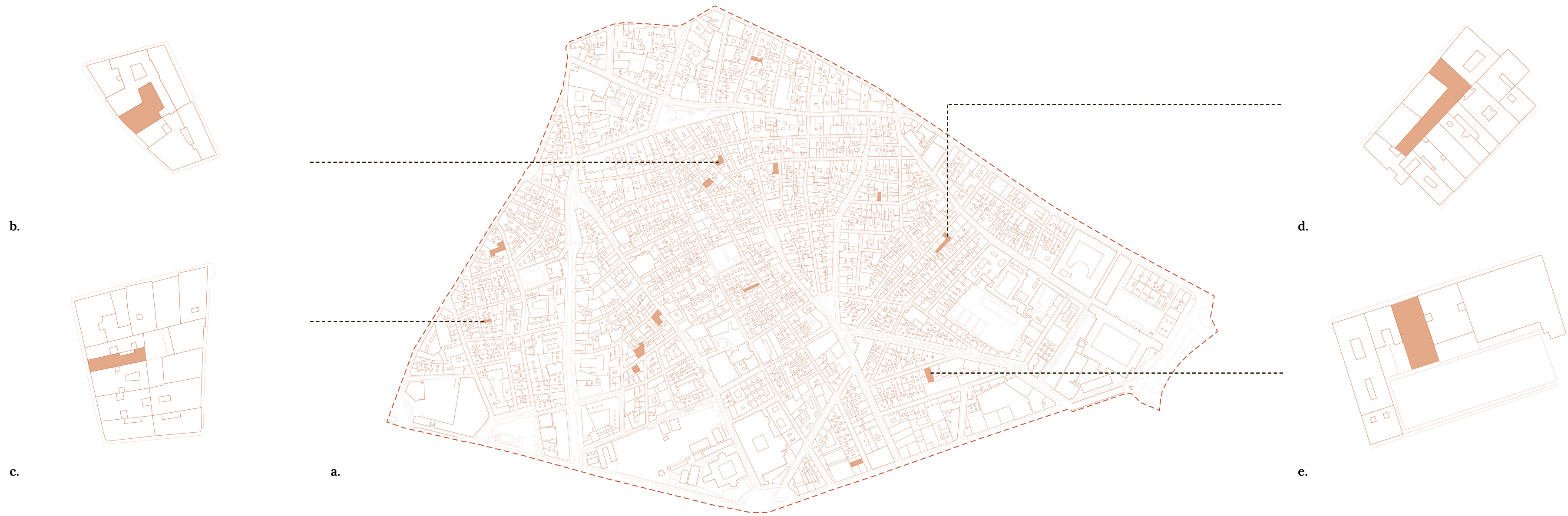


a. Site Analysis Location Descriptions.  
Perez, Mary. 2024  
b. Site Analysis Location on Embajadores Map.  
Perez, Mary. 2024



1. The Existing Conditions Neglect User’s Ever-Changing Needs and Desires

Site Analysis  
*Vacant and Abandoned Lots*



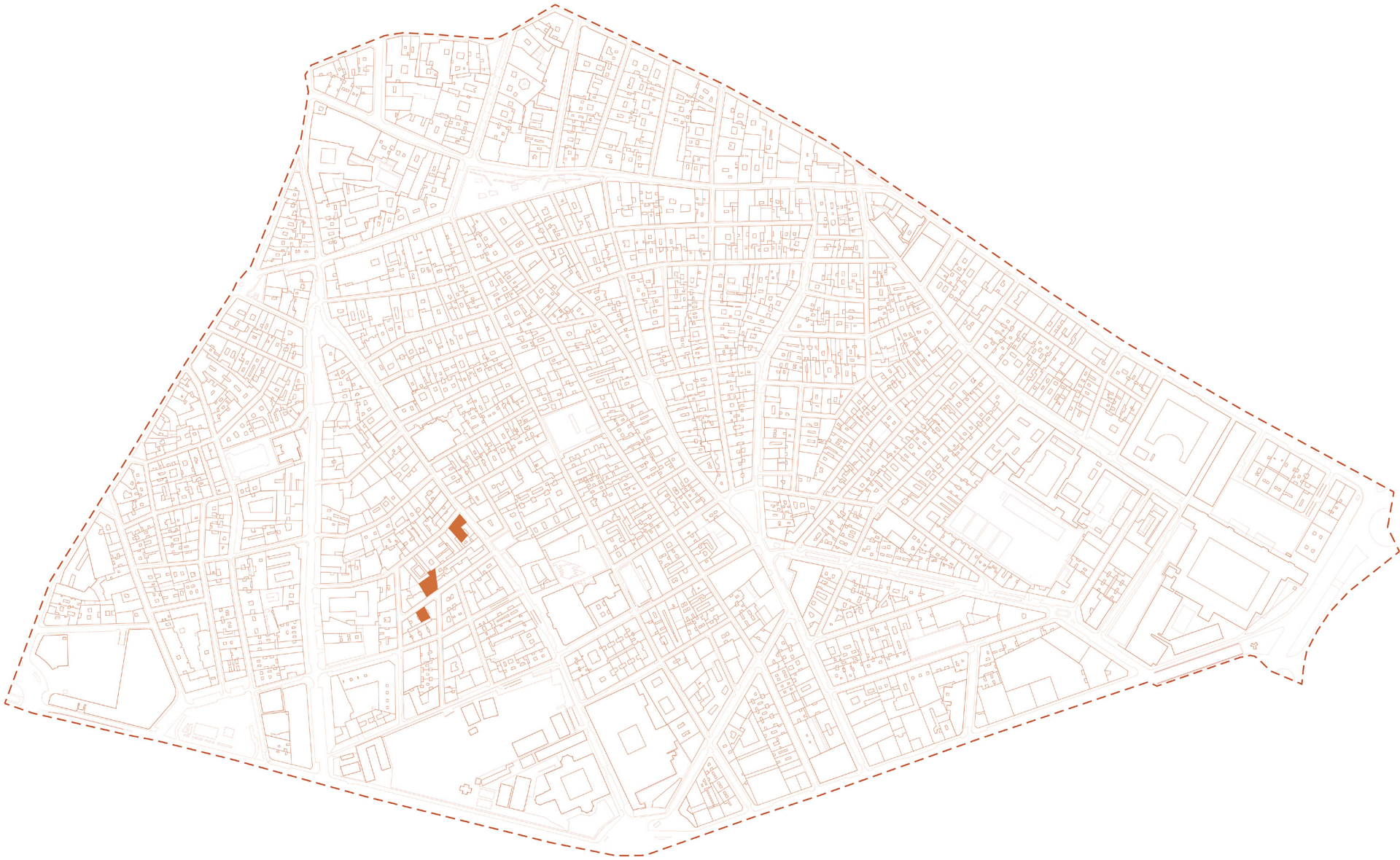
**a.** *Map of Vacant and Abandoned Lots in the Embajadores District. Perez, Mary. 2024*  
**b.- e.** *Miscellaneous Vacant Abandoned Lots in the Embajadores District. Perez, Mary. 2024*



1. The Existing Conditions Neglect User’s Ever-Changing Needs and Desires

Selected Sites

*Lavapies Area Abandoned Sites and Selected Cluster*



● selected cluster sites

a.

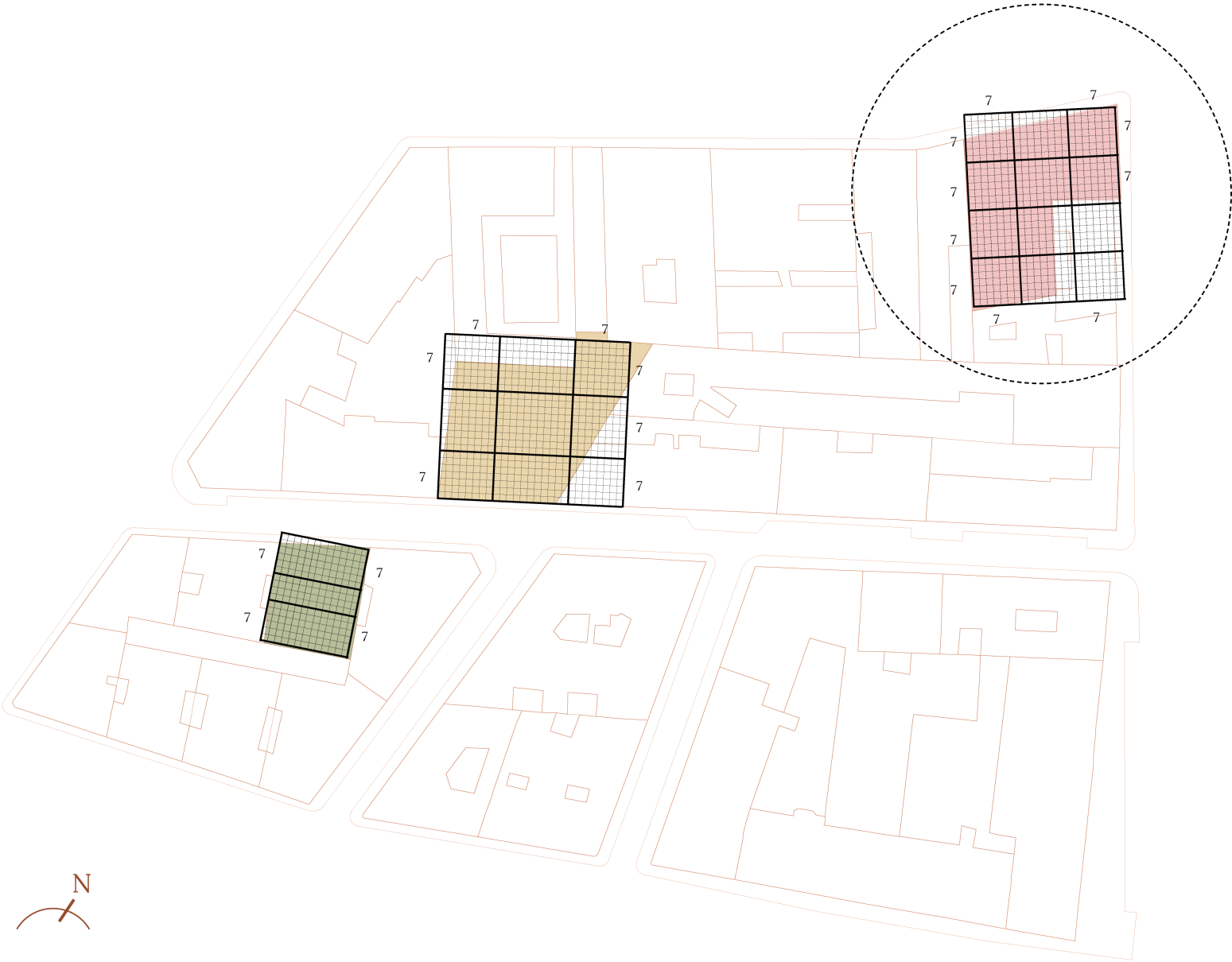
a. *Selected Vacant Lots for Proposed Project in the Embajadores District. Perez, Mary. 2024*



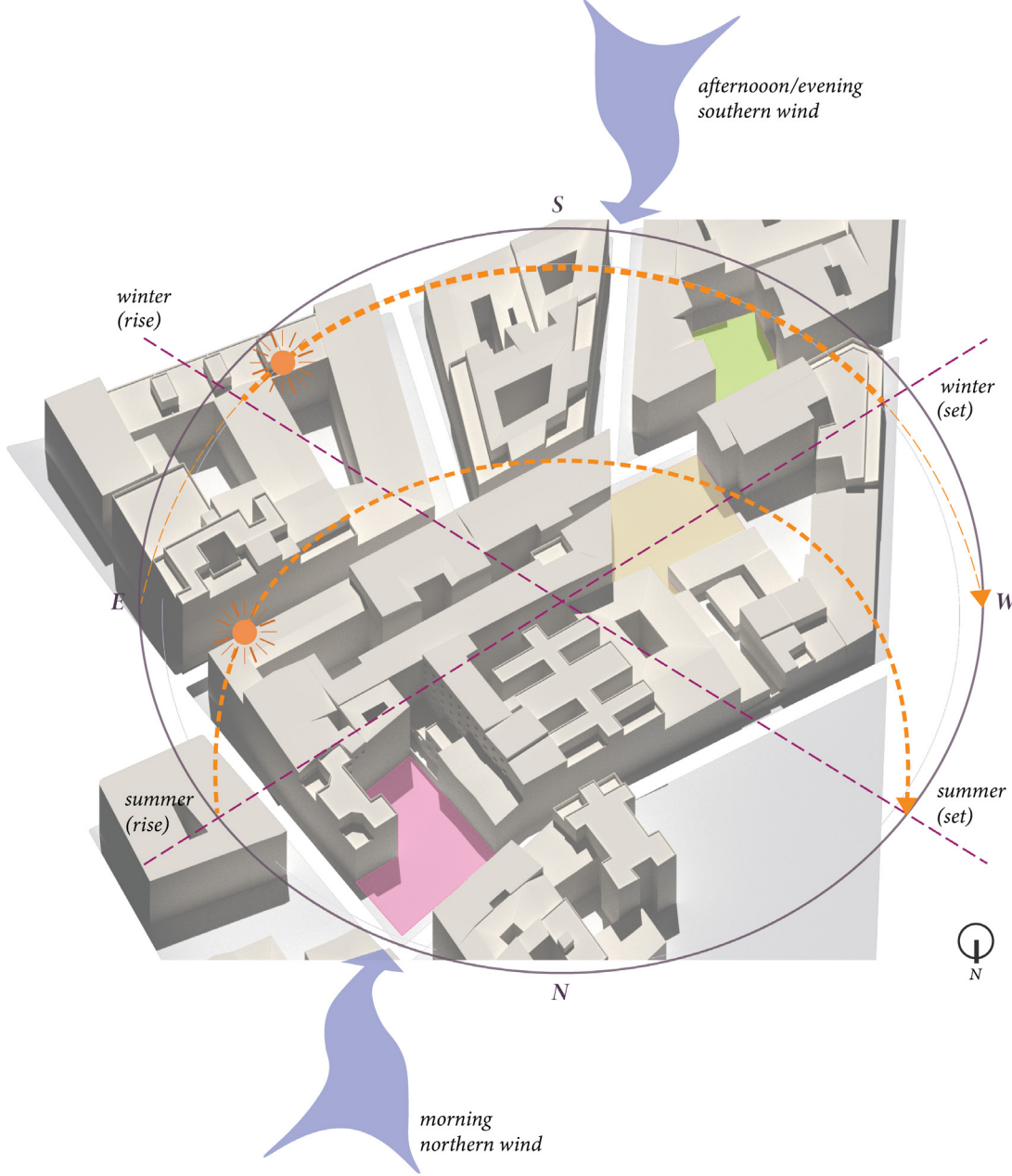
1. The Existing Conditions Neglect User's Ever-Changing Needs and Desires

Sites Analysis

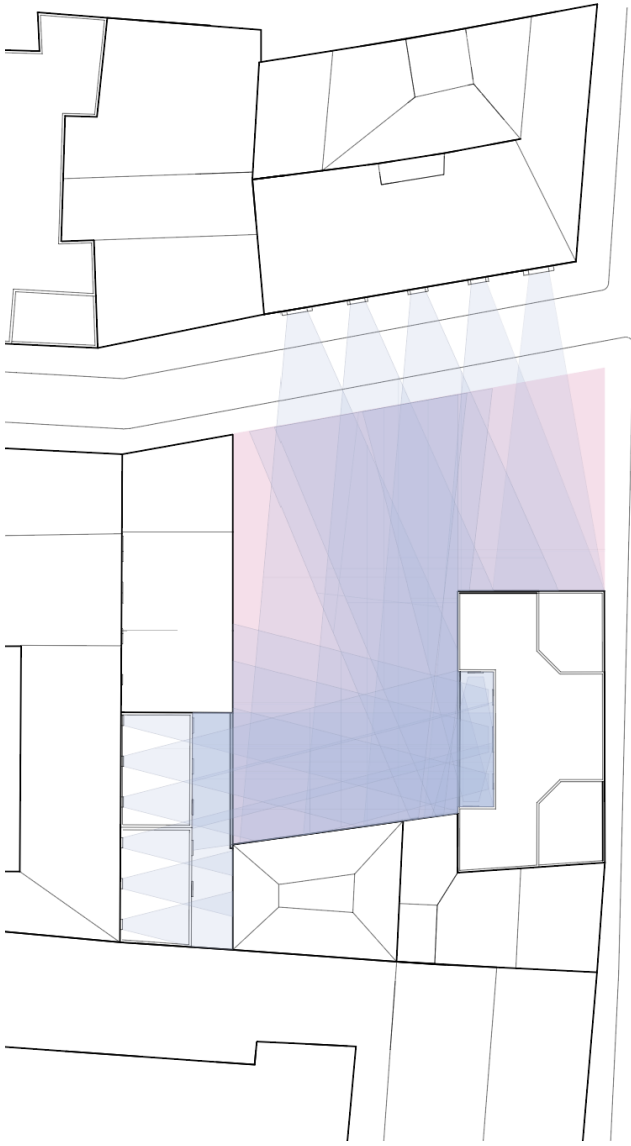
Lavapies Abandoned Sites Analysis and Adressing Proposal



Column Grid Layout



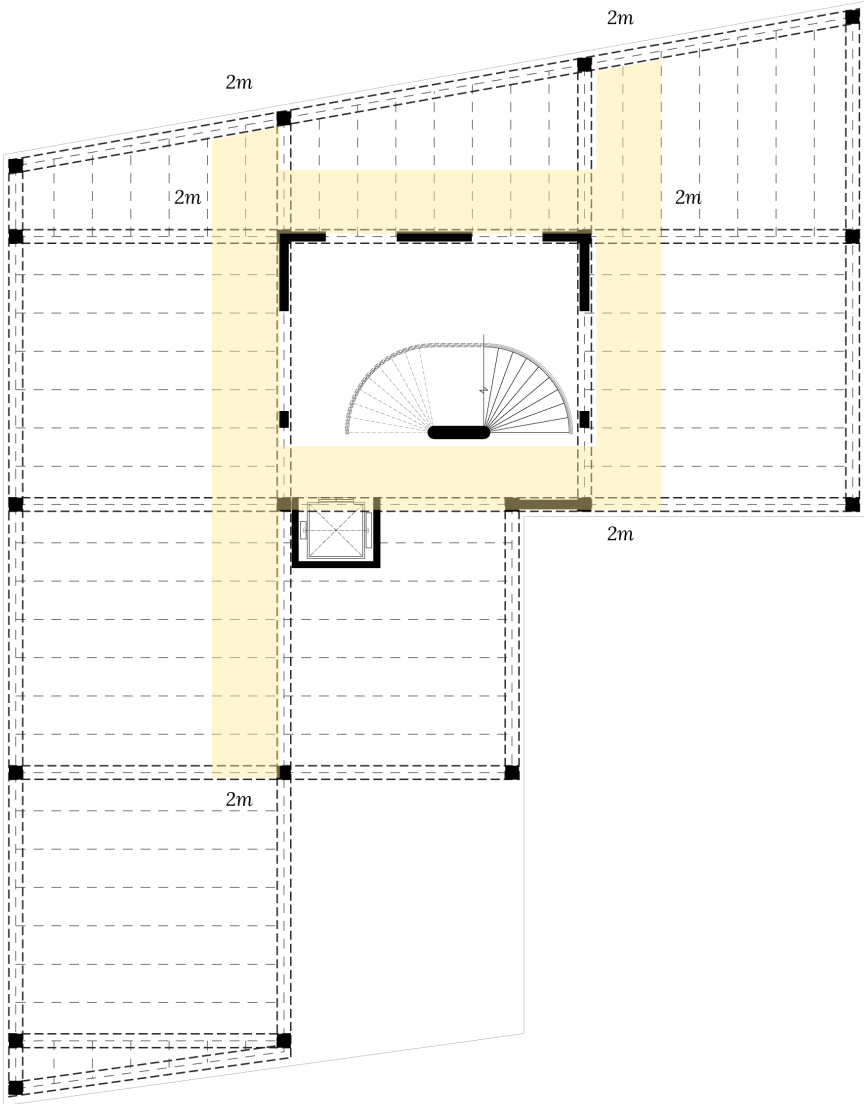
Climate and Sun Diagram



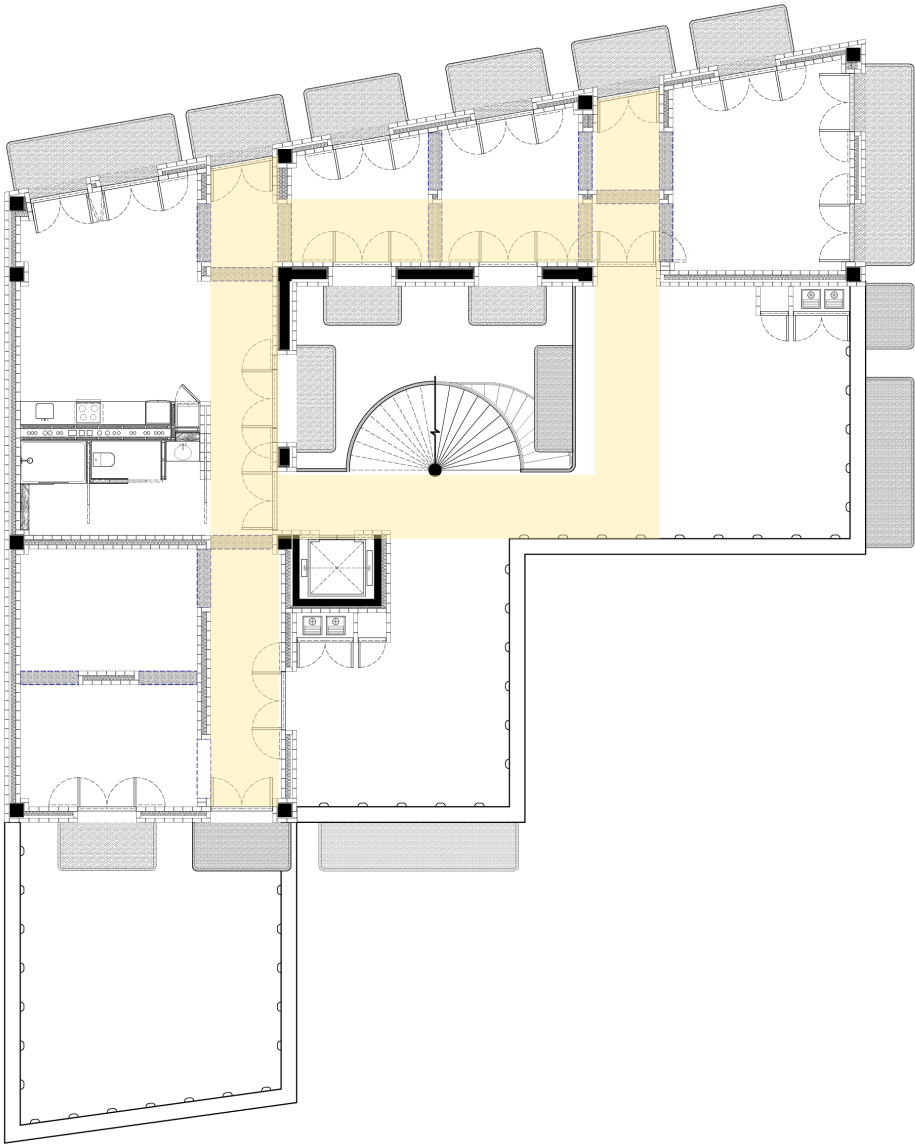
site neighbor interference

1. The Existing Conditions Neglect User’s Ever-Changing Needs and Desires

Floorplan Strategy  
*Lavapies Area Abandoned Sites and Selected Cluster*

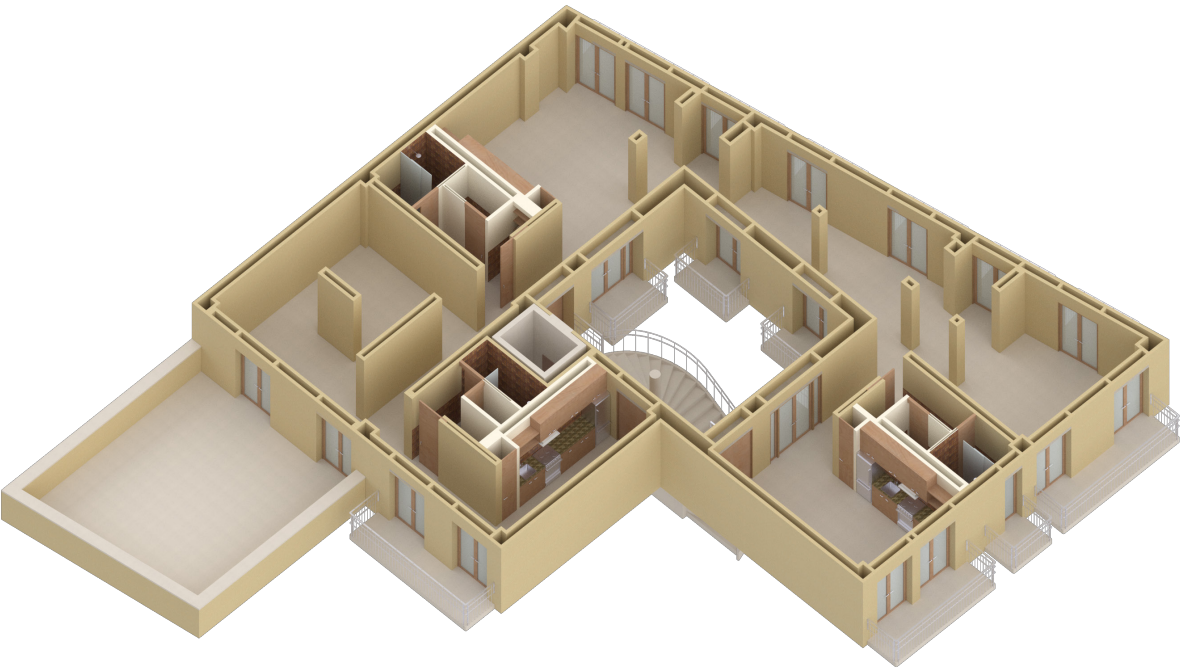


Column Plan with highlighted transition space



Floor Plan with highlighted transition space

*layout and transition space allows for freedom in floorplan flexibility*

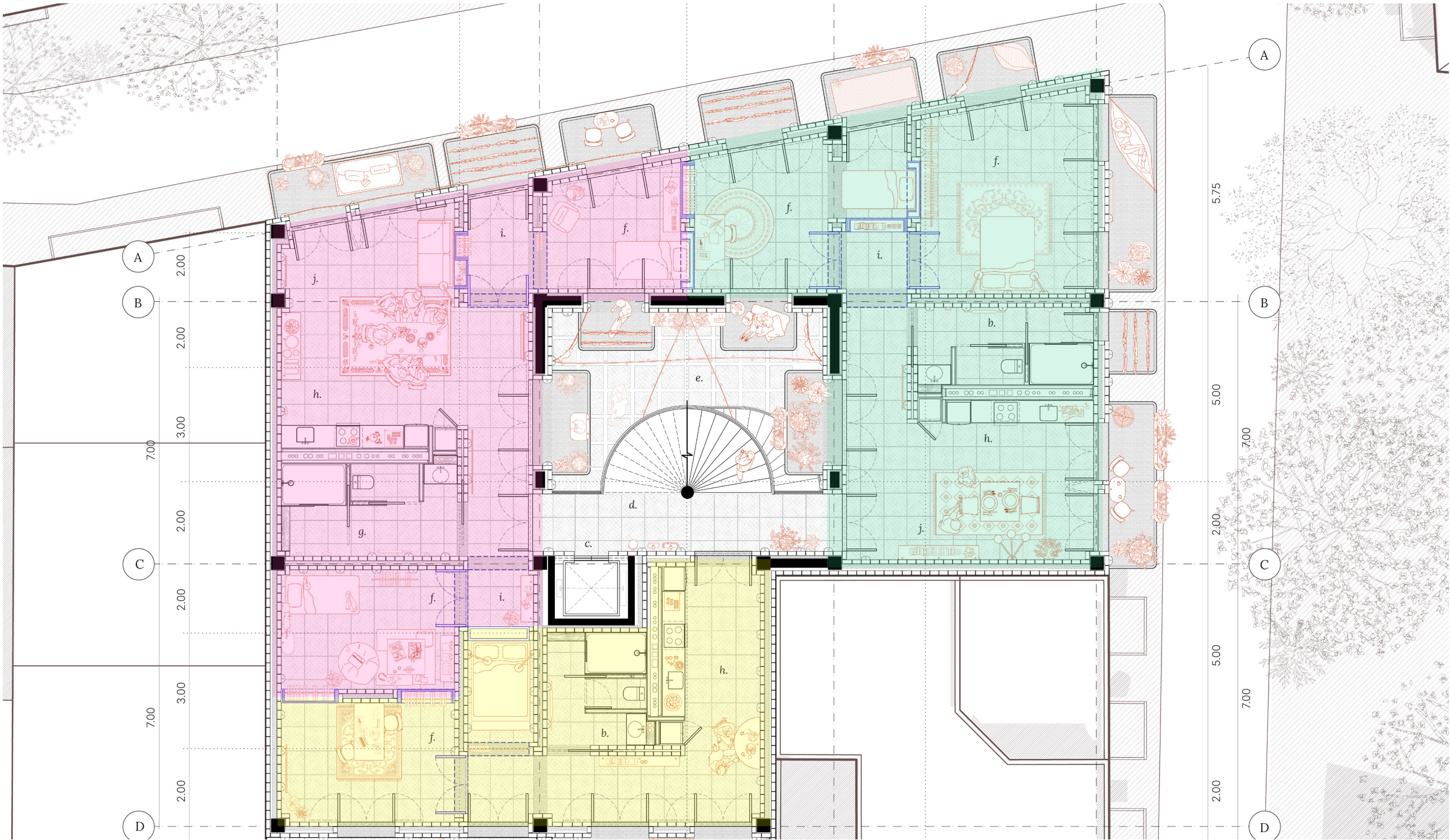


Level 1 Isometric Floorplan



1. The Existing Conditions Neglect User’s Ever-Changing Needs and Desires

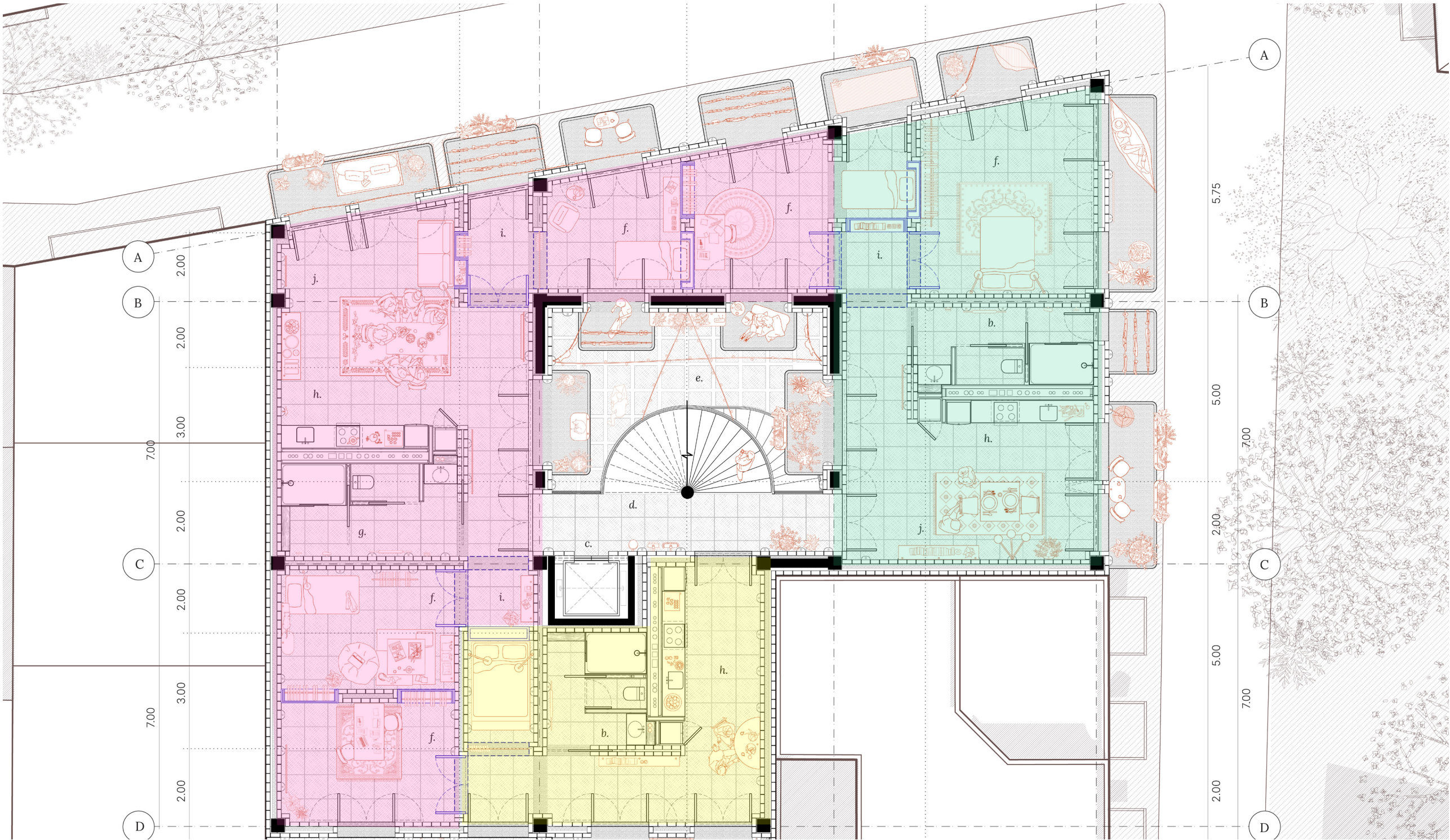
Flexible Floorplan A





1. The Existing Conditions Neglect User’s Ever-Changing Needs and Desires

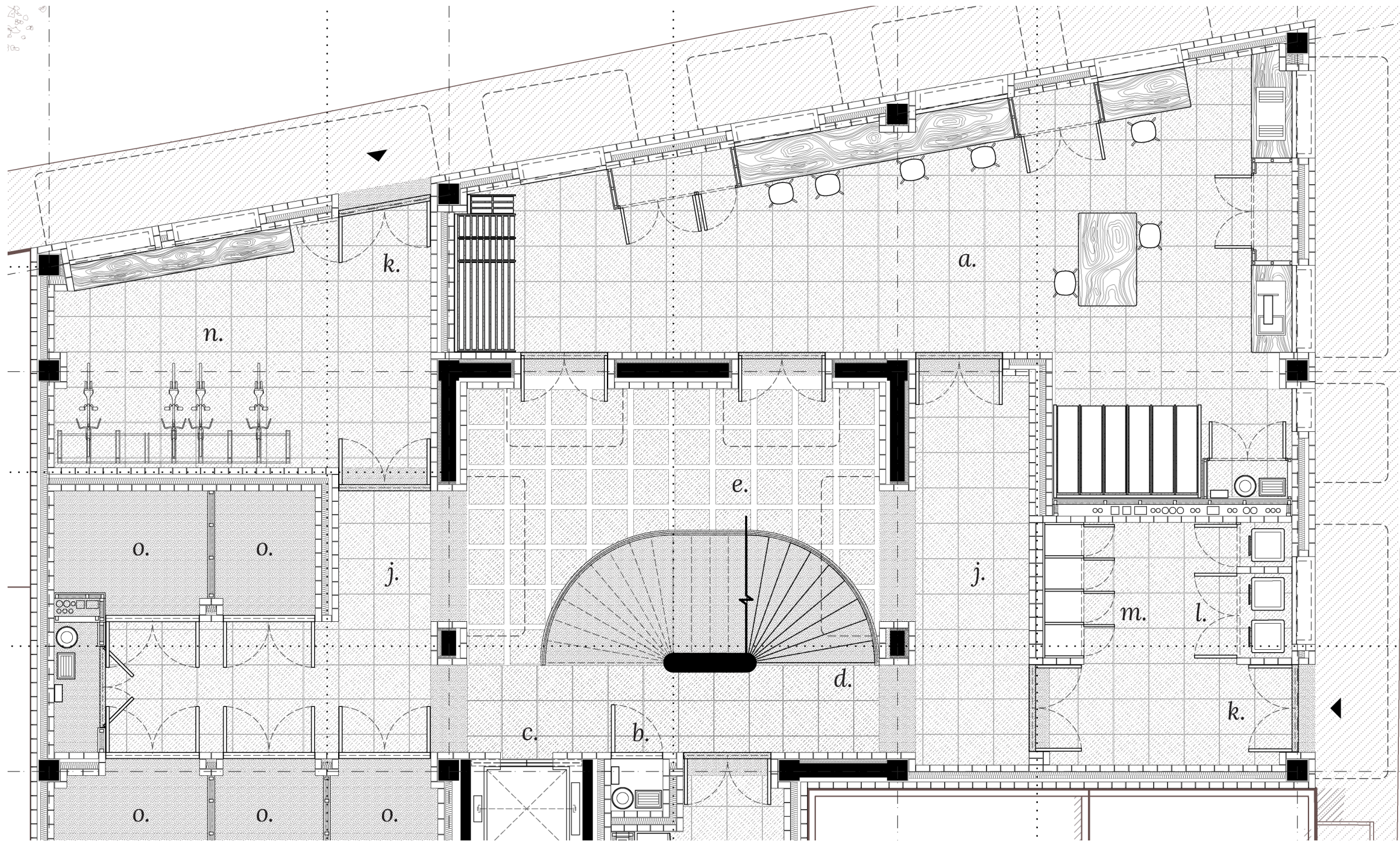
Flexible Floorplan B





1. The Existing Conditions Neglect User’s Ever-Changing Needs and Desires

Ground Floor Workshop and Material Storage for residents

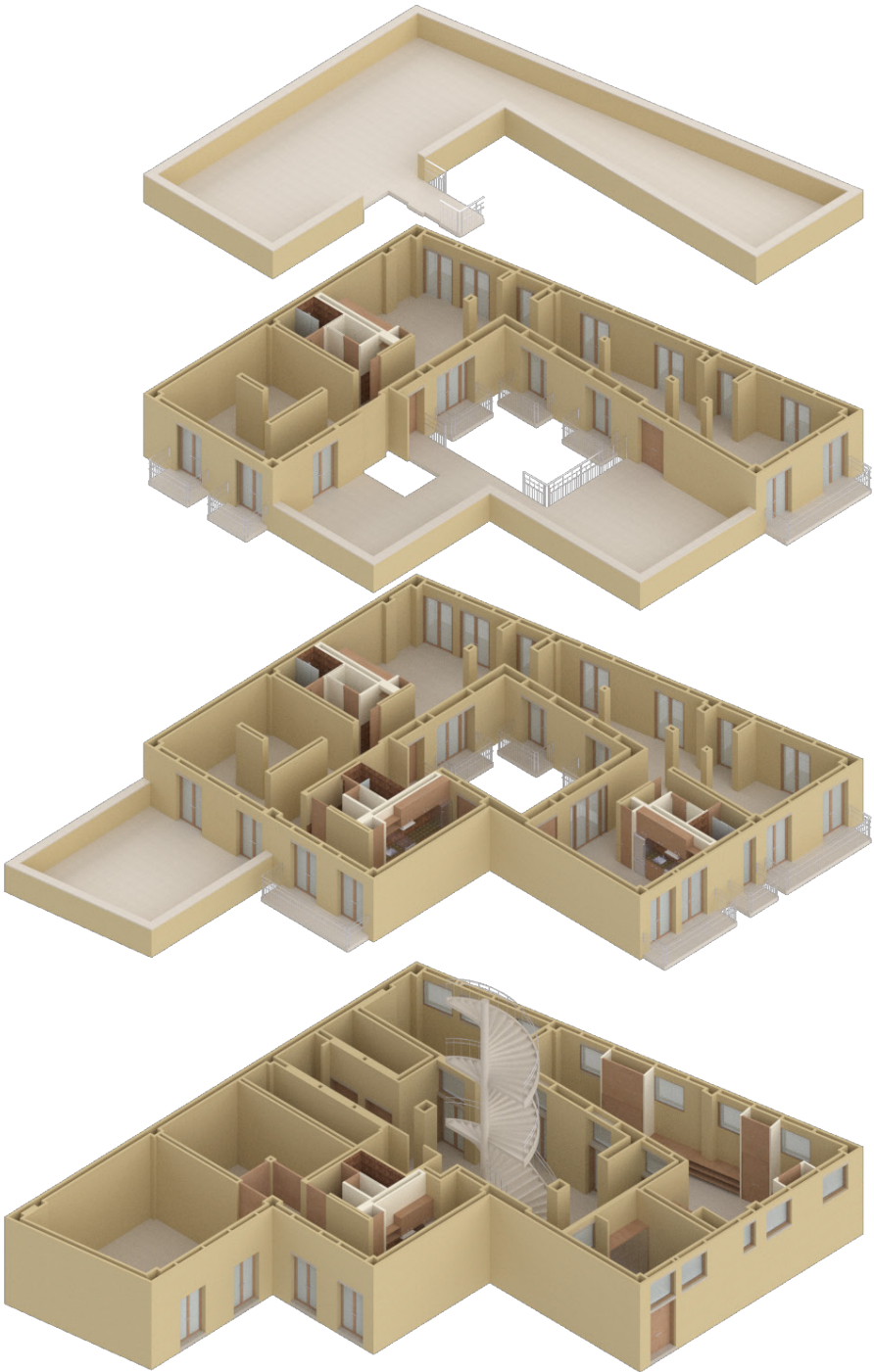




1. The Existing Conditions Neglect User’s Ever-Changing Needs and Desires

Floorplan

*Floorplan strategy to optimize appropriation*



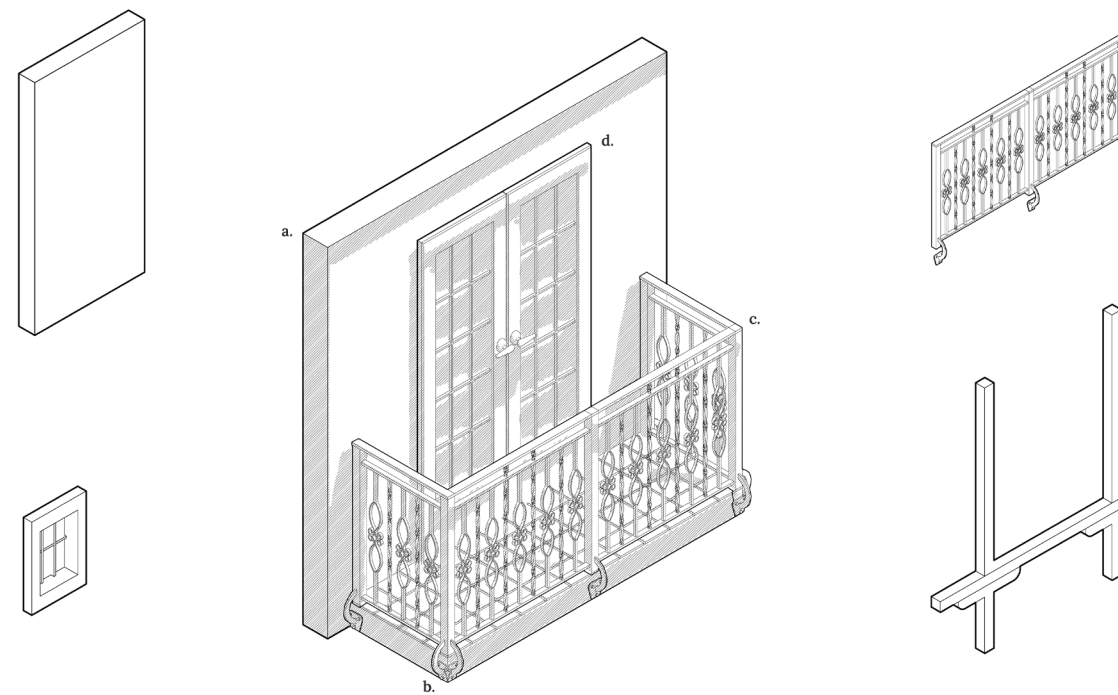
exploded isometric building



**Overarching Themes**  
*Conclusions from Seven Spatial Qualities*

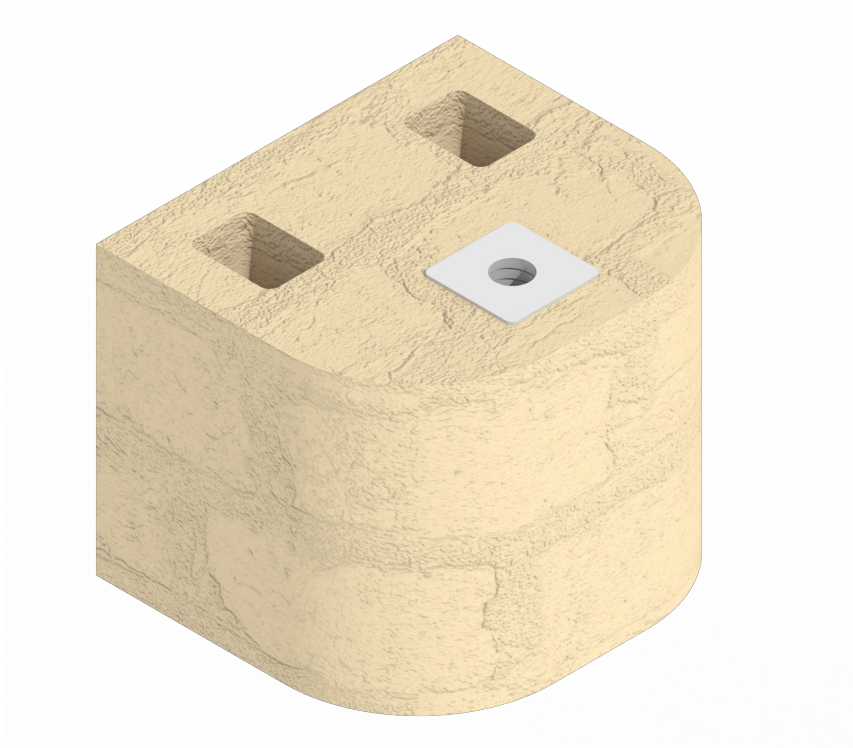
**2. User Modification of Architectural and Structural Features**

*Residents need a strong architectural base to appropriate,  
therefore the architecture must be easy to adjust*

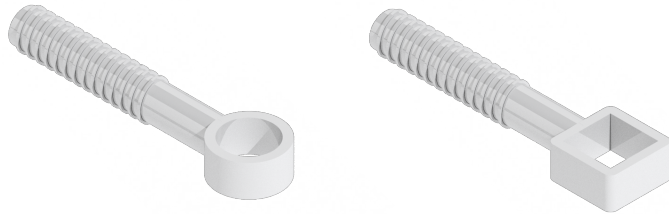


2. User Modification of Architectural and Structural Features

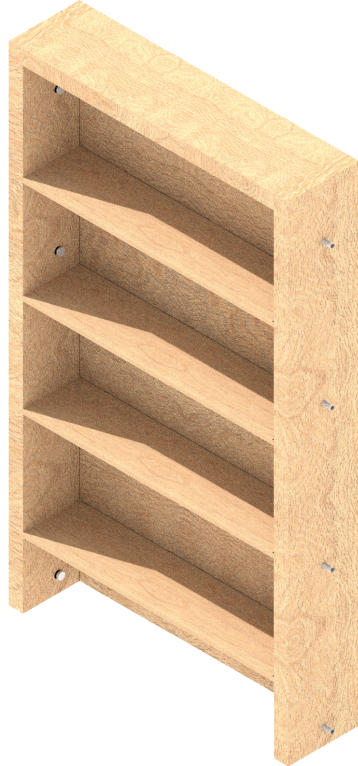
Brick, Brick Inserts, Threshold Inserts, Balcony  
*four main architectural and structural details that promote appropriation*



Appropriative Brick



Brick Inserts



Threshold Inserts

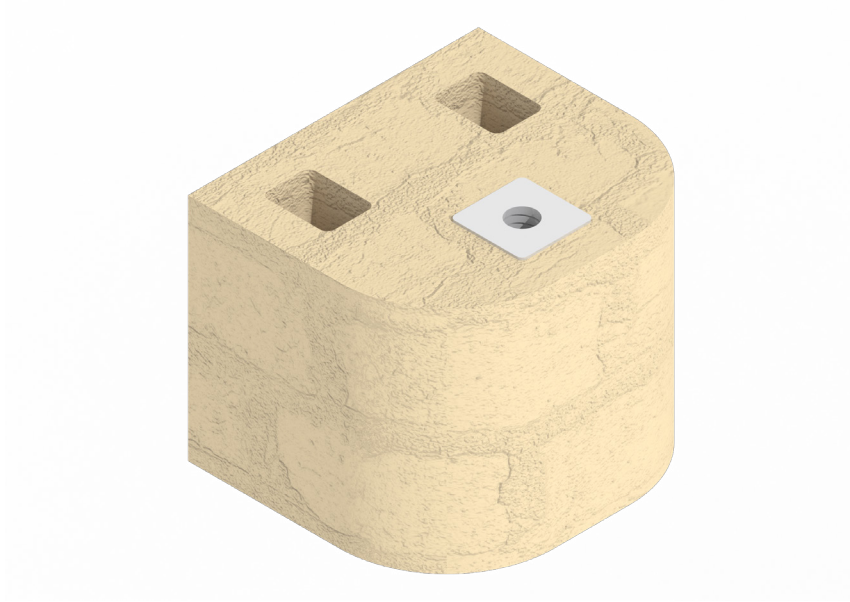


Balcony

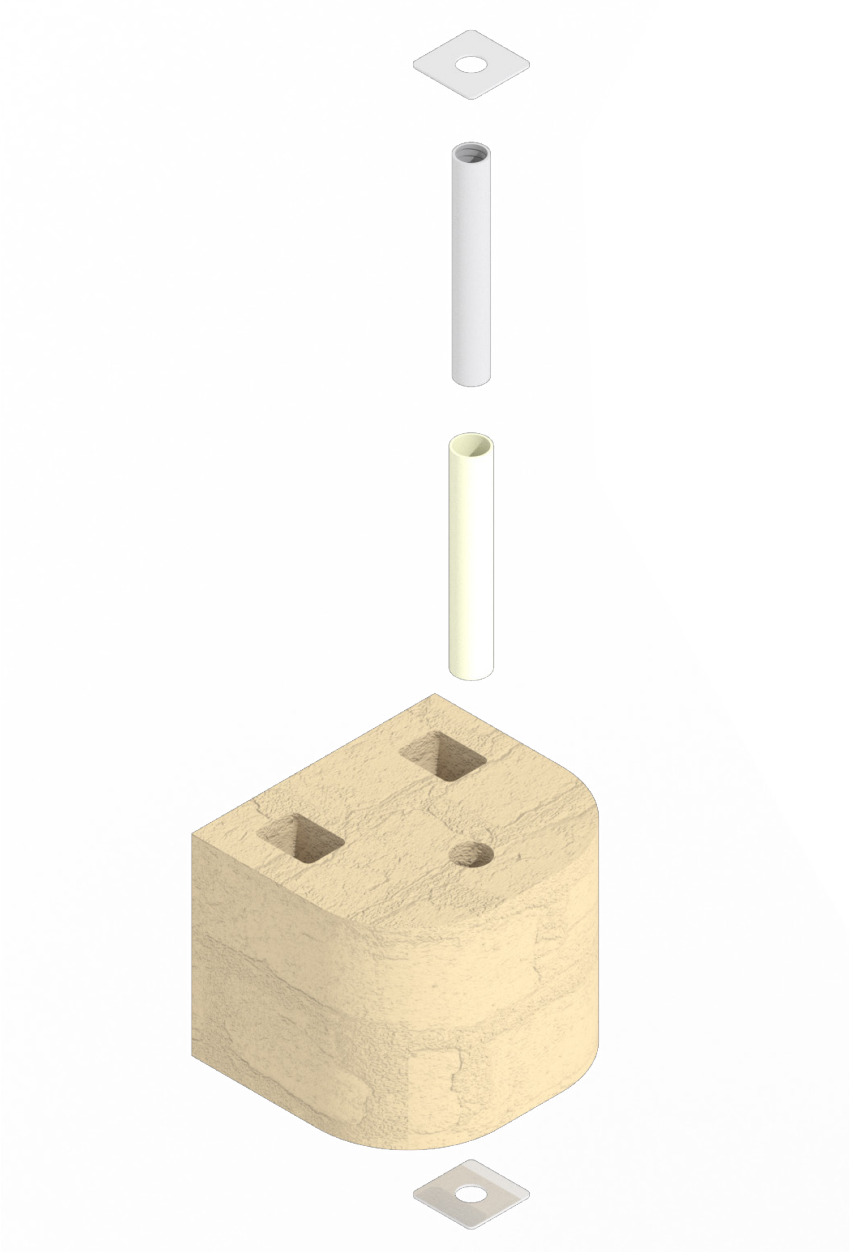


2. User Modification of Architectural and Structural Features

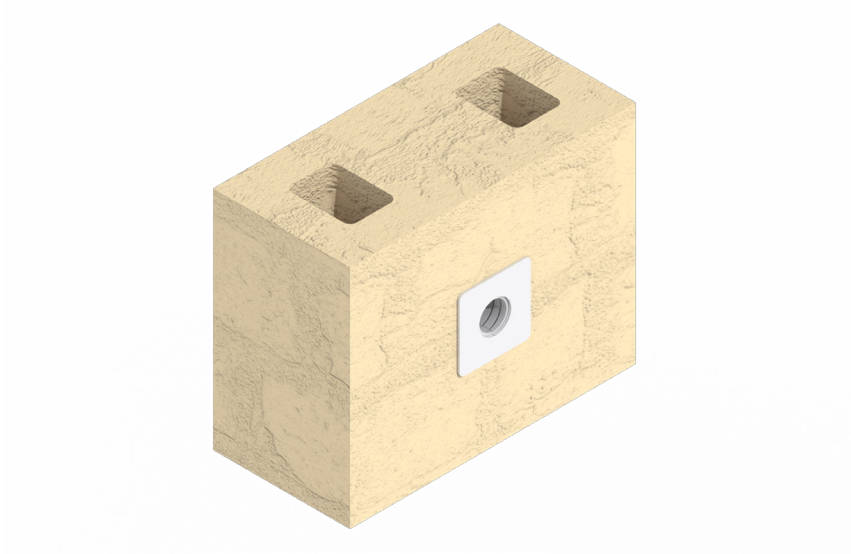
Appropriative Brick



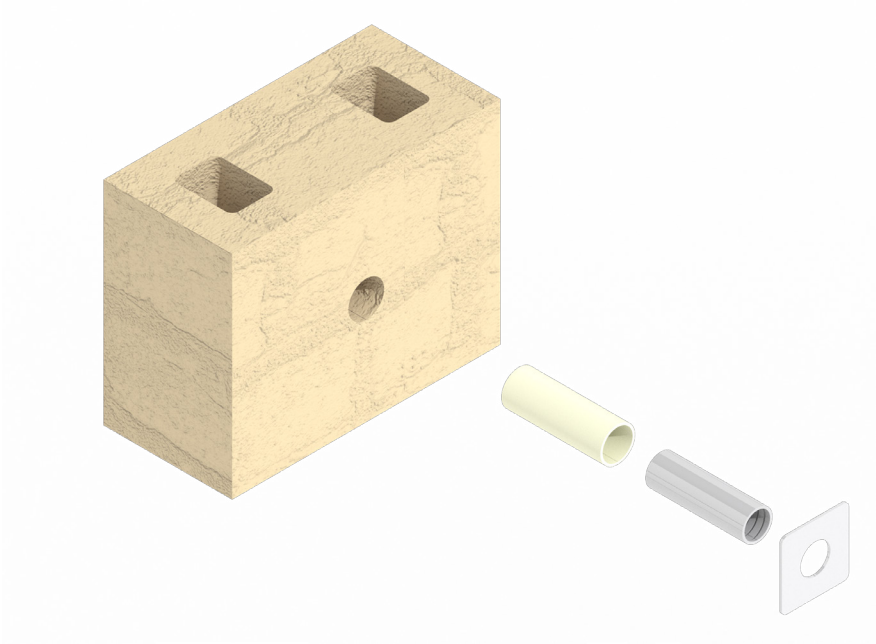
Appropriative Brick X



Appropriative Brick X Exploded



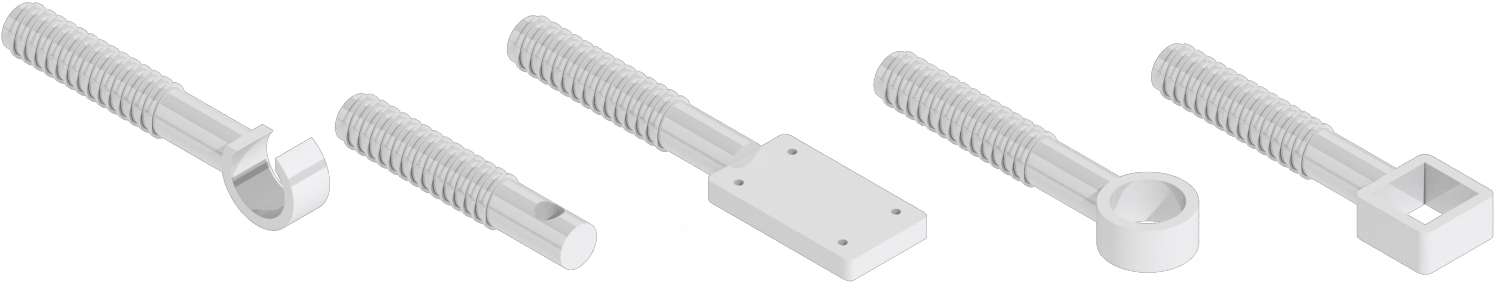
Appropriative Brick Y



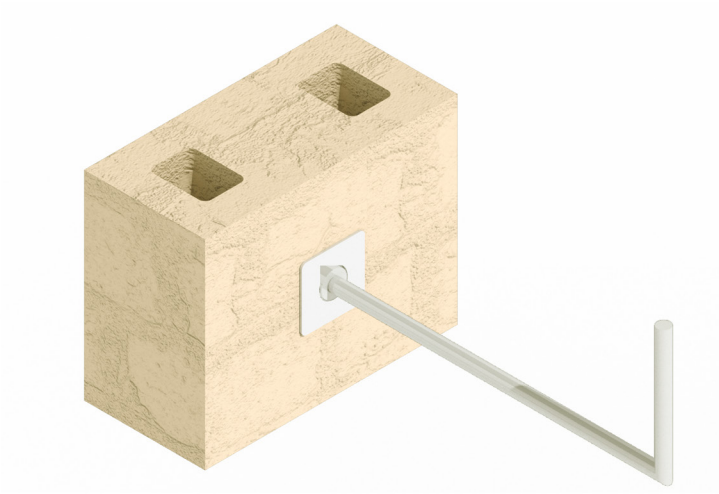
Appropriative Brick Y Exploded

2. User Modification of Architectural and Structural Features

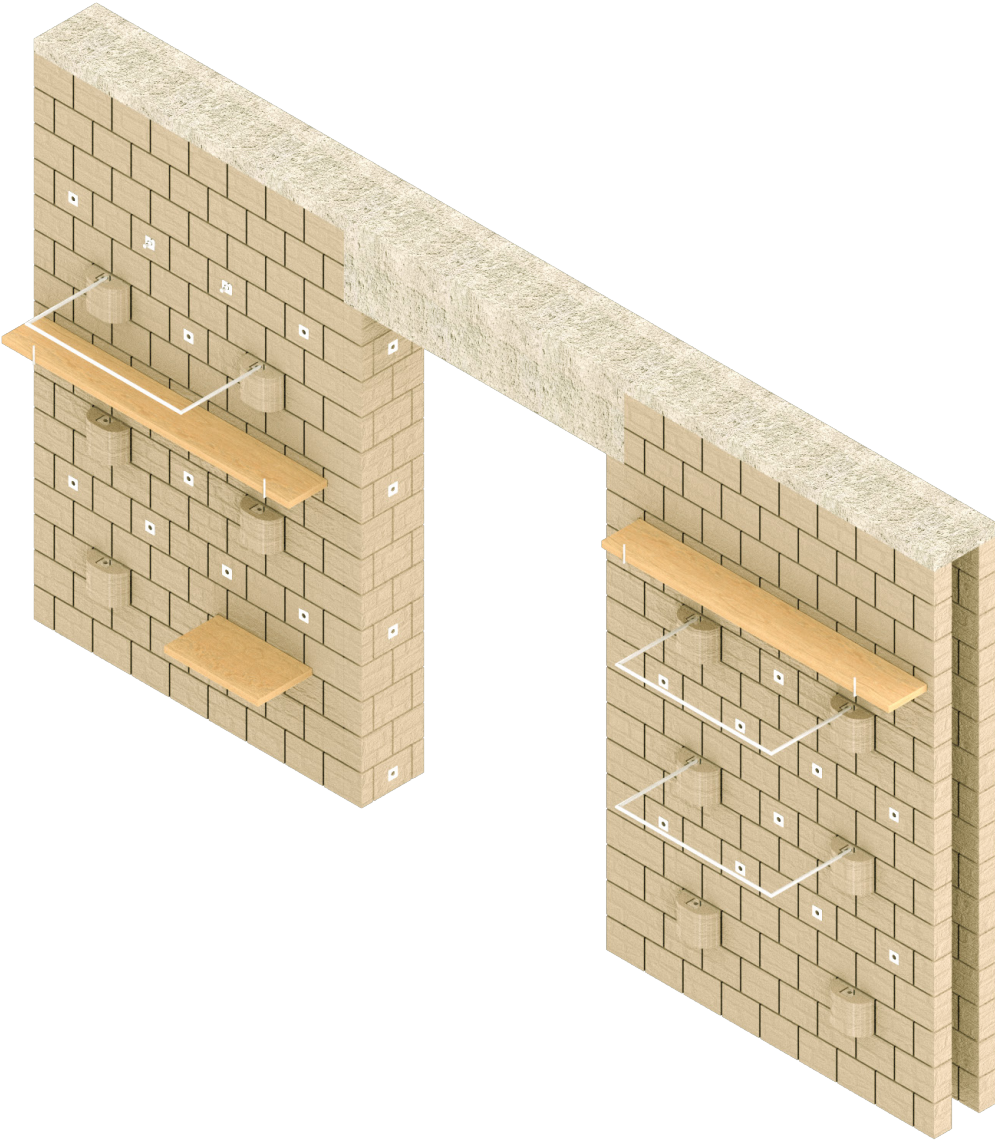
Brick Inserts



Brick Inserts



Appropriative Brick with insert

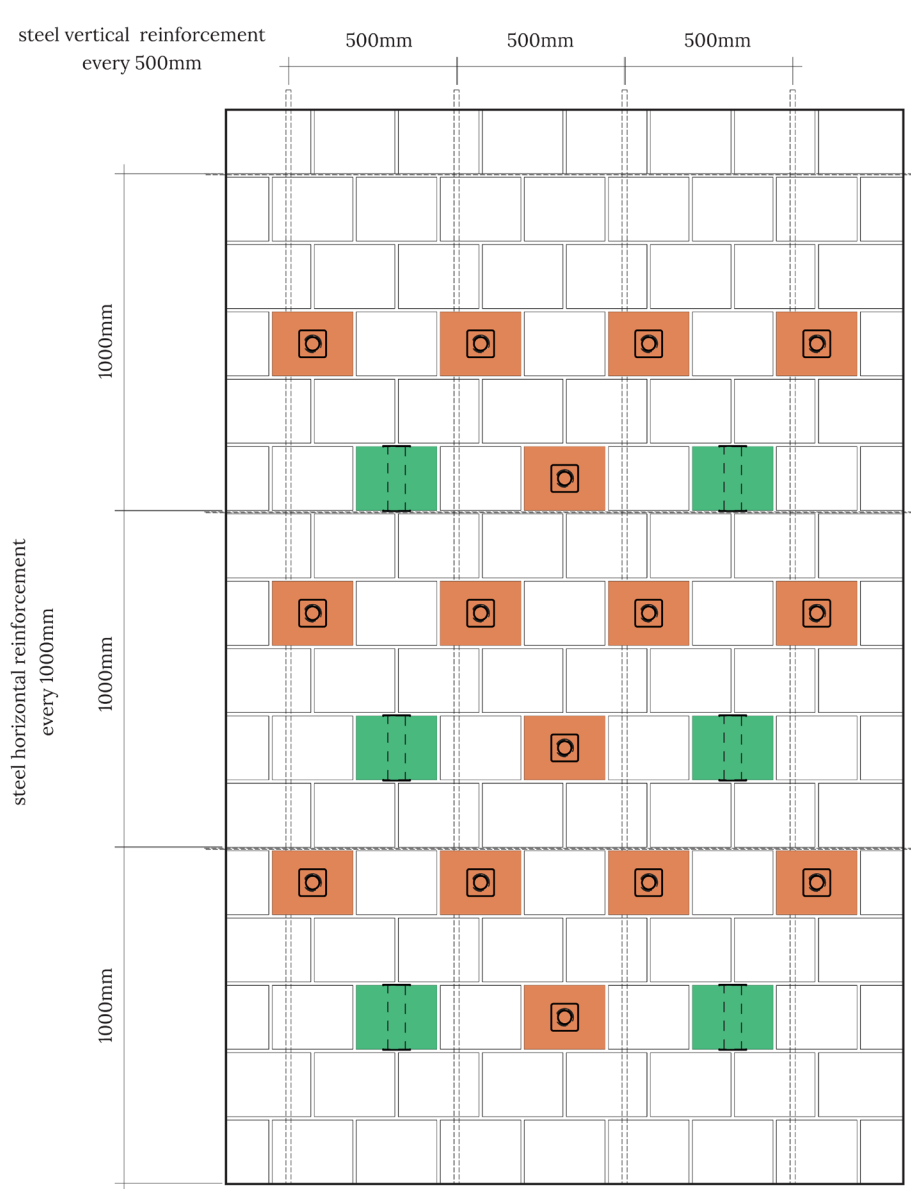


Interior Wall Configuration



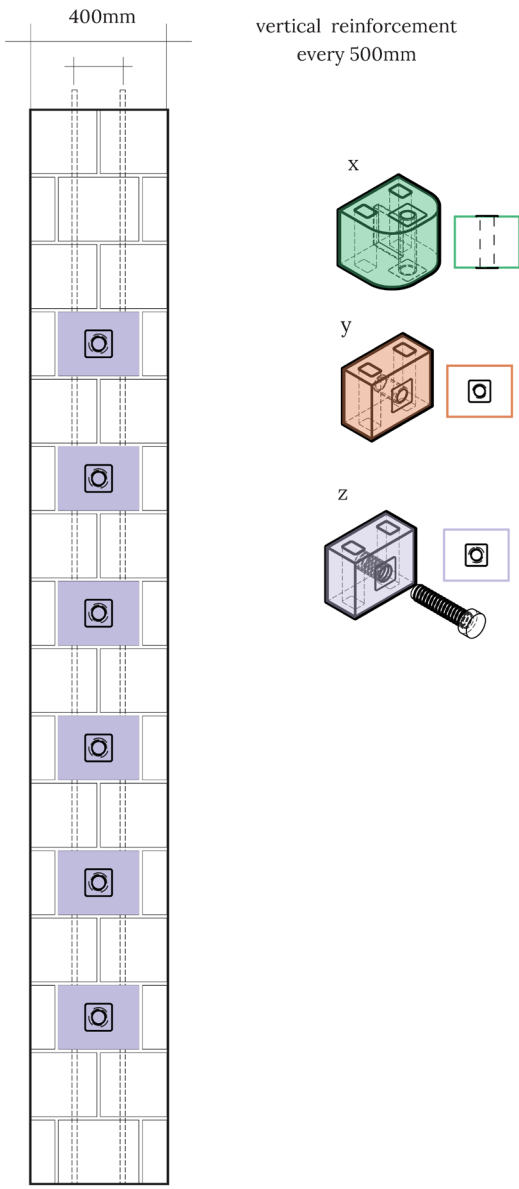
2. User Modification of Architectural and Structural Features

Brick Wall Configuration and Spacing

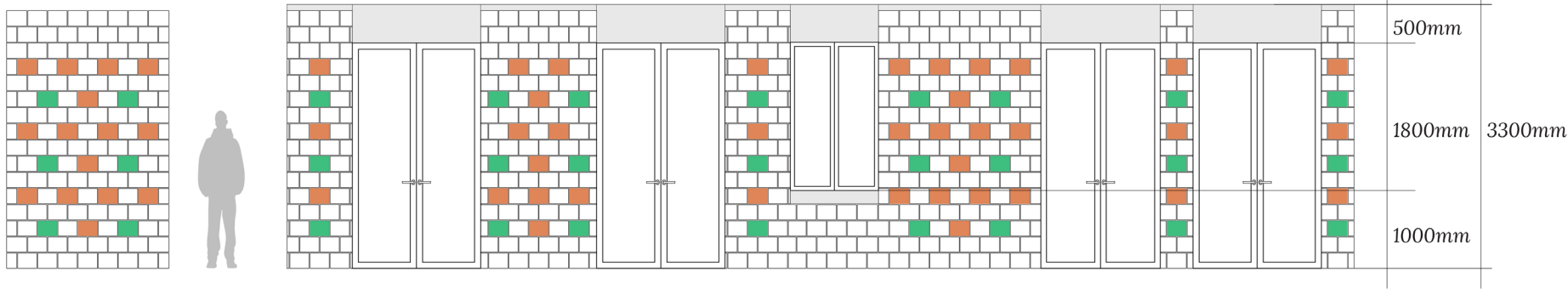


Wall Pattern Elevation

Appropriative Brick Wall Pattern



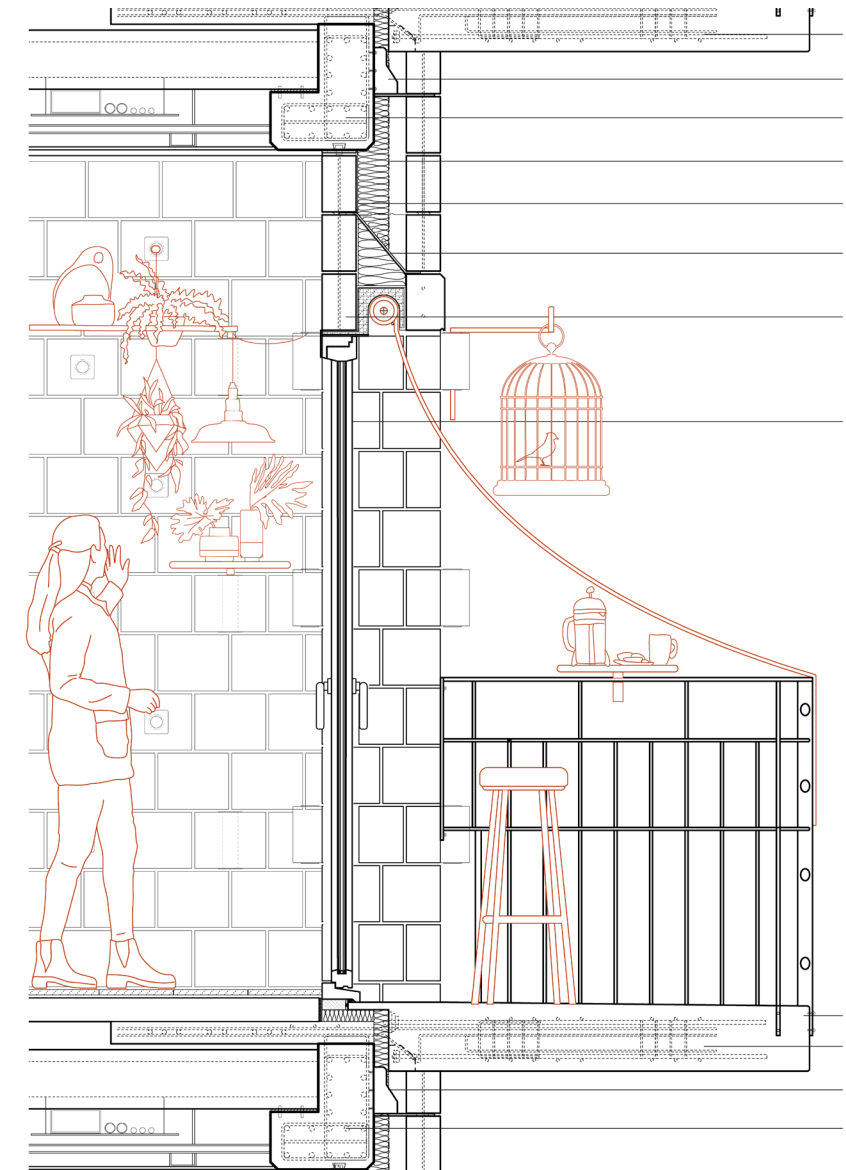
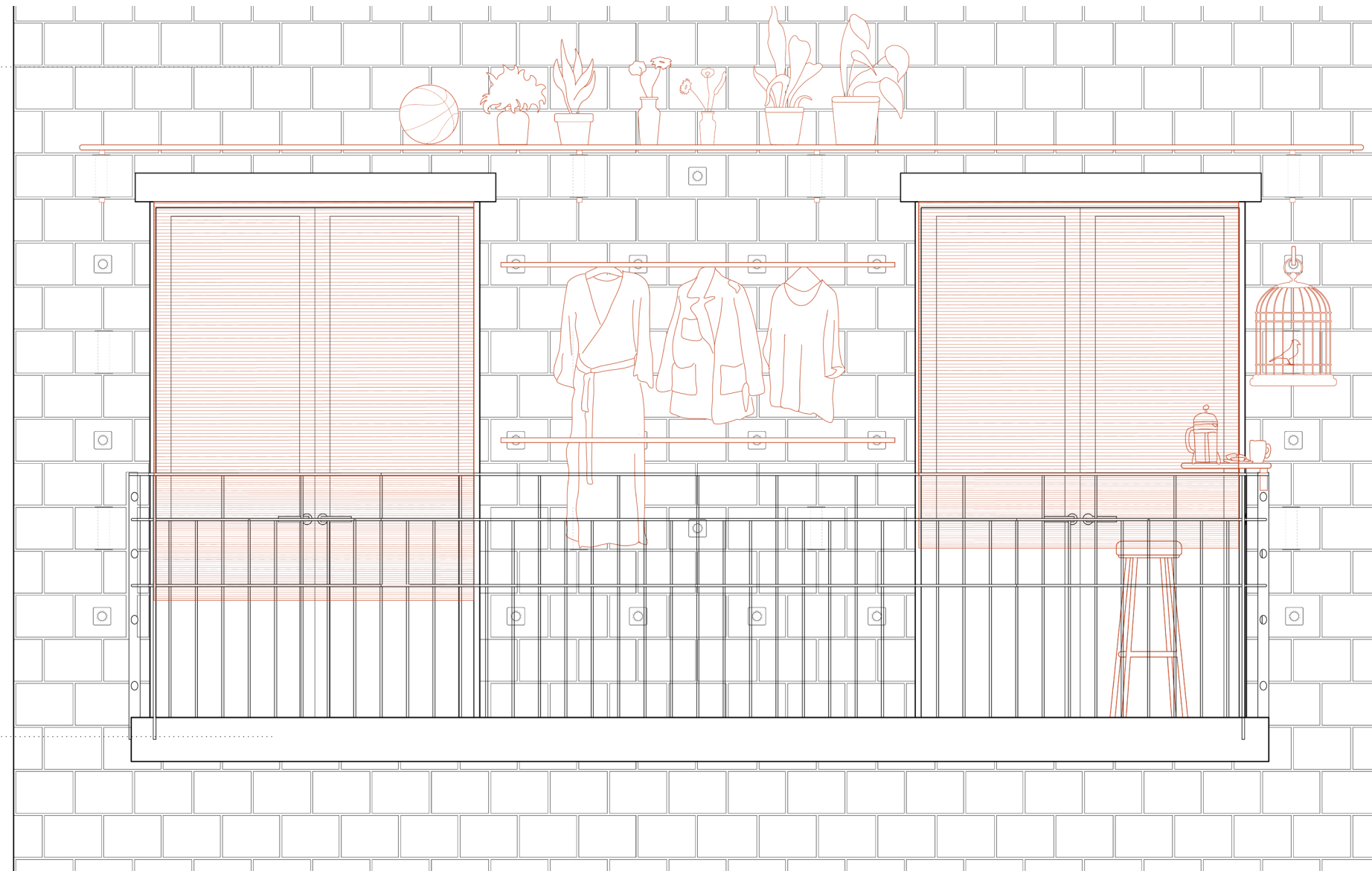
Threshold Pattern Elevation



Appropriative Brick Wall Pattern

## 2. User Modification of Architectural and Structural Features

### Section with Exterior Brick Appropriation





2. User Modification of Architectural and Structural Features

Threshold Insert



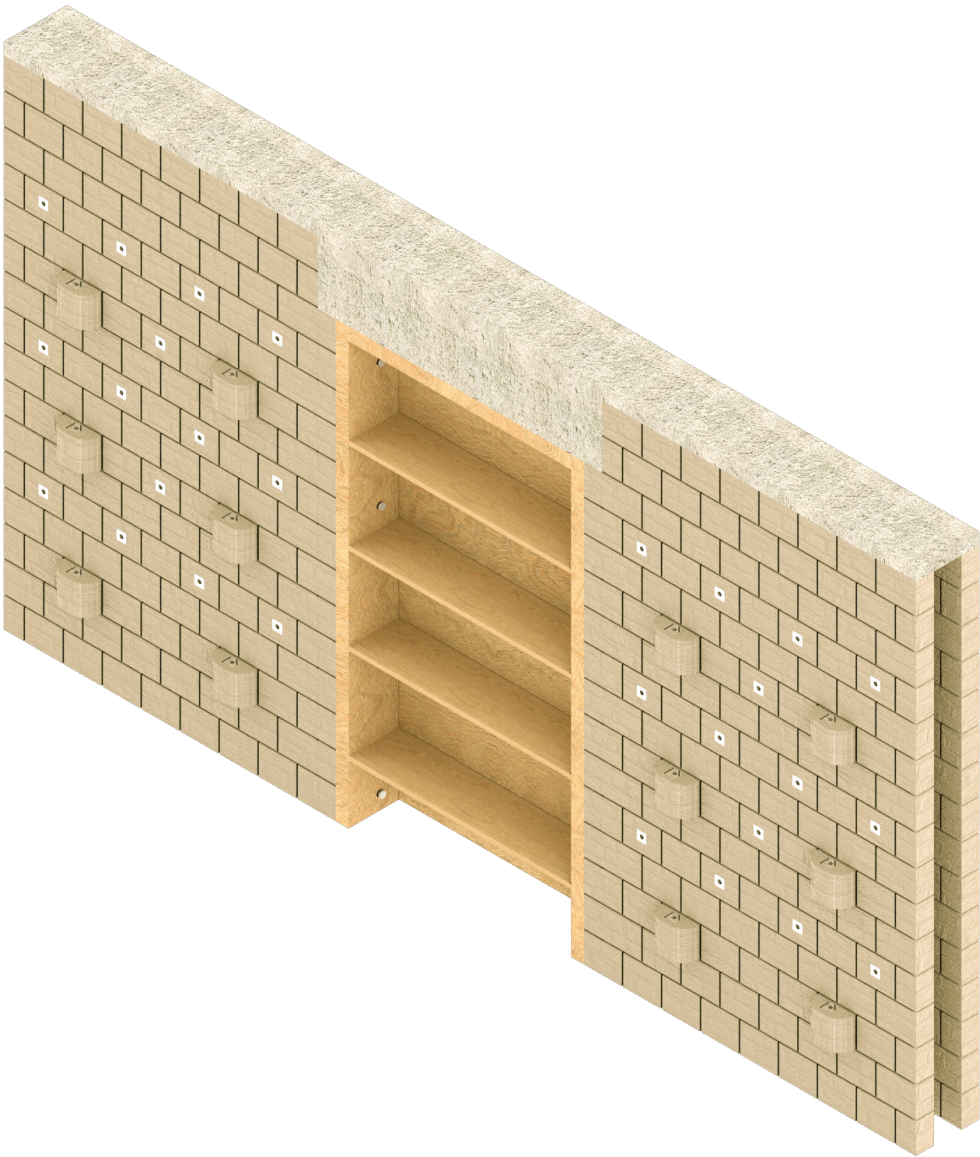
Shelf Threshold Insert



Door Threshold Insert



Shared Shelf Threshold Insert

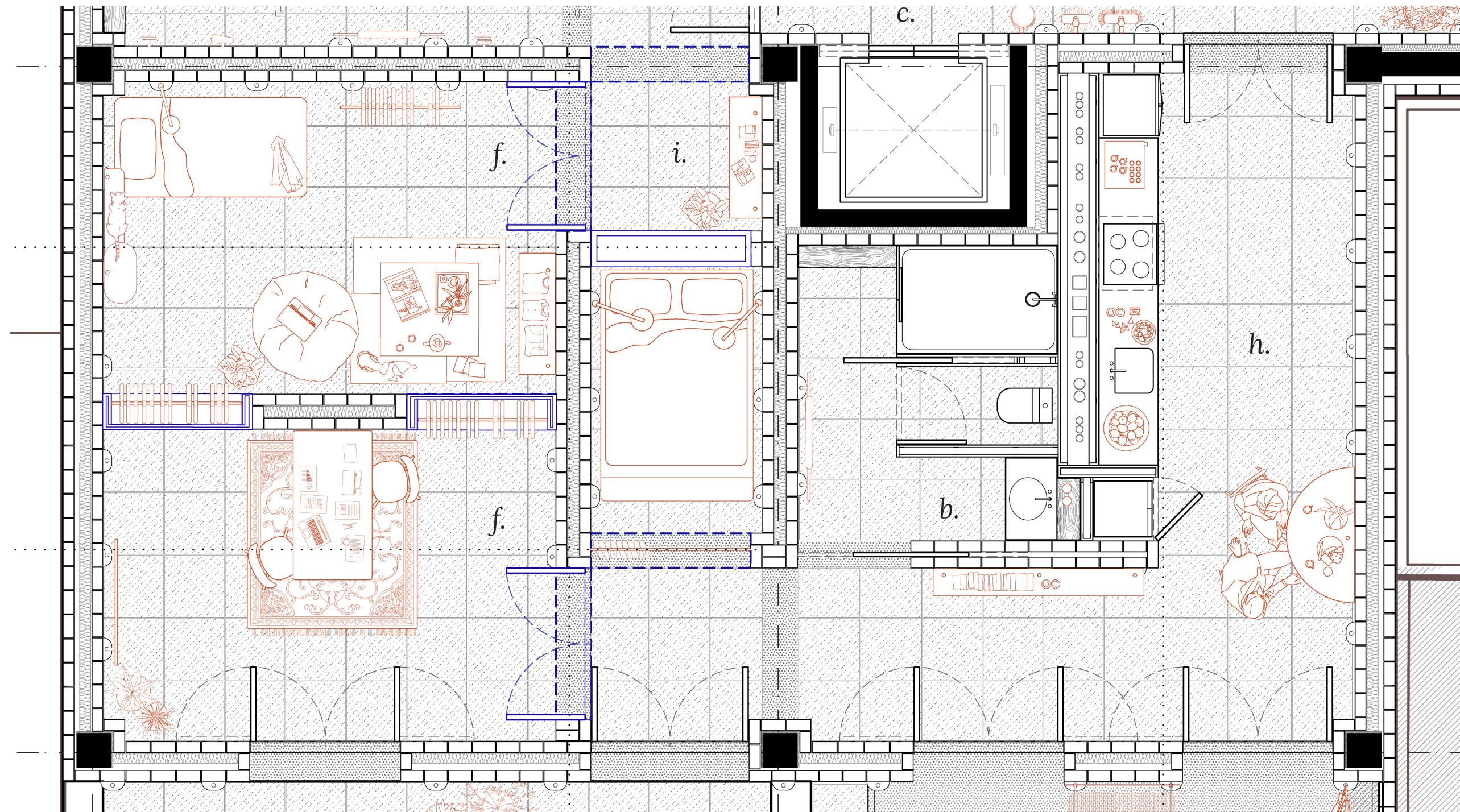


Interior Wall Configuration with Threshold Insert



## 2. User Modification of Architectural and Structural Features

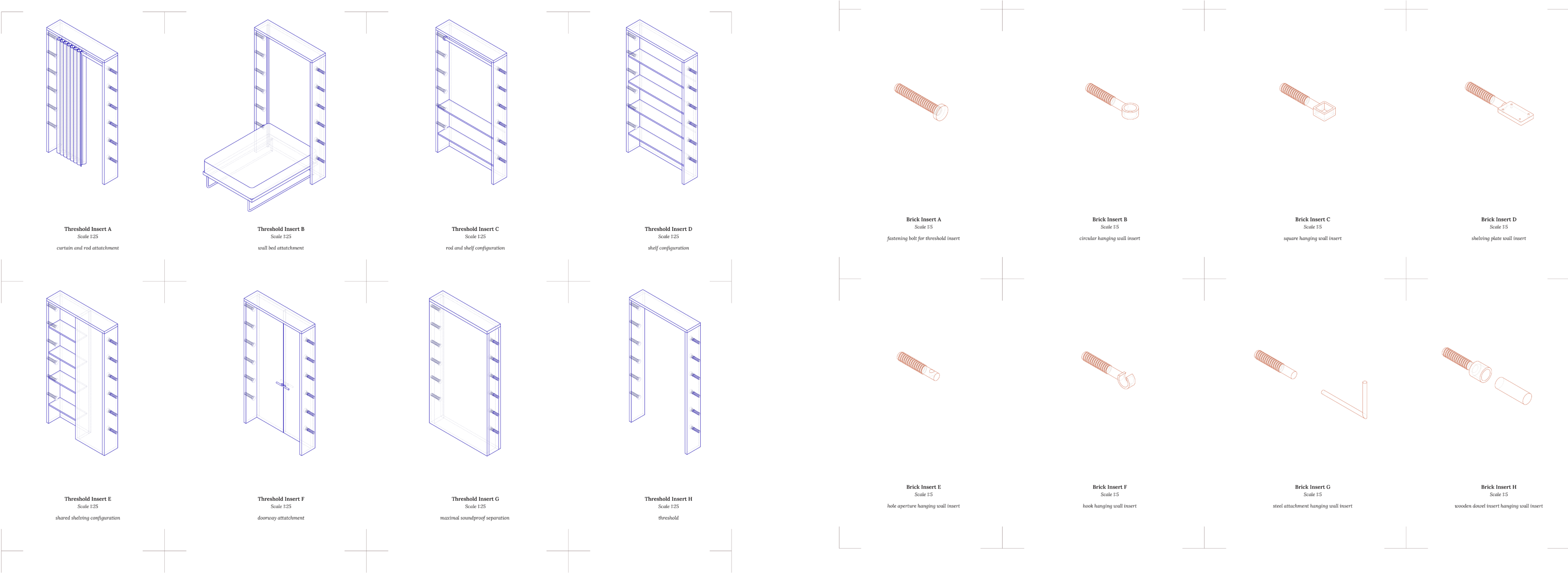
Floorplan with Threshold Insert





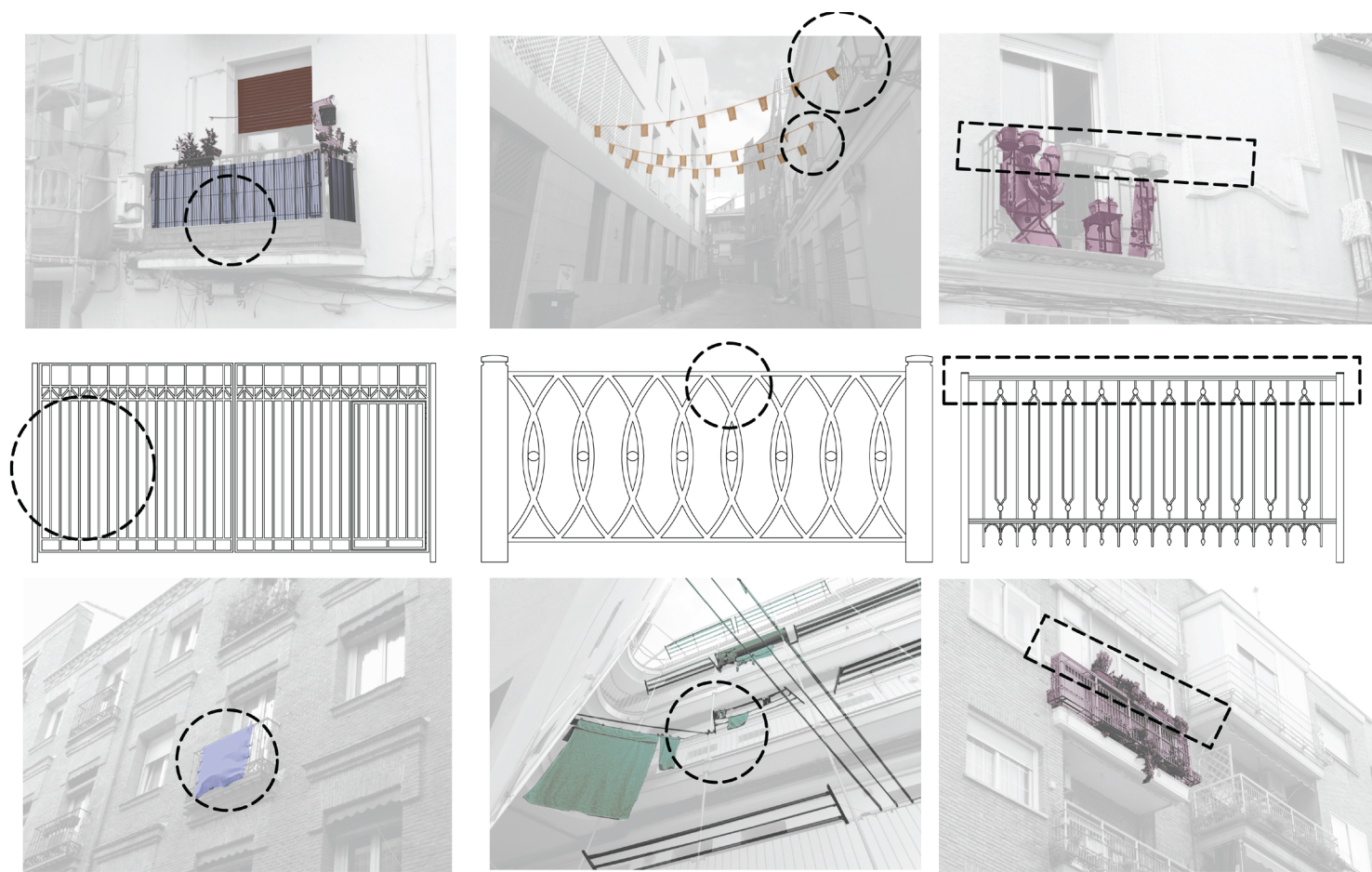
2. User Modification of Architectural and Structural Features

Matrix of Starting Point Insert Possibilities

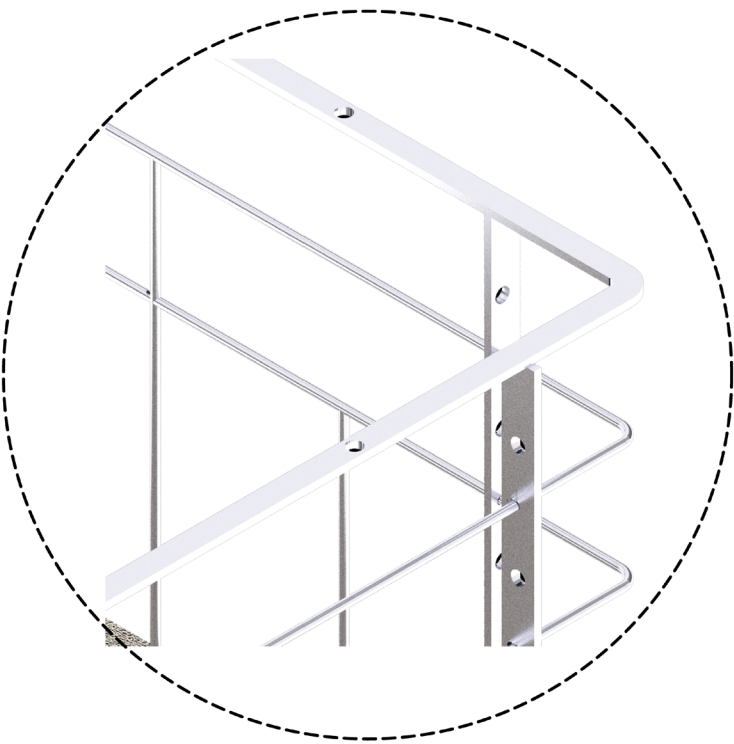


2. User Modification of Architectural and Structural Features

Balcony



Balcony Analysis



Appropriative Railing Feature



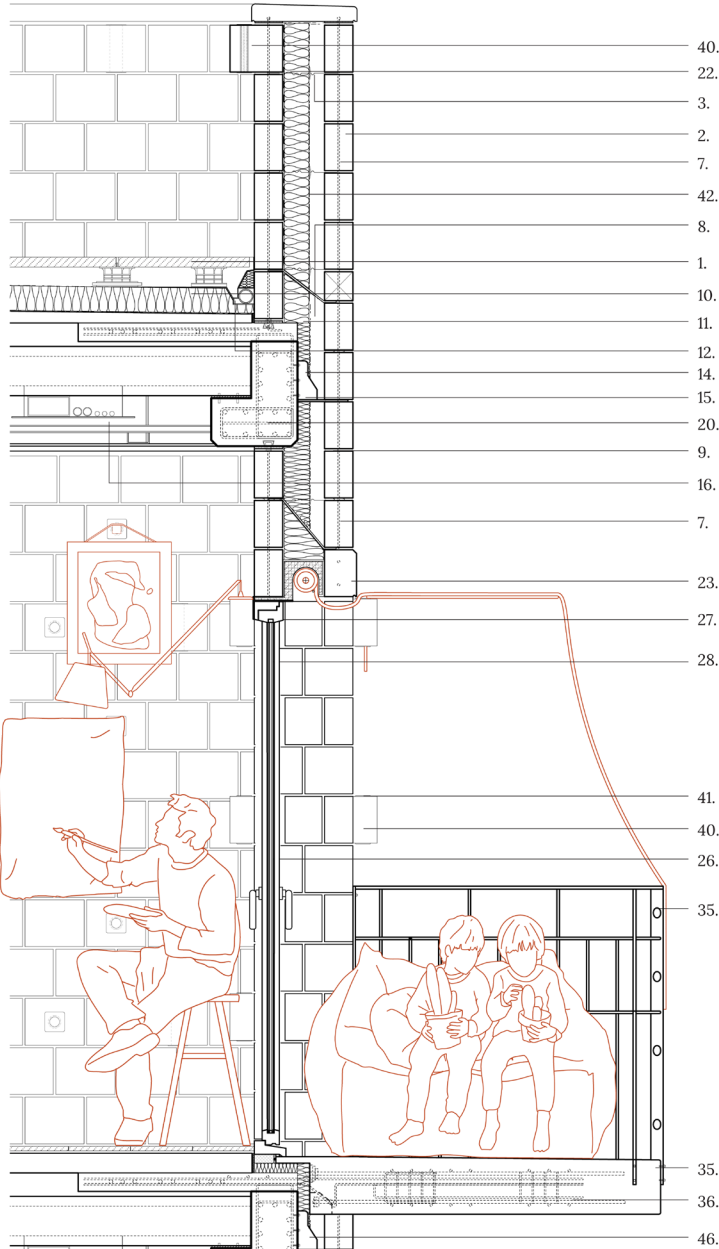
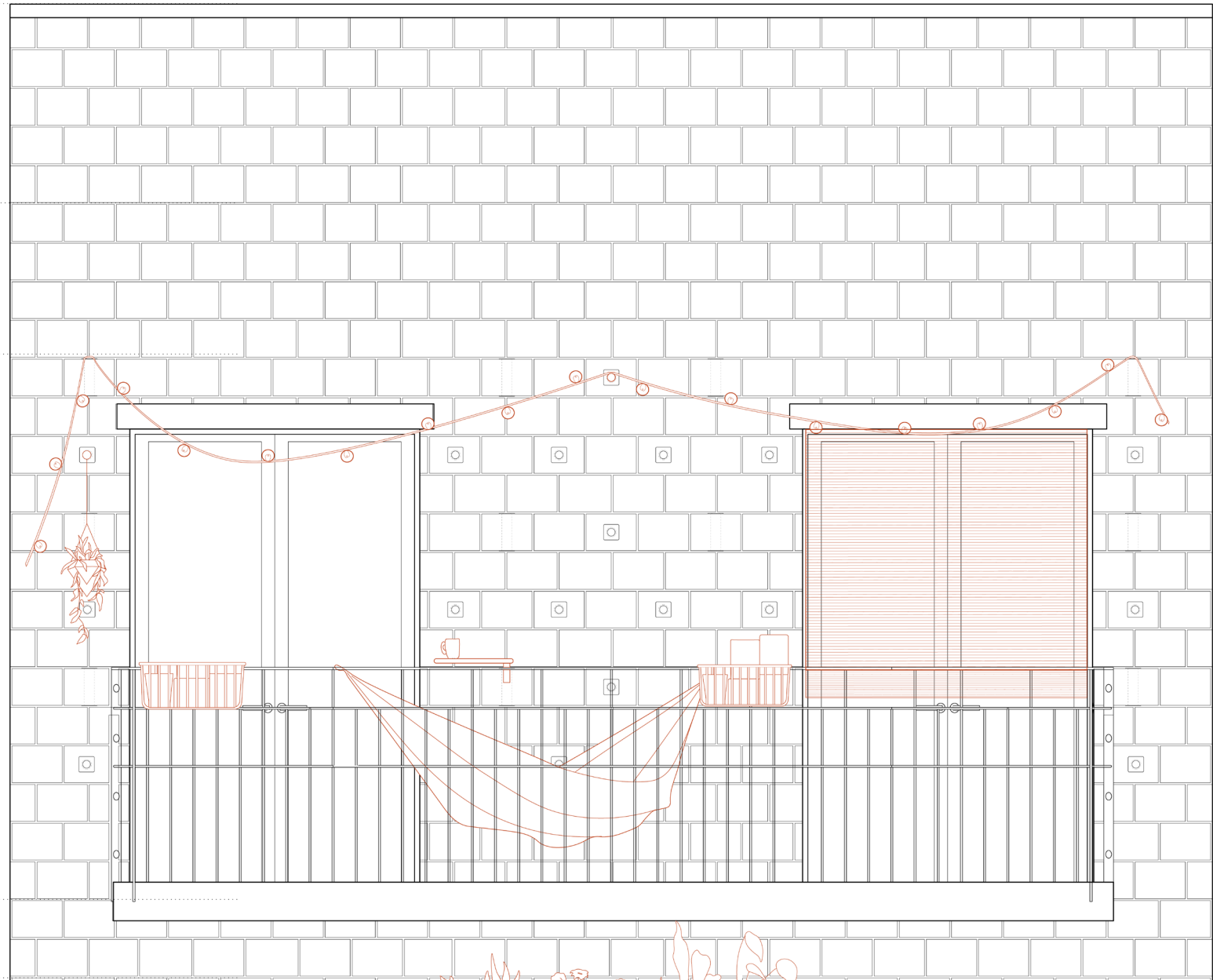
Balcony

Floorplan with Threshold Insert



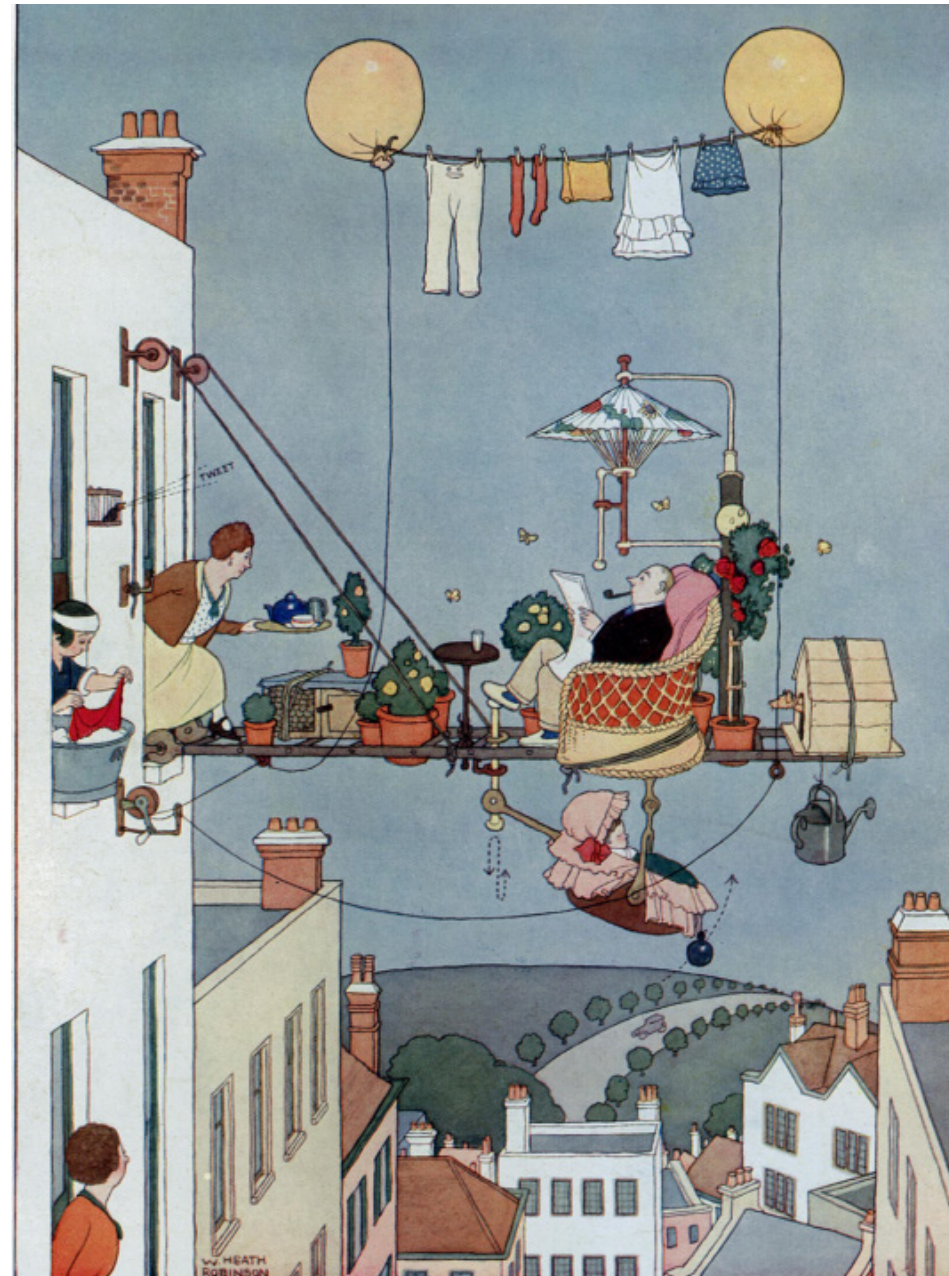
2. User Modification of Architectural and Structural Features

Section with Balcony Appropriation



### 3. Indoor-Outdoor Program Interchangeability

*Balcony's shape-shifting characteristic allows residents to change program daily or even hourly*



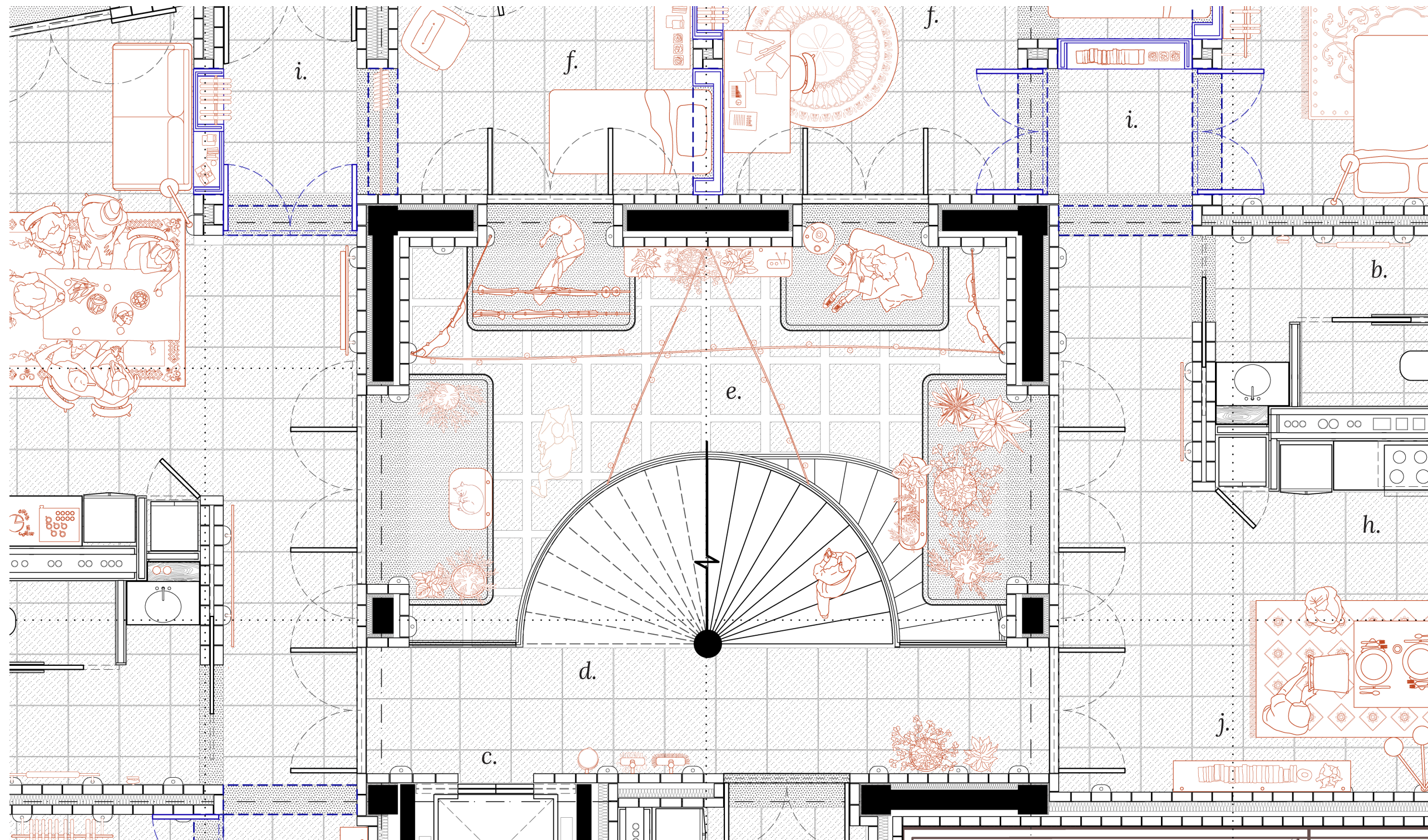
a.



### 3. Indoor-Outdoor Program Interchangeability

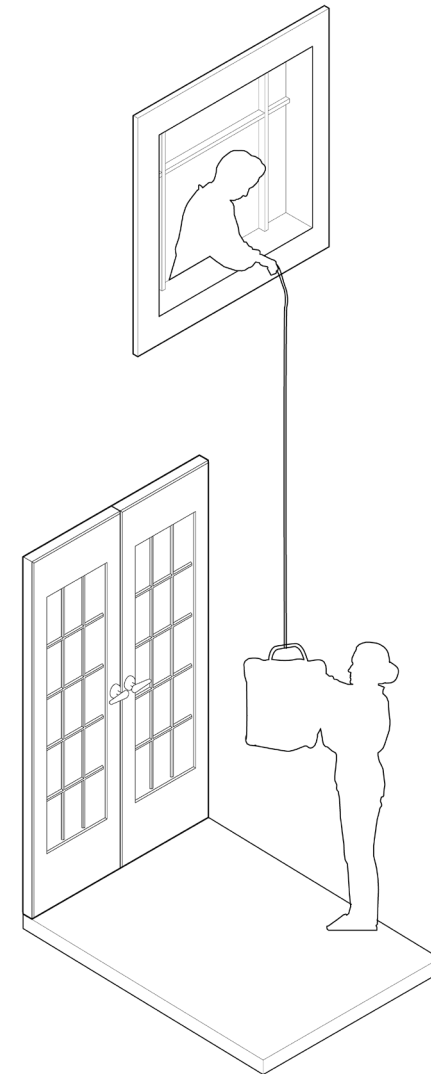
#### Inner-Facing Balcony - Interior Living Mitigates Indoor and Outdoor

*Private outdoor spaces are integral for a Madrileño's daily routine, therefore providing more balcony spaces permits users to apply these needs and desires more frequently*



#### 4. Appropriation in Shared Spaces Thrive in Limited Access

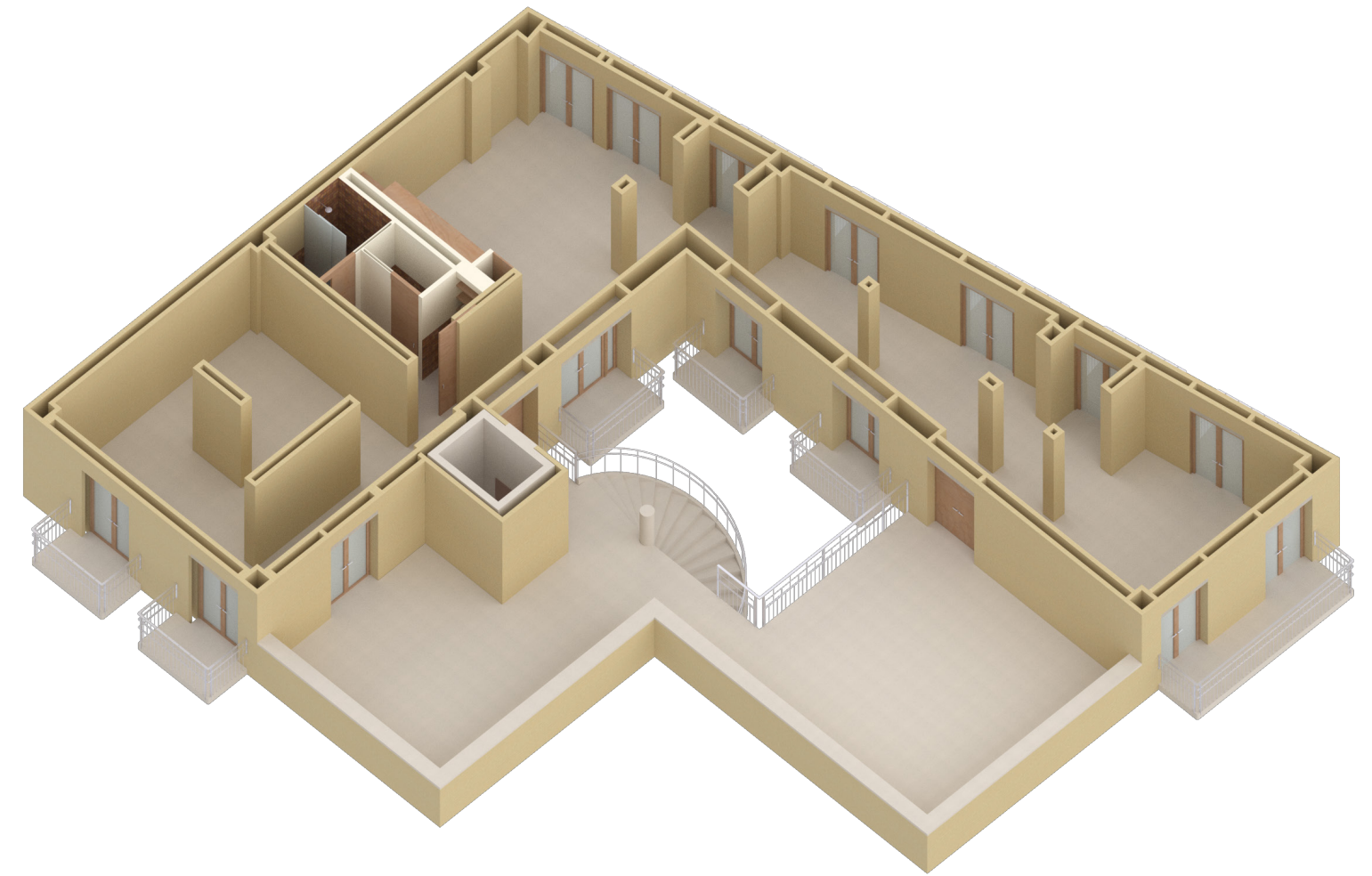
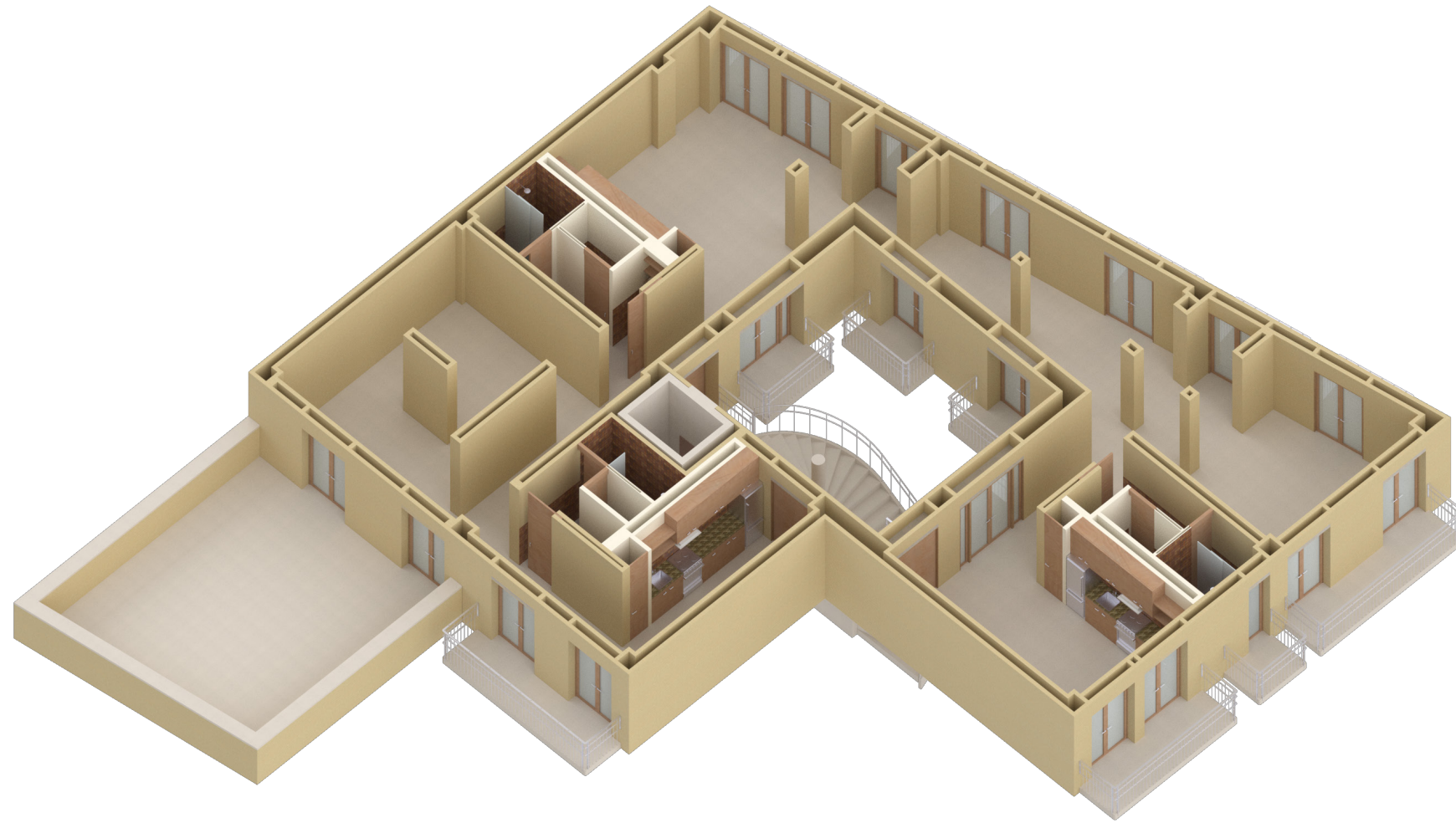
*Scattered Courtyards of various sizes and conditions are integral for individual and social dynamics*





#### 4. Appropriation in Shared Spaces Thrive in Limited Access

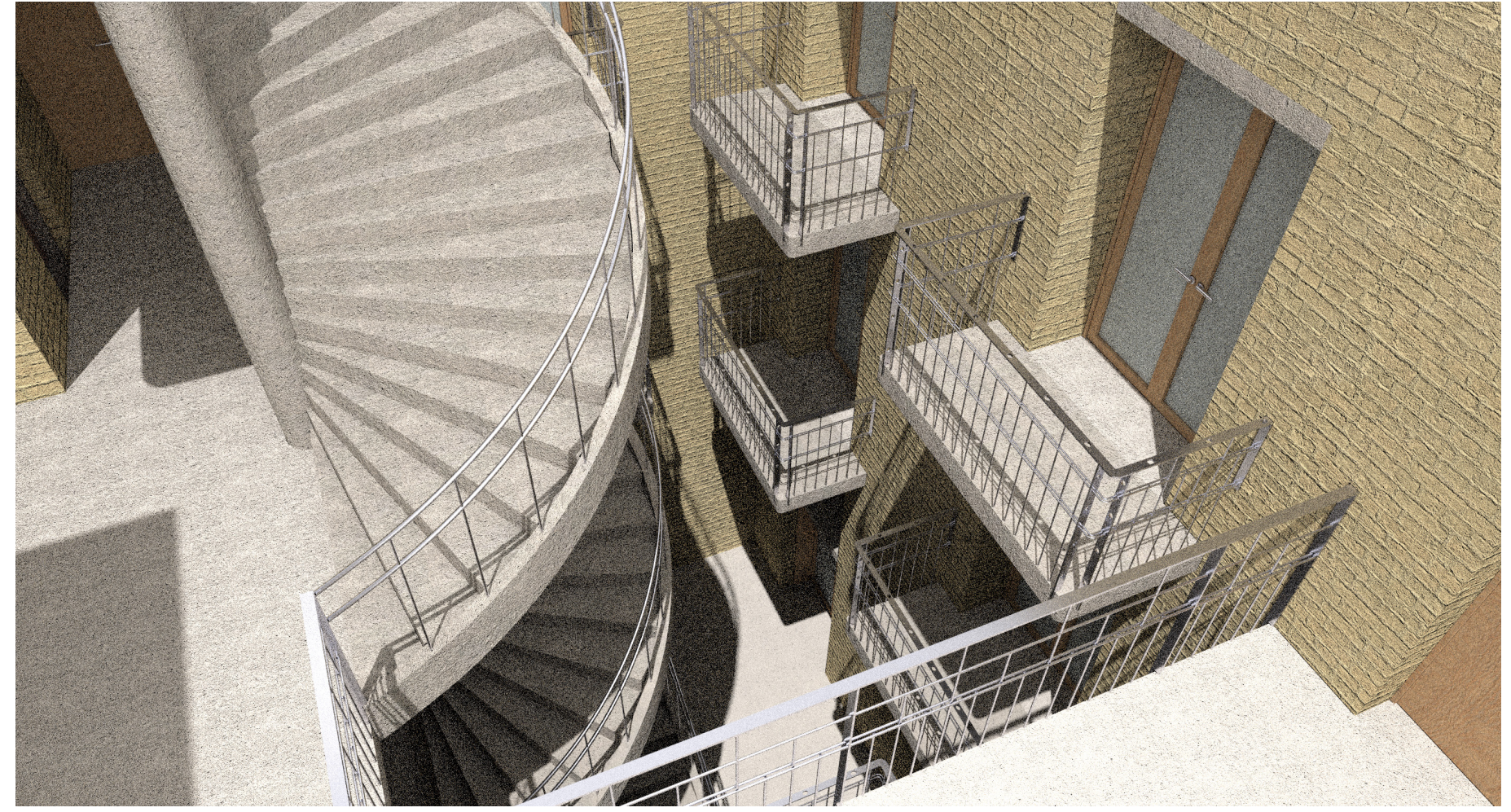
##### Courtyard spaces with Appropriative Functions





#### 4. Appropriation in Shared Spaces Thrive in Limited Access

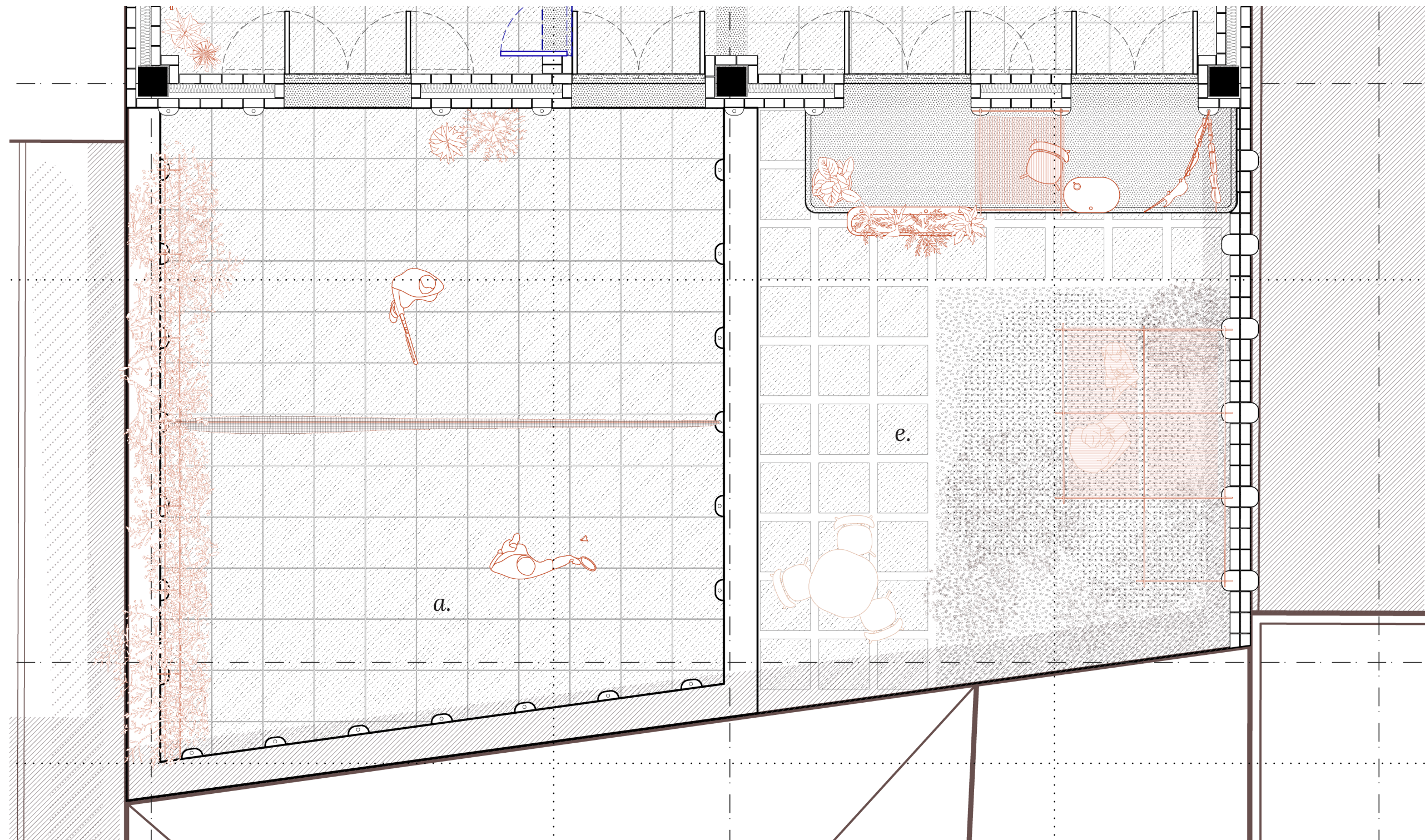
##### Courtyard spaces with Appropriative Functions





#### 4. Appropriation in Shared Spaces Thrive in Limited Access

##### Courtyard spaces with Appropriative Functions



thank you