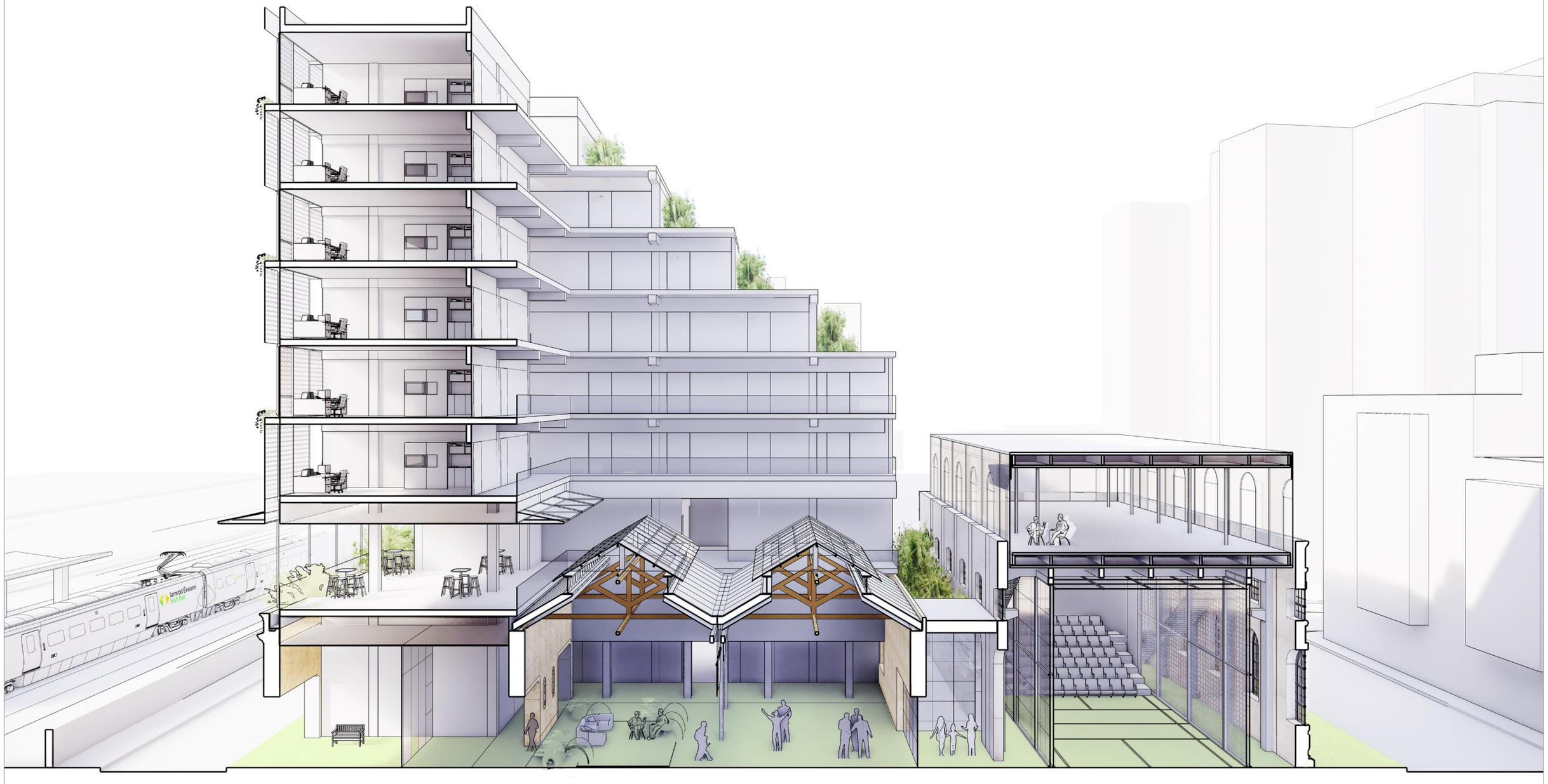
VALUES AND ATTACHMENT

SOCIAL AND ECOLOGICAL SPACES IN VALUE-BASED REDESIGN OF FORMER MILLING FACTORY, ESTAÇÃO, FARO



Heritage & Architecture – Graduation Studio: Revitalising Heritage | Faro Convention Labs | HEVA

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INTRODUCTION

This booklet is the research outcome of MSc3 Graduation Studio: Revitalising Heritage. The aim of the studio is developing and testing the values-based models for redesigning built heritage. There are three main phases: cultural significance survey, values-based redesign, and heritage impact assessment.

The diagram shows the working process of this graduation project and highlights the relationship between research (black lines) and design (red lines). On the one hand, the staged results marked by values and attributes (the design proposal, seven scenes, and redesign preferences) serve as the bridge that supports the transition between design and research. On the other hand, the outcomes of value-coding analysis (the values and attributes in square blocks) work as the assessment target which can be discussed and compared cyclically.

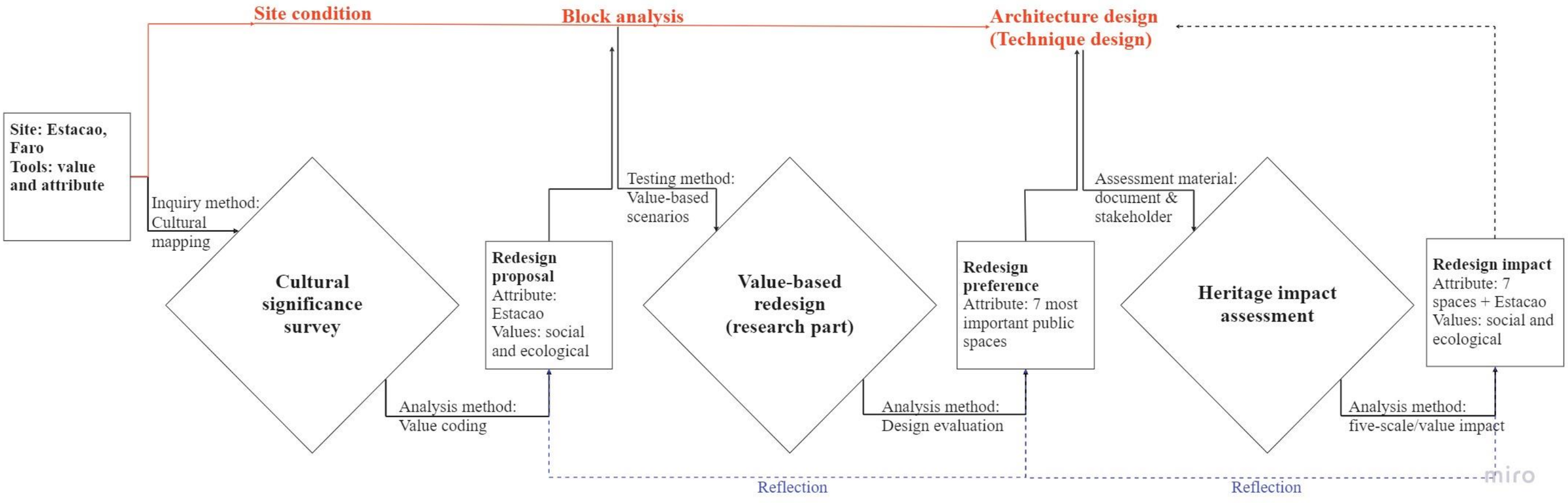


Fig. Working process of the graduation studio. (Each diamond block as an independent research, including one data collection method and one value-based data analysis method)

Paper 1:

Cultural Significance Survey

RESEARCH QUESTION

Motivation

As a bond connecting people with the physical and social settings of a place, place attachment support people's identity with the living environment and provides other psychological benefits (Brown, 2003), such as a positive place image or self-image (Chiara & Norma, 2010). I became interested in the topic of place attachment because I was once strongly influenced by the regionalist architectural trend: every generation of Chinese architects has discussed the national form, and Chinese users appreciate this option. To critique the rationality of this phenomenon from a broader perspective, it is one of the results of cultural identity and place attachment. Therefore, I am very curious about the reasons to support place attachment.

When people refer to where they live or work, what do they mean by "neighborhood" and what is meant by "place" when we acknowledge "place attachment"? What exactly are the heritage values, cultural resources, or physical environment that make people feel part of the place? What belongs here, what fits in the place, what makes it unique? I'm personally fascinated by these questions and I think they are also crucial for heritage redesign. From the perspective of heritage, the attributes and values of heritage are always very strong factors to support place attachment.

Case study

The research focuses on the neighborhood of Estação in Faro, Portugal. It is a neighborhood adjacent to the lagoon on the north side of the historical center of Faro. Various problems have gradually accumulated in this neighborhood with the urban development, and the coexistence of challenges and opportunities draws our attention to this site.

Based on our observations confirmed by locals and the municipality, the majority of the people living in the neighborhood are elderly. Most of them live in one or two-story-high self-owned houses built around 1925. Therefore, they still own their properties when they eventually need to go to an elderly home. This, in combination with the financial crisis, caused a high number of vacant buildings in the area compared to the rest of the city. Also, the vast plot of the factory building has been left vacant for many years. Nowadays, a renovation plan to demolish the entire industrial block for high-rise dwelling buildings will happen.

Fig 1-1. the location of Estacao neighborhood in city Faro

RESEARCH QUESTION

Problem statement

Nowadays, intense reflection on place attachment is aroused with the rapid urban renovation. On the one hand, many urban renovations on the sites with conspicuous volume and historical value might negatively affect the legibility and place attachment for the community. On the other hand, significant transformations of the urban realm might also strengthen residents' relationships with places when the changes are perceived as attractive upgrading and as still familiar environments. (Timo, Adrienne, Corinne, Michael, 2016)

In Estação, the renovation of the former flour factory block might provide a great opportunity to solve current urban problems, but it will change the age structure and the appearance of the whole neighborhood at the same time (Fig 1). Under such urban renovation, we architects must be very careful to avoid it causing a negative influence on residents' place attachment.

Research questions

In order to facilitate the collaborative fieldwork workshop, this paper will focus on two different age groups: adults and the elderly. According to the different attachment degrees of participants in previous studies with different genders, levels of education, age, length of residence, and occupation (Chiara & Norma, 2010), therefore the place attachment between different generations will be worth exploring and comparing. Besides, Peter Laslett's theory (1991) about age groups suggests the differences in life status (immaturity - work-life - frailty) and degree of independence (dependency - responsibility - dependency) among this two groups of stakeholders, which are very likely to lead to the differences in attachment factors and the scope of the psychological neighborhood. Therefore, the research raises the following individual research questions:

How could the values and attributes affect the place attachment of the elderly and adults in Estação neighborhood, Faro?

1) What is the level of place attachment of locals to the Estação neighborhood?
2) Which values and attributes are more relevant to residents' place attachment?
3) What are the differences between the place attachments of different generations?

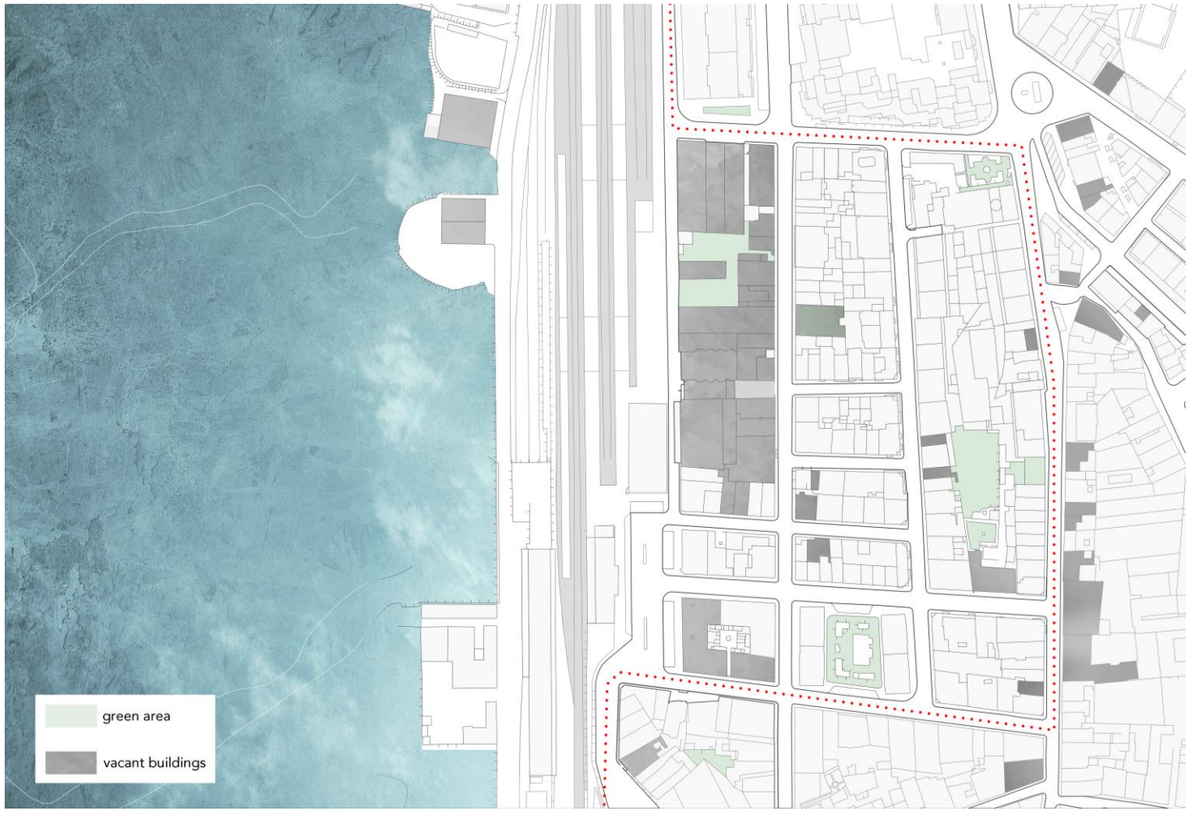


Fig 1-2. the scope of Estacao neighborhood

Fig 1-3. the comparison between the currently demolished factory and the high-rise dwelling project

LITERATURE REVIEW

Value and attribute theories

This research is organized around a values-based design approach developed by Pereira Roders and Tarrafa Silva (2012). The foundation of this approach is the cultural significance of heritage. Cultural significance considers two elements: values and attributes. Value of heritage is referred to as importance. It is understood as "the importance or worth of something for someone". (Cambridge English Corpus, 2022) The definition of attribute refers to "a quality or characteristic that someone or something has." (Cambridge English Corpus, 2022) Cultural significance is defined as: "Aesthetic, historical, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places, and objects. Places may have a range of values for different individuals or groups." (ICOMOS, 2013) The question what? is answered by the attributes, while the question why? is linked to values. According to the attributes taxonomy made by Veldpaus, attributes are divided into tangible and intangible. Then, Pereira Roders expanded the list of values with additional ones: economic, political, age, and ecological, and assigned other secondary values to them. (Pereira Roders, A. R, 2007)

Fig 1-4: Values framework by Pereira Roders.

MC[1]	Sc[2]	Subcategories Types	Definition
Tangible	Asset	Built elements	The tangible attribute represents specific elements or parts of a building. This element can be constructive, constitutive, or decorative. Part, component, material, feature, or section of a building, which is constructive, constitutive, or decorative; adds value or functionality.
		Building	The tangible attribute represents a whole building, structure, construction, edifice, or remains that host(ed) human activities, storage, shelter or other purpose.
		Urban element	The tangible attribute represents elements, parts, components or aspects of/ in the urban landscape. This can be a construction, structure, or space, which is constructive, constitutive, or decorative.
		Natural element	The tangible attribute represents specific flora or fauna, like water elements of/in the historic urban landscape produced by nature. It can be natural or designed.
	Area	Ensemble	The tangible attribute represents a group of buildings or specific urban ensemble or configuration. The combination generates or represents specific history, coherence, variation, significance and has recognizable relations.
		Context/Setting	The tangible attribute represents the buildings or elements surrounding, supporting, or contextualizing the actual heritage. It is situating, adds understanding, often - though not necessarily - geographical proximity.
		Area	The tangible attribute represents a district in a wider (urban) landscape, or a specific combination of cultural and or natural elements.
	All	Landscape	The tangible attribute represents the integrated whole, the wider cultural landscape including (indicated or located) elements, areas or attributes with various levels of significance.
		Layering	The tangible attribute represents a landscape illustrative of the evolution or development of human society and settlement over time, a diversity of manifestations of the interaction between humankind and its natural environment.
Intangible	Relation (asset-related)	Character	The intangible attribute represents defining features, or a specific nature or quality. This can be related to specific design (e.g. typology, morphology, layout, composition, proportion) or an atmosphere (e.g. tranquil, lively, urban, rural).
		Relation (object–to-object)	The intangible attribute represents a relation with another connected element, location, place or environment. Often the attribute is related, or represented by, a tangible heritage asset.
		Concept	The intangible attribute is the intended idea, norms, values, expression, style in arts or architecture and the development (phase or evolution) thereof. Often the attribute is related, or represented by, a tangible heritage asset.
	Societal	Use	The intangible attribute represents a specific (typical, common, special) use or function of a place or environment.
		Knowledge	The intangible attribute represents (local) practices, traditions, knowledge, or customs of a community or group. These can be phenomena associated with a place or the understanding of the world by a group of people, which are transmitted and/or repeated and experienced and/or practiced.
		Association	The intangible attribute represents human associations with a place, element, location, or environment.
		Community	The intangible attribute represents a community or society itself (its members or specific individuals or groups) and/or their cultural identity or diversity.
	Process	Planned	The intangible attribute is an action, change, or process that is intentional and planned, determined by strategies and policies (bureaucracy). The attribute is often a more short or medium term process.
		Not planned	The intangible attribute represents an action, change or process that is piecemeal, unintentional, spontaneous and natural, without intervention of policies or strategies. The attribute is often a long-term, slow process.

Fig 1-5. Veldpaus's attribute taxonomy (Veldpaus, 2015; Gutscoven, 2016)

LITERATURE REVIEW

Place attachment theories

Is place attachment always positive phenomenon? It should be a neutral fact about the existence of the bond between people and space. Place attachment is normally connected with positive experiences and emotions because a high level of agreement to the place is the basis of it, and place attachment represents individuals' yearnings to replicate positive experiences and emotions. (2009, Leila Scannell, Robert Gifford) However, the reasons to decrease the level of place attachment and the result lead by place attachment can be negative, such as prejudice against other regions or neglecting the potential risks around the neighborhood (Rita, Susana, Saul & Óscar, 2017).

What does the "place" of place attachment mean? What attributes are more relevant? A number of different models have been proposed in previous studies to clarify the definition and content of "place": (a) a particular position, location, or area in space. This is a general definition based on geographic logic, mainly reflected in the discussions about geographic scale (Cuba & Hummon, 1993), boundary (Tapsuwan, 2011), and home range (Powell & Mitchell, 2012). (b) According to the person–process–place (PPP) framework, the place dimension of place attachment is influenced by social and physical factors. (Kim and Rachel, 2004) The social settings include social arena and social symbol, the physical settings include built environments and natural environments. (c) Some place theorists identify three essential components for creating "place" as activities, physical attributes and conceptions. (Canter, 1997) (d) The meaning-mediated model of place attachment (Stedman, 2003) proposes that individuals do not become directly attached to the physical features of a place, but rather to the meaning that those features represent.

According to the four typical models for the place dimension of place attachment, we could assume that "place" is a psychological environment as the collection of three factors to which people can directly feel attached: physical environments, personal meanings, and social network.

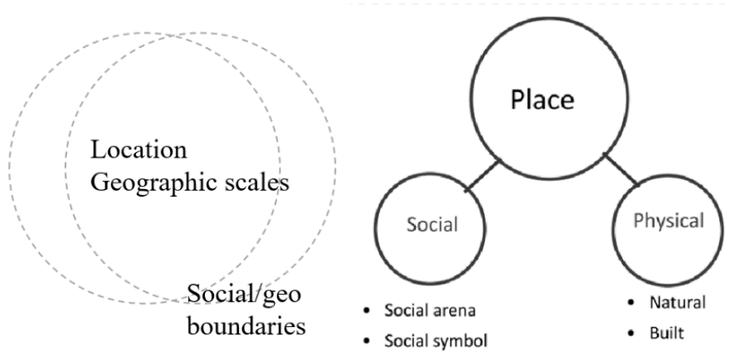
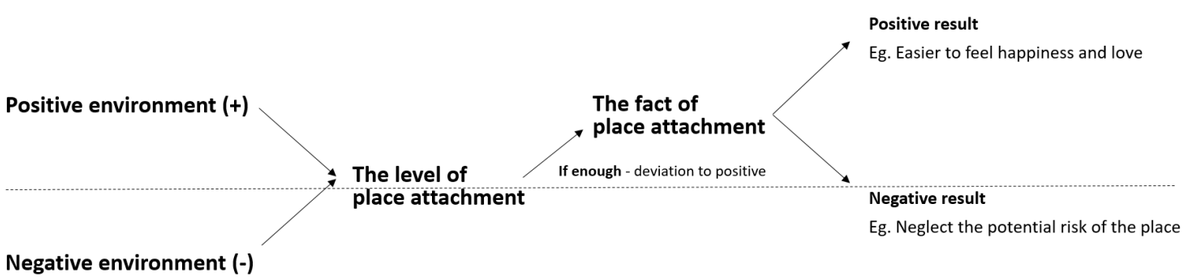
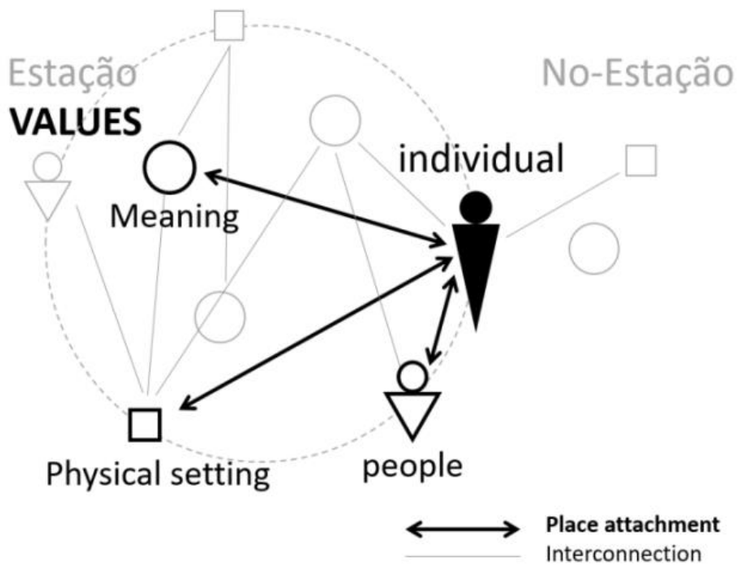


Fig 1-6. Diagram for positive and negative sides of place attachment (self-made)

Fig 1-7. Four typical models for the place dimension of place attachment and the model for this booklet (self-made)





LITERATURE REVIEW

Cultural mapping method

How could the research clarify the “place” for a specific site? The method of cultural mapping, also known as cultural resource mapping or cultural landscape mapping, is the label organizations and people (including UNESCO) concerned about safeguarding cultural diversity give to a wide range of research techniques and tools used to "map" distinct peoples' tangible and intangible cultural assets within local landscapes around the world. It is a mode of inquiry and a methodological tool in urban planning, cultural sustainability, and community development that makes visible the ways local stories, practices, relationships, memories, and rituals constitute places as meaningful locations. (Nancy Duxbury, 2005) It aims to capture those elements that are not easily counted or quantified but are key to understanding a place and how it is meaningful to its residents.

Besides, under the workshop format of the interview, cultural mapping could also be combined with some serious games or city games, like “Play the City”, a game technique developed in 2008 by Ekim Tan that can be (and has been) adapted to different stakeholders and situations. During the survey, a “City Game” board could be designed based on a map of the research area, forming a tabletop game with cards to engage participants.

Fig 1-8. a cultural mapping workshop case with 3D model of Ovalau Island, Fiji (Crawhall, Nigel, 2010)

Fig 1-9. “Play the City uses gaming to engage multiple stakeholders in resolving complex urban challenges.” (http://www.playthecity.nl/)

THEORETICAL FRAMEWORK

Place attachment: *a bond between an individual or group and a place that can vary in terms of spatial level, degree of specificity, and social or physical features of the place, and is manifested through affective, cognitive, and behavioral psych*ological processes.

Based on the definition of place attachment, five questions are normally used to measure the level of place attachment, also clarifying the contents of the "bond". *1. The environment can bring more convenience to my life. 2. I feel this place is part of my life. 3. I like to get involved in this place's activities. 4. I love this place. 5. I don't want to move my current living place.* Through value coding, we find the broad concept of "place attachment" includes more than collective emotional value, but also other secondary values. As an assumption, place attachment is relevant to social-emotional, social-spiritual, social-involvement (self-defined), social-dependency (self-defined), and economic-use values.

Place: *a spatial or psychological scope that can be described in a similar geographical manner, which includes three factors to which people can directly feel attached: physical settings, activities with people, and meanings.*

As it mentioned before, we assume that "place" is a psychological environment as the collection of three factors to which people can directly feel attached: physical environments, personal meanings, and social network. From the perspective of heritage, According to the extended attribute typology of Veldpaus (2015), physical setting belongs to tangible attributes, social network belongs to intangible societal attributes network and meaning belongs to intangible relation attributes. Theoretically, these three attribute categories will be the main reasons for place attachment.

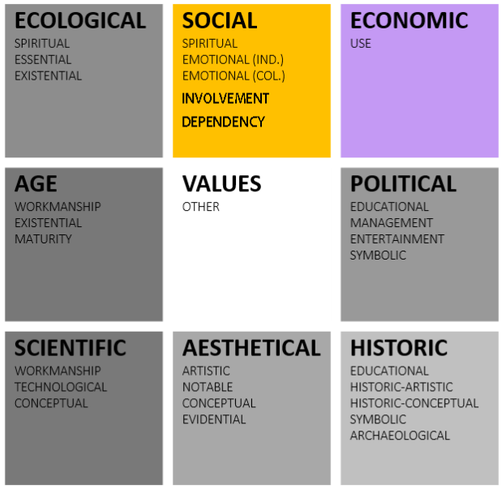


Fig 1-10. the relationship between place attachment and value theoretical framework (self-made)

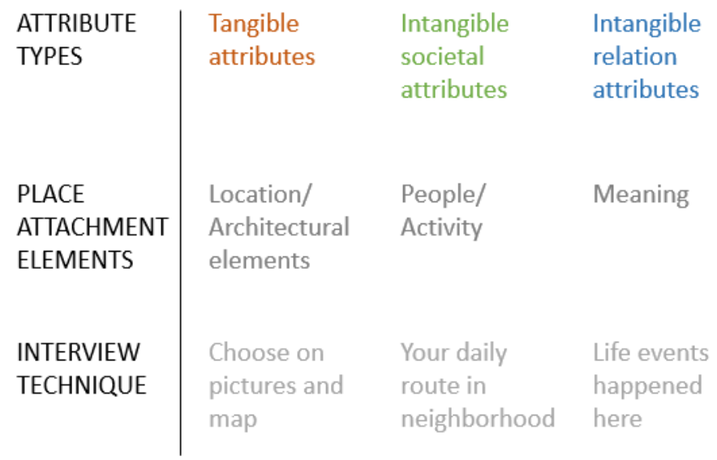


Fig 1-11. the relationship between place attachment and attribute theoretical framework (self-made)

METHODS & TOOLS

In preparation for not being able to engage a workshop of neighborhood residents during fieldwork, the research develops both workshop and street interview approaches for the cultural mapping method:

During the cultural mapping card game workshop, relevant attributes will be color-divided by physical setting, activity-social network, and meaning on one-third-sized card fragments. The game will invite participants to choose any number of initial fragments that are "important to my living in the Estação neighborhood" or "I feel an emotional attachment to". They will then choose one piece from each of the other two color card pools (or write down extra reasons) that can support the attached object, thus forming a group of completed cards for themselves. After completing the cards, participants will get the same number of mapping locations as the completed cards and a certain number of semi-transparent cards to measure their level of place attachment. Based on the geographic center and self-decided overlapping of semi-transparent cards to form hotspots, participants could complete "My Neighborhood Estação".

In the case of cultural mapping street interviews, the participants will be asked first to write down what they like or dislike in the area from three perspectives: environment, activity, and meaning. They will write the answers on sticky notes, marking them on the map simultaneously. Then, participants will answer yes or no to five questions measuring their level of place attachment, like “whether I want to stay in Estação.” Based on the number of “yes” and “no,” they need to choose only five positive or negative attributes that support the choice from the list they wrote at the beginning and explain the reason. In this way, the attributes related more to place attachment can be figured out. This method can provide two groups of expected results: the first result is the different values with their frequency for different generations from the place attachment cards’ value coding; the second result is the place-attachment hotspot map with the information about primary attachment attributes.

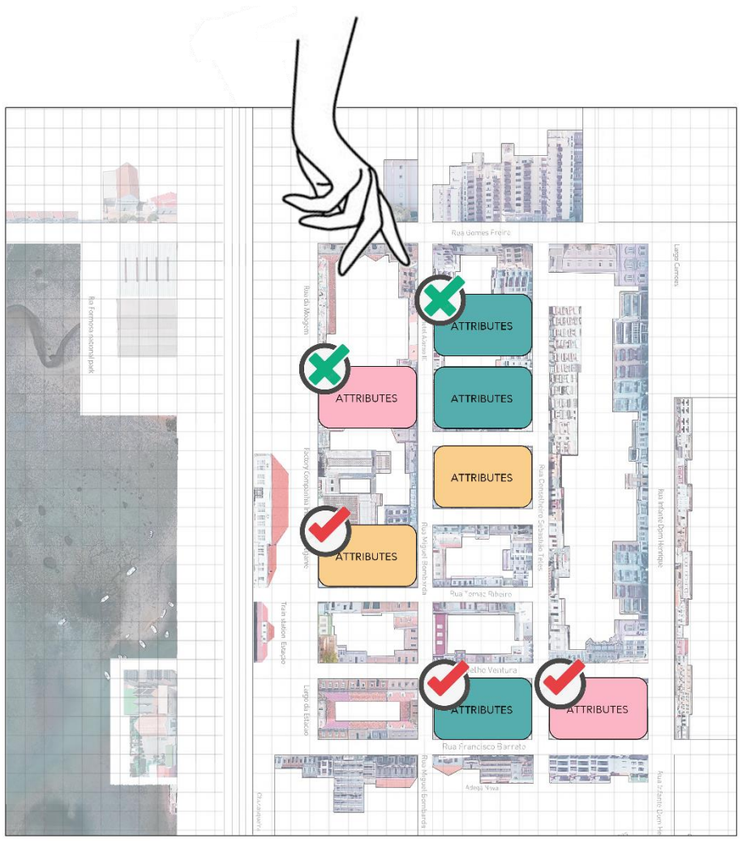


Fig 1-12. design of neighborhood map for cultural mapping

Location/ Architectural elements in Estação	Important People/Activity in neighborhood Estação	Personal Meaning about neighborhood Estação
My home	**Walk my dog**	**“Home”**
My working place	**Talk with Neighbors**	**“where I grew”**
The bar	**Have drink with Friends**	**“where I pass everyday”**
The train station	**Leisure activity with Family member**	**“where to earn money”**
The path by the sea	**Work with colleague**	**“Place with heavy traffic”**
The Natonal Park	**Doing exercise by my self**	“place near to the sea”
The sea	Waiting the train/bus	“place of escape”
The Bombarada street	Cultural events with public	“an abandoned place”
The factory	Nature or urban sightseeing	“Place where a lot of people died”
The tower of factory	Go fishing	“Place with history”
The facade of 19th century buildings	Cycling	
(Self-writing)	(Self-writing)	(Self-writing)

The neighborhood environment can bring more convenience to my life (Y / O / N)
I feel the neighborhood of Estação is part of my life (Y / O / N)
I like to get involved in Estação neighborhood’s activities (Y / O / N)
I love the neighborhood of Estação (Y / O / N)
I don’t want to move my current working/living place in Estação (Y / O / N)

Location/ Architectural elements in Estação	Important People/Activity in neighborhood Estação	Personal Meaning about neighborhood Estação
which support you to choose Y/N	which support you to choose Y/N	which support you to choose Y/N
		(5 only)

5-1 The café owner, lady

Tangible attributes
Intangible societal attributes
Intangible relation attributes

POSITIVE *2

① **I like to watch very different people pass by, I like to talk with very different people**

② **Working in a café that next to the train station support me to meet new and different people**

.....

I like the train station, it is an important building for the whole city

The station support the movement of tourists, and help to expand the city

.....

This place means “working place” for me

I like to work here in a calm neighborhood

We have very nice people living here

NEGATIVE*3

① **I don’t participant in neighborhood activities**

② **There is very few public space in Estação to support any activities**

③ **There is no activity in this neighborhood**

Fig 1-13. street interview method and attributes analysis sample

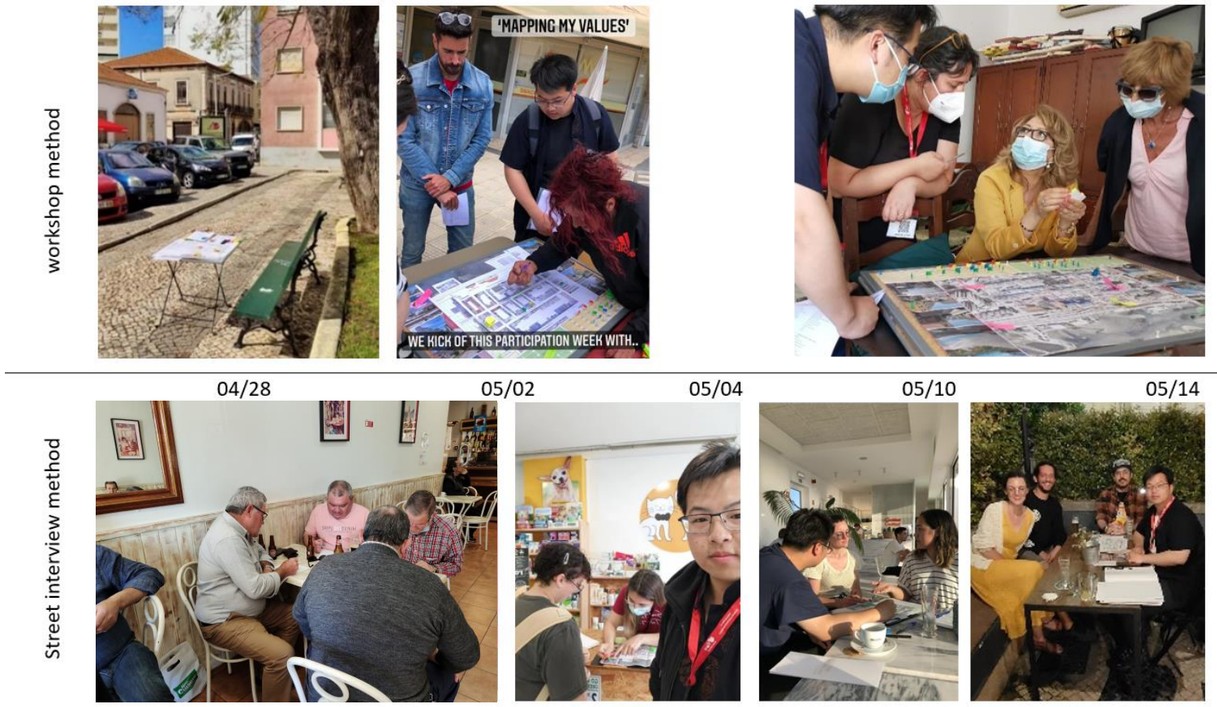
FIELDWORK APPLICATION

During the Faro fieldwork, we found Estação is a neighborhood with a very old population and it is difficult to engage the elderly to organize a workshop. Due to the language barrier, communication with them is possible only when the interview is supported by translators. Eventually, the fieldwork decided to rely more on the simplified and efficient street interview method and gathered the answers from 42 Estação residents (27 elderly, 12 adults, and 3 teenagers). Apart from visiting different working places in Estação, the street interviews focused on engaging people relaxing in cafes. It was always easier to approach people in a less formal way, through which people were more open to sharing their opinions and memories.

As part of the public engagement, we found that the interviewing activity itself also exerted significant influence on the site and residents. In the beginning, our researchers felt guilty about taking up the interviewer's time but later found that many of the participants enjoyed it. Some of the participants at the bar party were very happy that our presence gave them a new topic and started to interact spontaneously based on this. Some other participants were also very supportive of this type of environment-related research, believing that the community needs such attention and discussion to become better.

Fig 1-14. The timeline of two types of fieldwork workshop

Fig 1-15. Public engagement in Estacao



SURVEY RESULTS

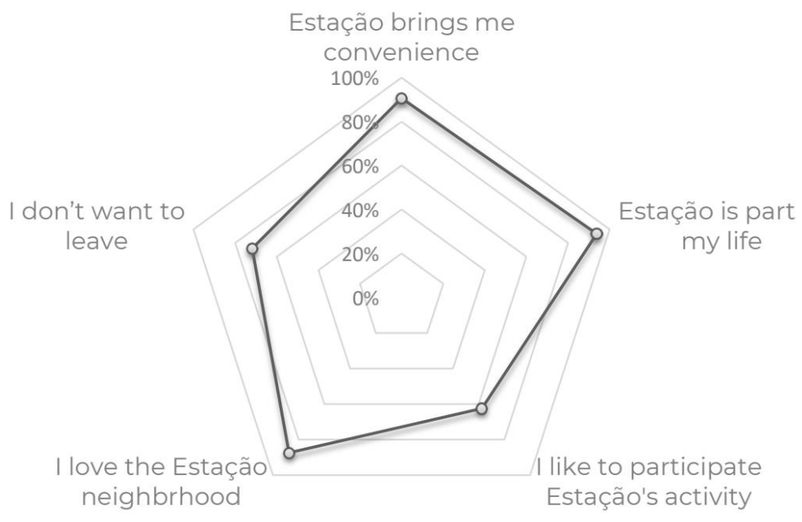
Sub question 1: Do local users feel place attachment to the Estação neighborhood? Result: People love Estação, they feel more attached to the edge areas of the neighborhood.

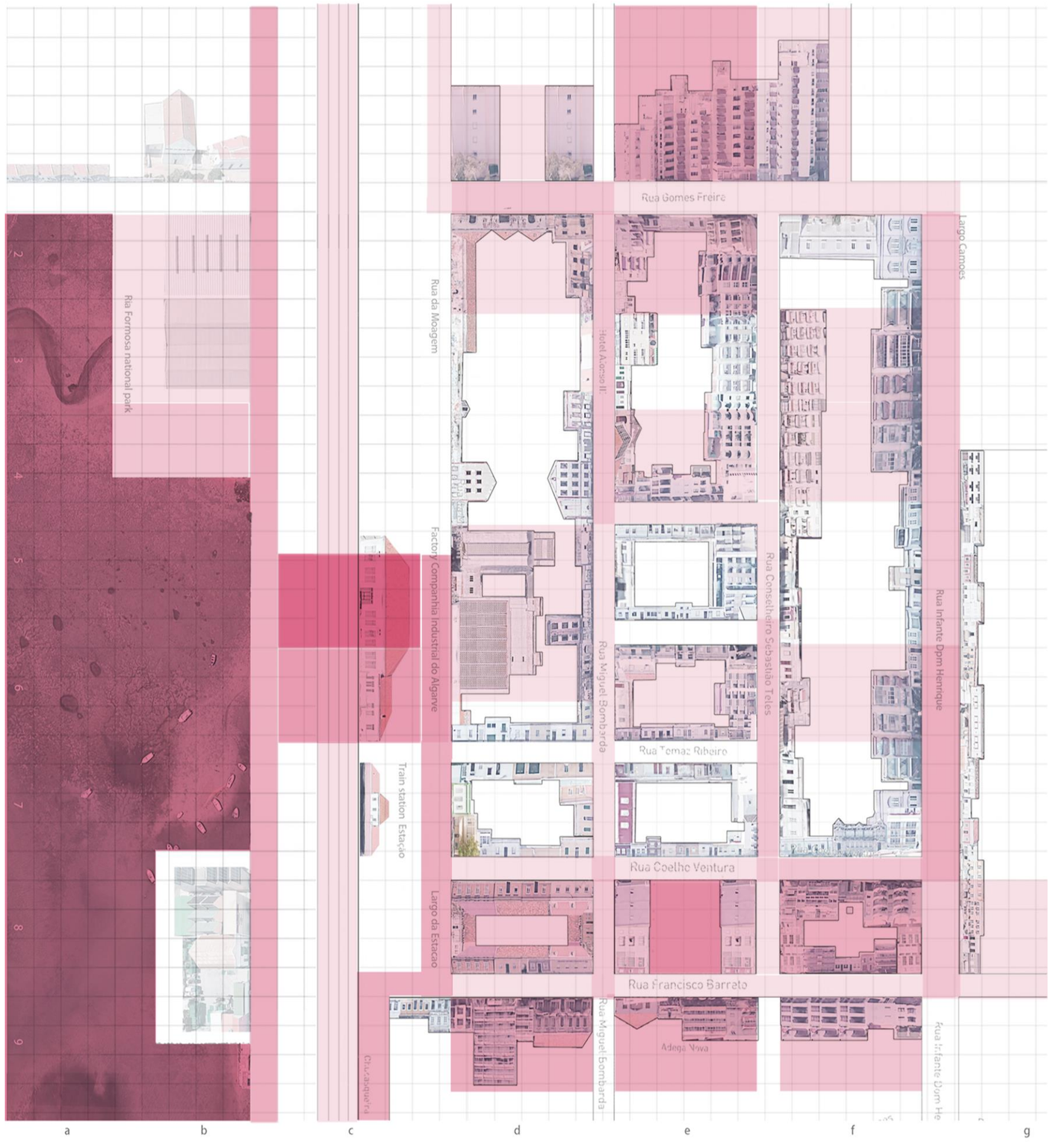
The first group of findings focuses on the current emotional attachment condition of residents in Estação: 90 percent of people love this place, with 81% of the answers being positive for all five questions. People also identify Estação as part of their lives and enjoy its convenience. The only problem is that there are not enough activities to participate in, which makes the site less attractive for new residents to stay in.

Then, through the overlapping of participants' drawings on the map about the locations that they like, the research provides the place-attachment hotspot map, where we could find that people feel more attached to the edge areas of the neighborhood. Some participants explained that Estação is a quiet neighborhood with a proper distance from all the busy areas around, which makes the site even more charming for them.

Fig 1-16. the measurement of place attachment

Fig 1-17. the hotspot map of Estação area





SURVEY RESULTS

Sub question 2-1: Which values are more relevant to residents' place attachment? Finding: Value type hierarchy: Social > Economic >> Ecological > Aesthetical >> Others

When we focus on the 3rd and 4th age groups in the value result, we would see the value type hierarchy order as Social > Economic > Ecological > Aesthetical >> others. Social and economic values are connected with the definition of attachment, while it is out of the hypothesis that the ecological and aesthetical values are so important, whose figures are even higher than that of economic value for the elderly. During the interview, residents emphasized their memories and social networks when talking about their personal emotions to Estação. In descriptions of the landmarks in the neighborhood, the functional and aesthetic values of the buildings were emphasized, while their historical values were rarely discussed.

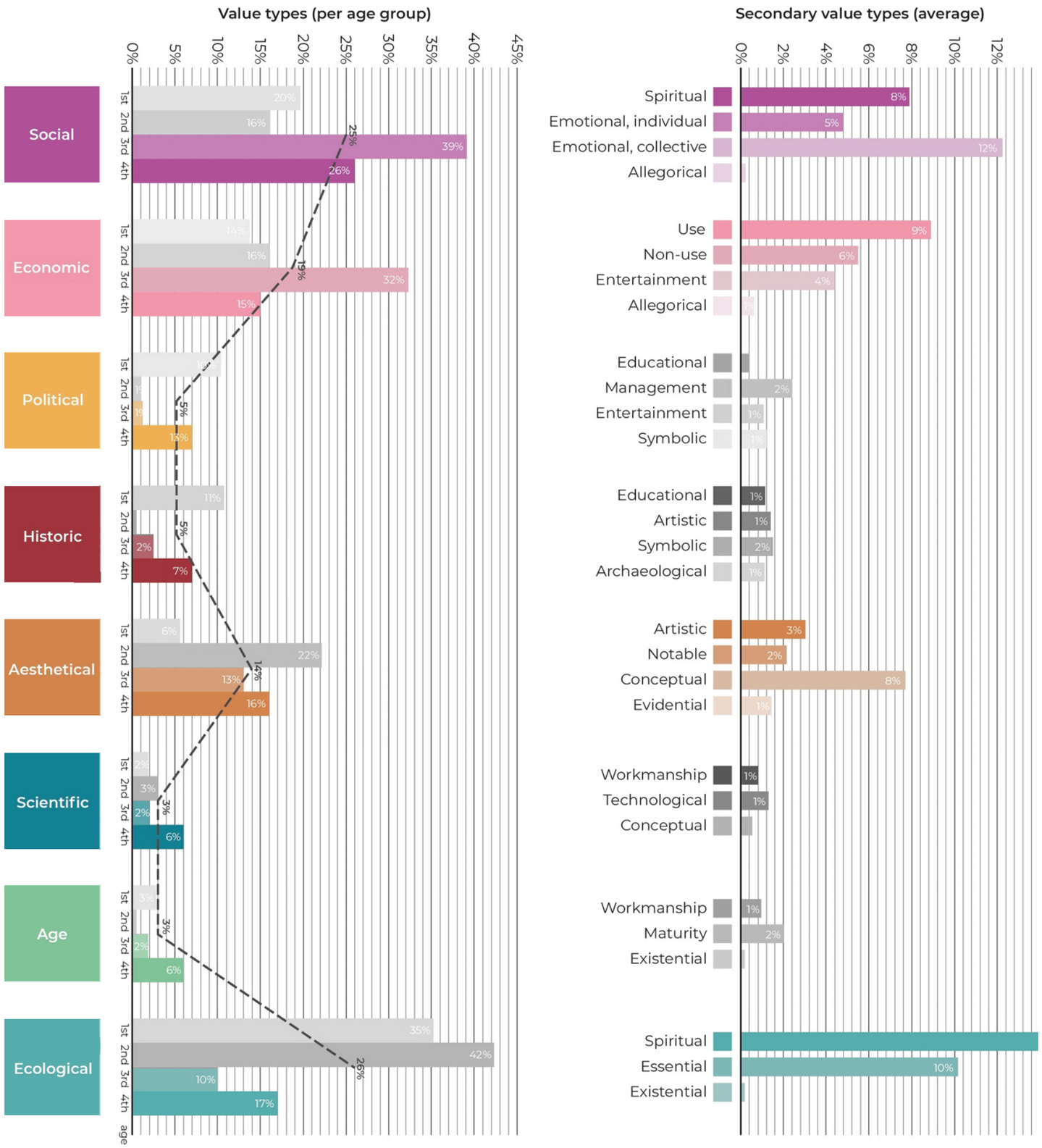


Figure 1-18: The four highest rated values from research. Made by author.

SURVEY RESULTS

Sub question 2-2: Which attributes are more relevant to residents' place attachment? Finding: Attribute type hierarchy: (I)Social > (T)Asset > (I)Relation >> Others.

When we focus on the 3rd and 4th age groups at the first level of the attributes sheet, it shows that people feel more attached to intangible attributes. This result comes the high proportion of (I)Social, (I)Relation, and (T)Asset attributes among the second level attributes, which meets the prediction from the theoretical framework. The figure of (T) area is exaggerated because words like "this place" "neighborhood" and" Estação" repeat continually during the interview without concrete meaning.

The third level of analysis broke the previous six subcategories of attributes into eighteen subcategory types, among which seven of the attributes arouse more attention from both adults and the elderly. The seven important attributes are (I) Social – Community, (I) Social – Use, (I) Relation – Relation, (I) Relation – Character, (T) Asset - natural element, (T) Asset - Urban element, and (T) Asset – Building. Some more specific answers can be distinguished on hotspot maps like the train station, bar, my house, the square, and the sea. There are also highly repeated intangible answers like meaning, memory, and quiet atmosphere; social attributes like friends, family, drink, talk, exercise, and so on.

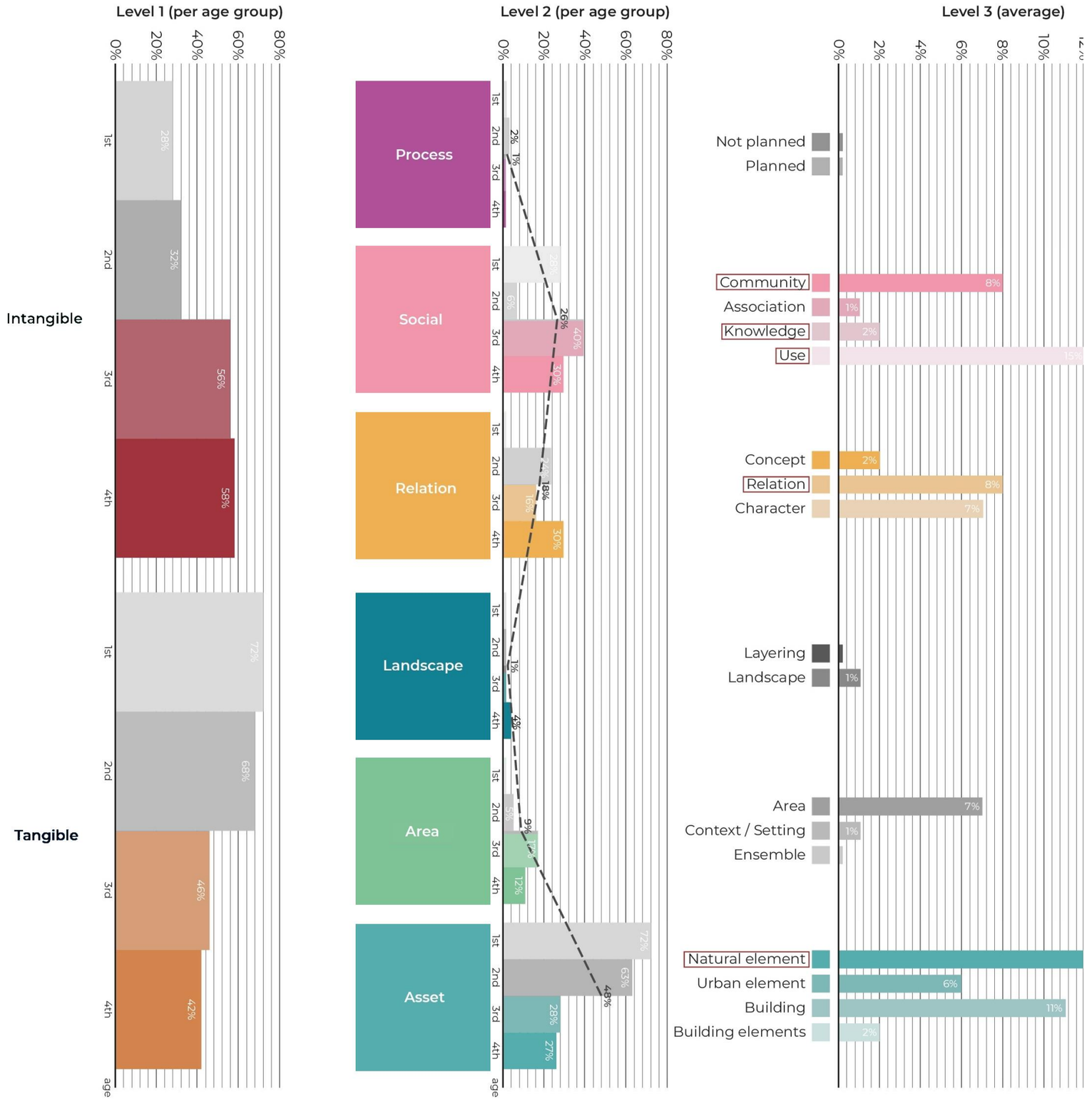


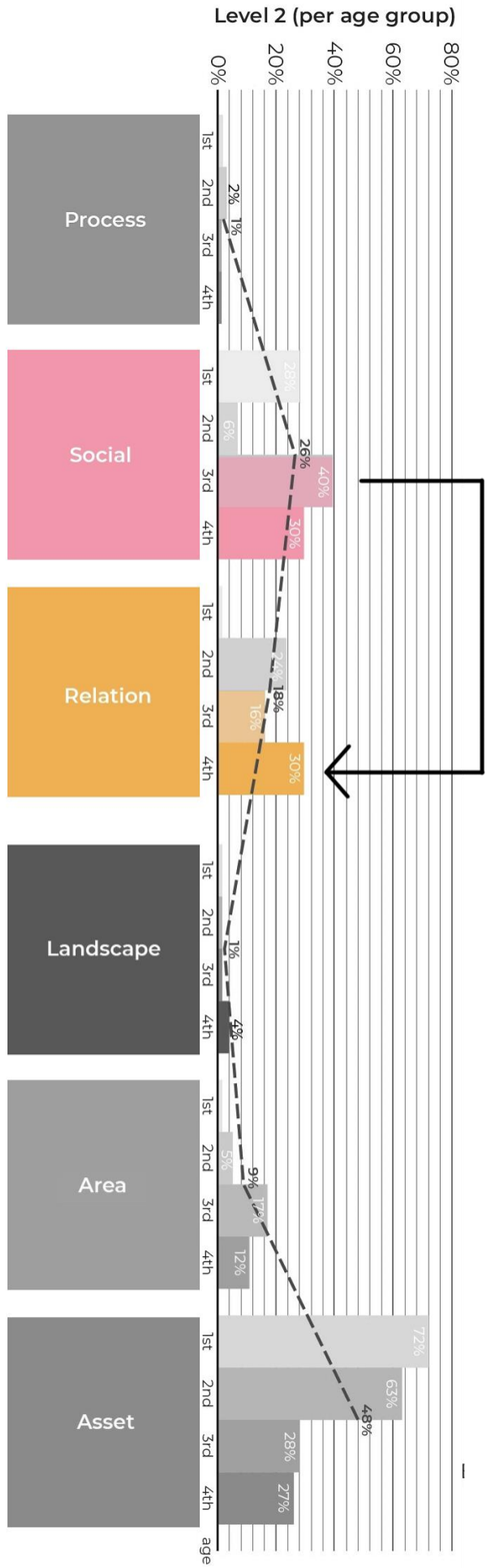
Fig 19. the three levels of attribute diagrams. Made by author

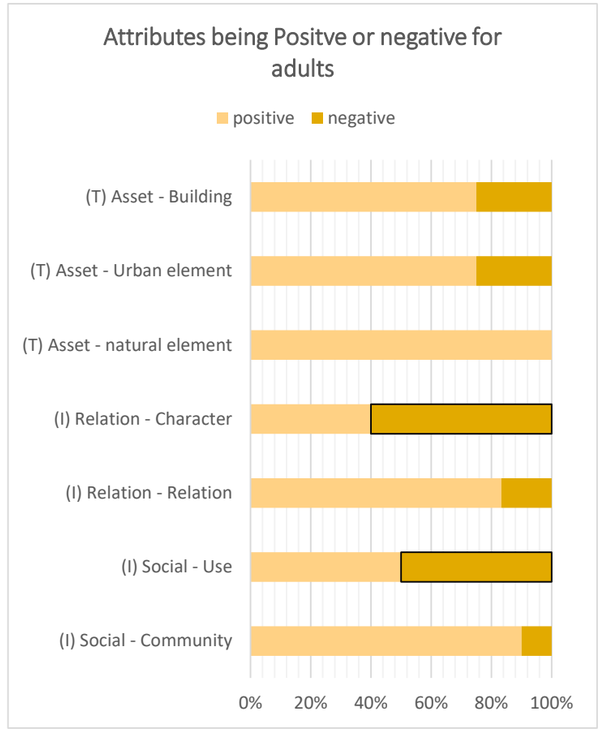
SURVEY RESULTS

Sub question 3: What are the differences between different generations' place attachment? Finding: There is a translation from (I) social attributes to (I) relation attributes between adults and the elderly. The adults focus on economic value much more than the elderly.

From the intergeneration perspective, the biggest finding is that there is a shift in focus from (I) social attributes to (I) relation attributes between adults and the elderly. In some cases, use (societal attribute) turns to important memory or meaning (relation attribute) when participants became elder. [1]

Another big difference is that adults focus on economic value much more than the elderly. This is the biggest mismatch among all the value types, also causing their disagreement with each other on use and character attributes: adults feel much more negative towards character attributes because they wish the neighborhood atmosphere (relation-character attribute) to be lively while the elderly enjoy the quiet atmosphere. [2] Besides, adults are very dissatisfied with the public spaces and the possible activities (social–use attribute) that Estação could provide while the current activities are enough for the elderly. [3]





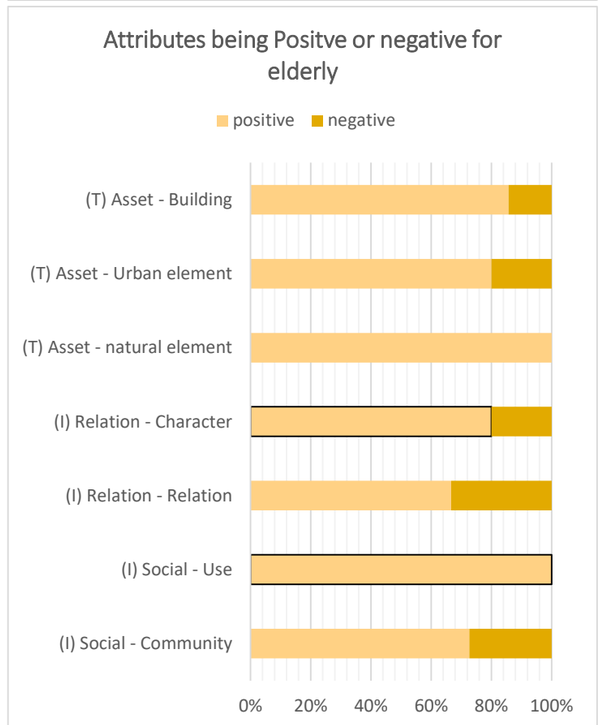


Fig 20 left. The shift in focus from (I) social attributes to (I) relation attributes

Fig 21 right. The positive and negative attributes percentage for elderly and adult

[1] The phenomenon of attribute shifting could be explained by the experience of one elderly participant: he used to raise his kids around the neighborhood and the square between two pink buildings was the place where his kids played. Nowadays the kids have grown up and the participant lives alone, but he still walks to the square from time to time just for watching other kids playing. So in this case, the social attribute "my children" is translated into a relation attribute during the time.

[2] Adult participants once describe the quiet atmosphere of Estacao as "the possible place for drinking coffee with friends, but never for beer" and "a boring street drama by the elderly".

[3] The elderly are very satisfied with the café around the neighborhood while half of the adults want more functions like a nightclub. Adults need more entrainment activities, they also need a proper playground or park for their kids to play in.

CONCLUSION

As a phenomenon referring to the bond between people and the place, place attachment does happen in the Estação neighborhood. Residents love their neighborhood, and they feel specifically more attached to the edge areas of the neighborhood with more activities. Based on the value coding of residents' descriptions, when we discuss the place attachment in Estação, we are talking about four values types (Social, Economic, Ecological, and Aesthetical values), three attributes types (social, relation, and asset attributes), and two groups of stakeholders (adults and the elderly). Specifically, memories of site experiences, interactions with family and friends, and the characteristic atmosphere of the site contribute to the people's attachment to Estação. The main difference between older and younger stakeholders is the different emphasis placed on social attributes, relation attributes, and economic value.

In the process of research, the fieldwork revealed the important contribution of gaming interviews and public engagement to the community, data analysis reflected the strong support from the value-attribute coding method. As the main results, the research obtained a hotspot map of place attachment, the hierarchy sheets of values and attributes, and an intergenerational comparative analysis. These will contribute to the site choosing, redesign proposal, and clarifying stakeholders' demands in the later design process. Furthermore, the next paper of the booklet will introduce how the results of the cultural significance survey are translated through the redesign model and support the value-based design to strengthen residents' relationships with Estação.

Paper 2:

Value-based Redesign

SITE SELECTION

Location and background

As what the cultural significance survey mentioned, Estacao is an aging community with the problem of abandoned buildings. On the one hand, this situation affects residents' quality of life, especially for young adults; on the other hand, it also shapes the quiet and safe characteristics of Estacao. According to the hotspot map of residents' attachment, the edge areas of the neighborhood are more suitable for introducing new public spaces with new activities and the north-western corner is the only blank area. Therefore, the northern part of the abandoned milling factory has particular potential.

As the chapter about the problem statement shows, what is going to happen on this site is a high-rise dwelling project with three towers. In terms of land ownership and current site density, a high-rise volume towards the sea is inevitable for this site, but the position of the heritage studio cannot agree with such a rough design that demolishes all old buildings and creates huge entrances along Bombarda Street, which will change the atmosphere the whole neighborhood. The ongoing construction provides the business logic of the project as the basis of designing, but my design will be very different from it.

In conclusion, the project decides to choose the northern part of the abandoned milling factory as the scope of design. This is a proper site to provide more activities and demands for residents without influencing the quiet atmosphere and other basic characteristics of the neighborhood, improving residents ' place attachment positively.

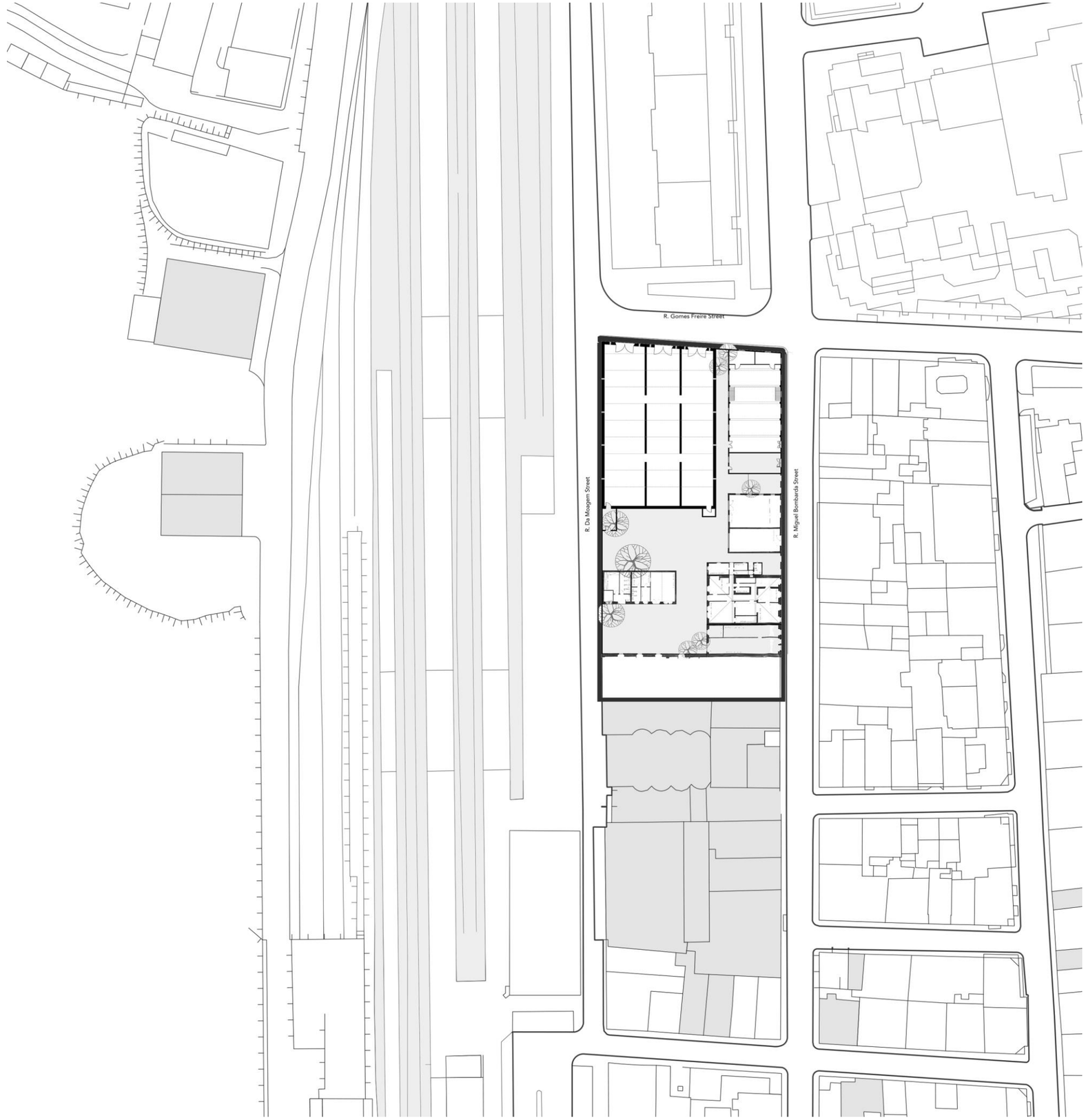


Fig 2-1. The site location and current site plan partly from the municipality archive

SITE SELECTION

Three structure types and two plots

In terms of age, structure, and materiality, the site includes three building types: 1. Stone and clay construction & wood roof framework; 2. Load-bearing brick wall & wood roof framework; 3. Steel-concert framework & factory crane beam. Then, the site analysis further divided the site into 2 plots because the different load-bearing construction of the two groups of buildings suggests their different directions in layout to connect with outdoor space. The architecture design will focus on plot B.

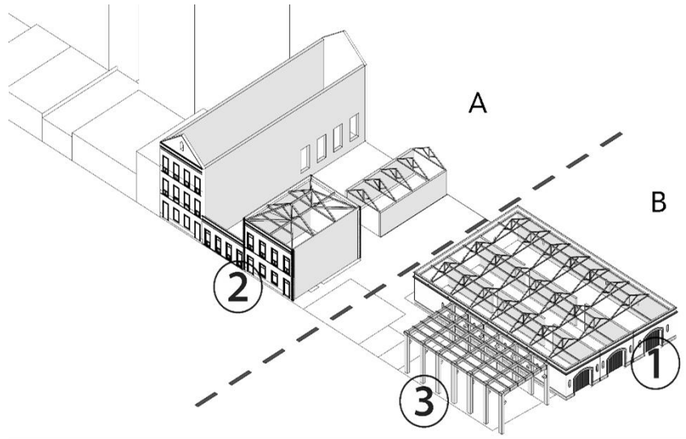
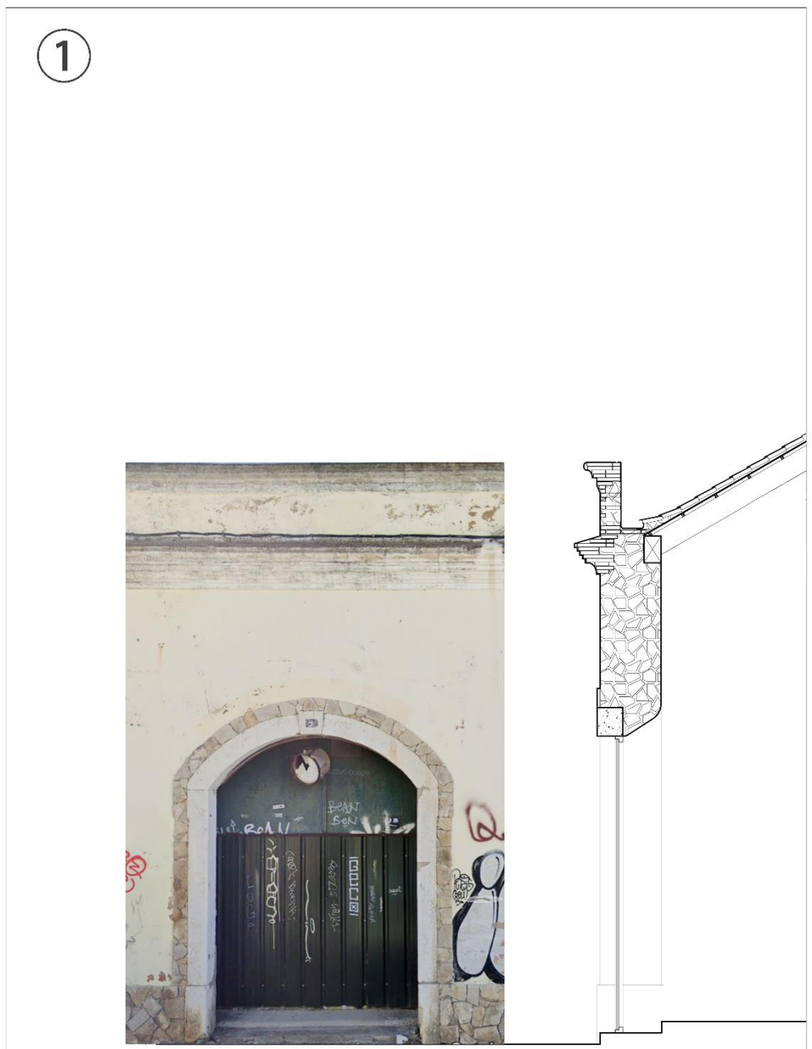
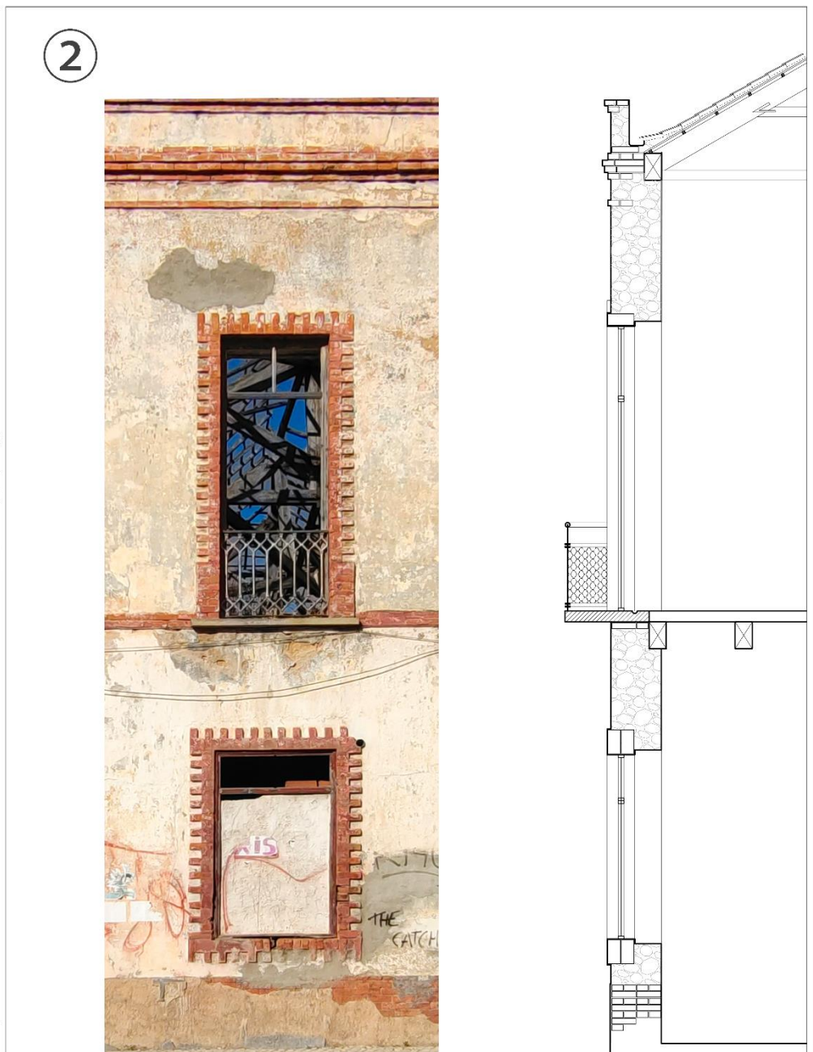
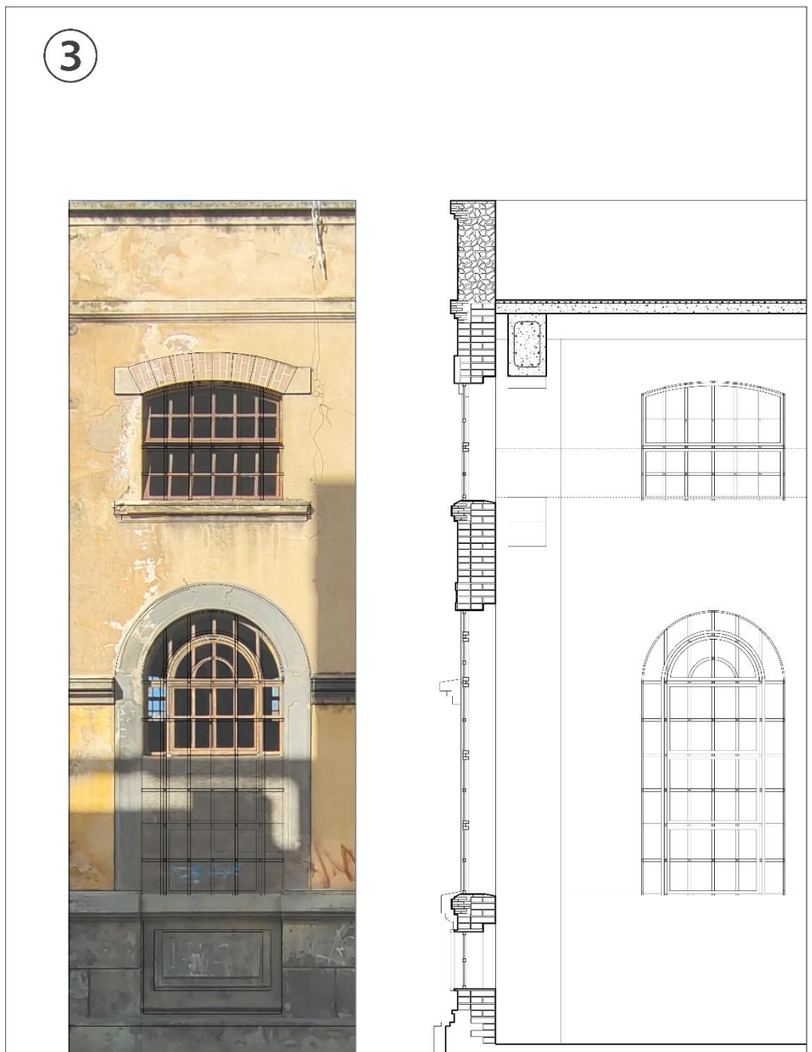


Fig 2-2. The façade fragments and wall details of three building types

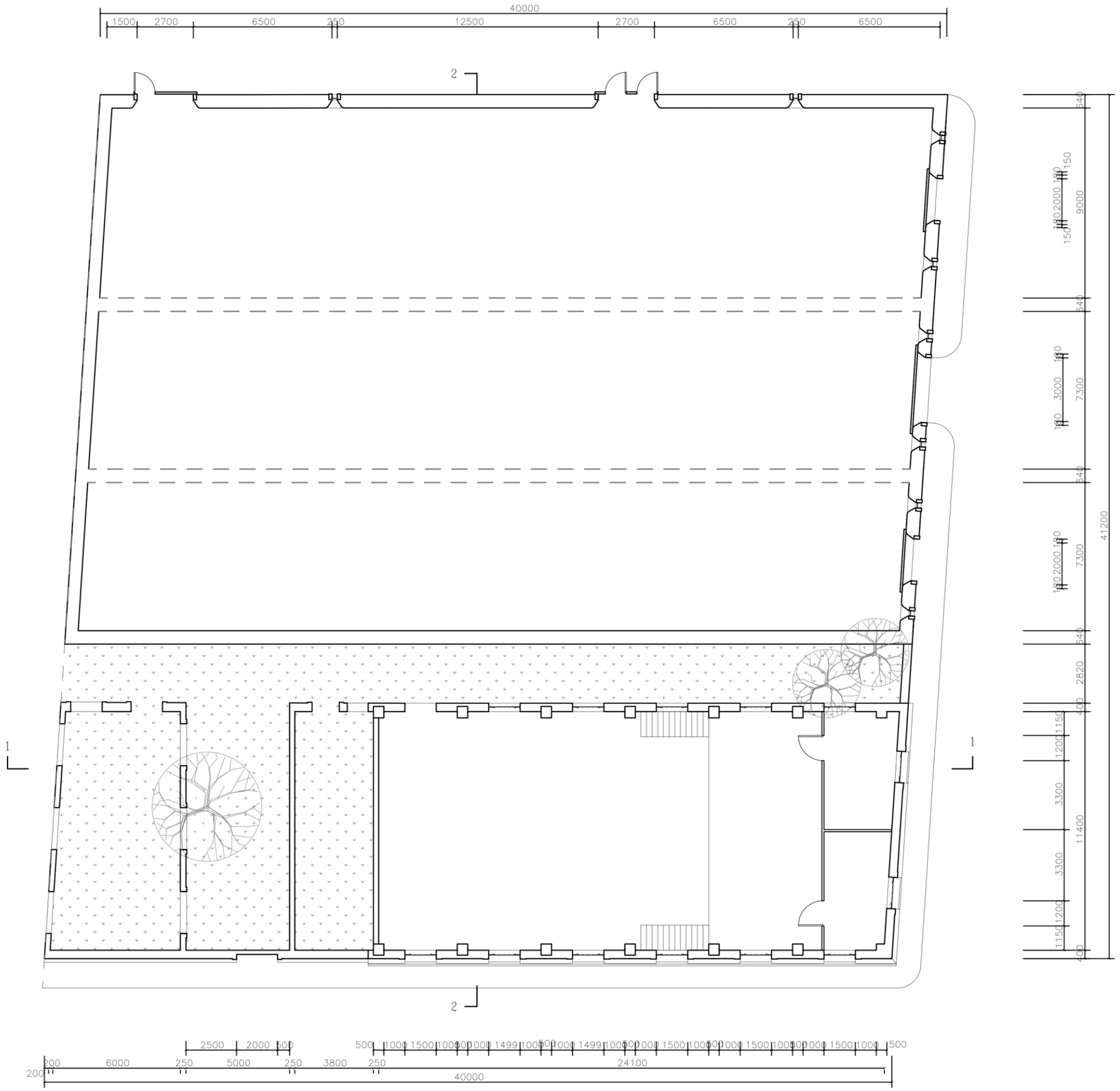






SITE SELECTION

Technical documentation of plot B

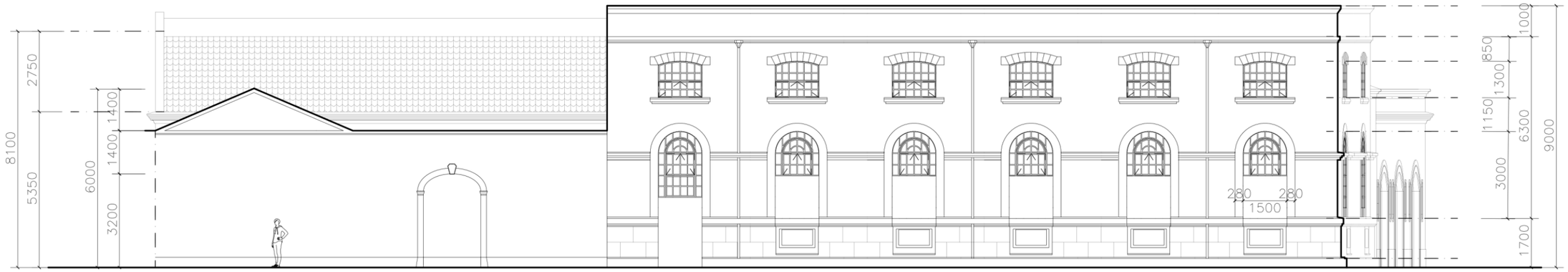


GROUND FLOOR PLAN 1:200

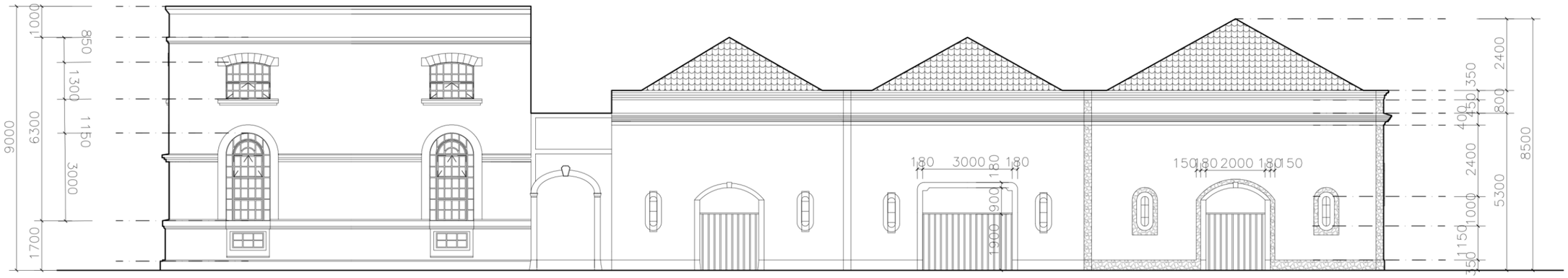
SITE SELECTION

Technical documentation of plot B

EAST ELEVATION 1:150



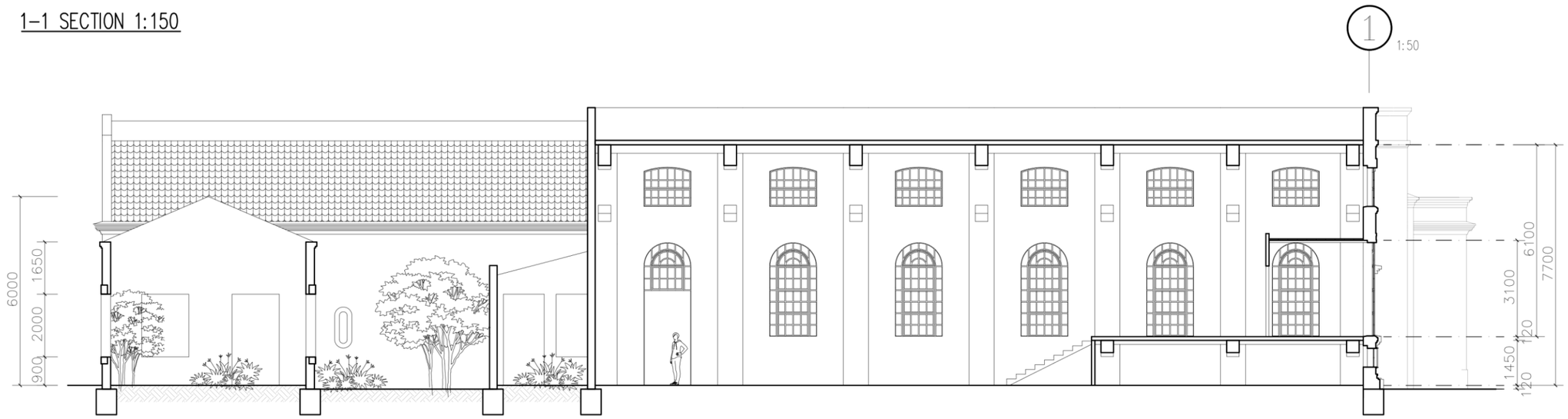
NORTH ELEVATION 1:150



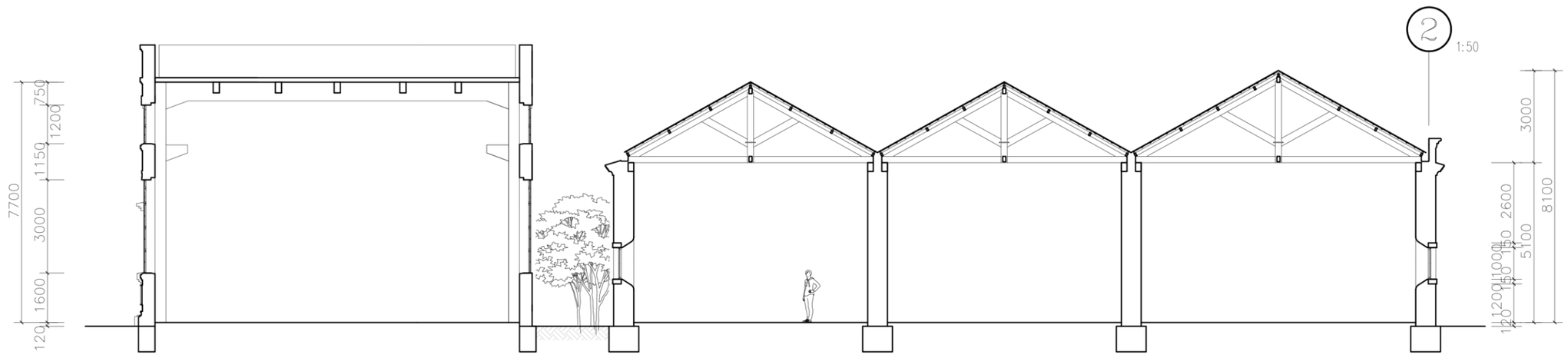
SITE SELECTION

Technical documentation of plot B

1–1 SECTION 1:150



2–2 SECTION 1:150



DESIGN PROPOSAL

The translation of fieldwork results

After the documentation drawing about site condition, another important basement of design is the project proposal as a translation of fieldwork results. The target is to combine the values and attributes in one redesign model and translate them into a clear and actionable proposal.

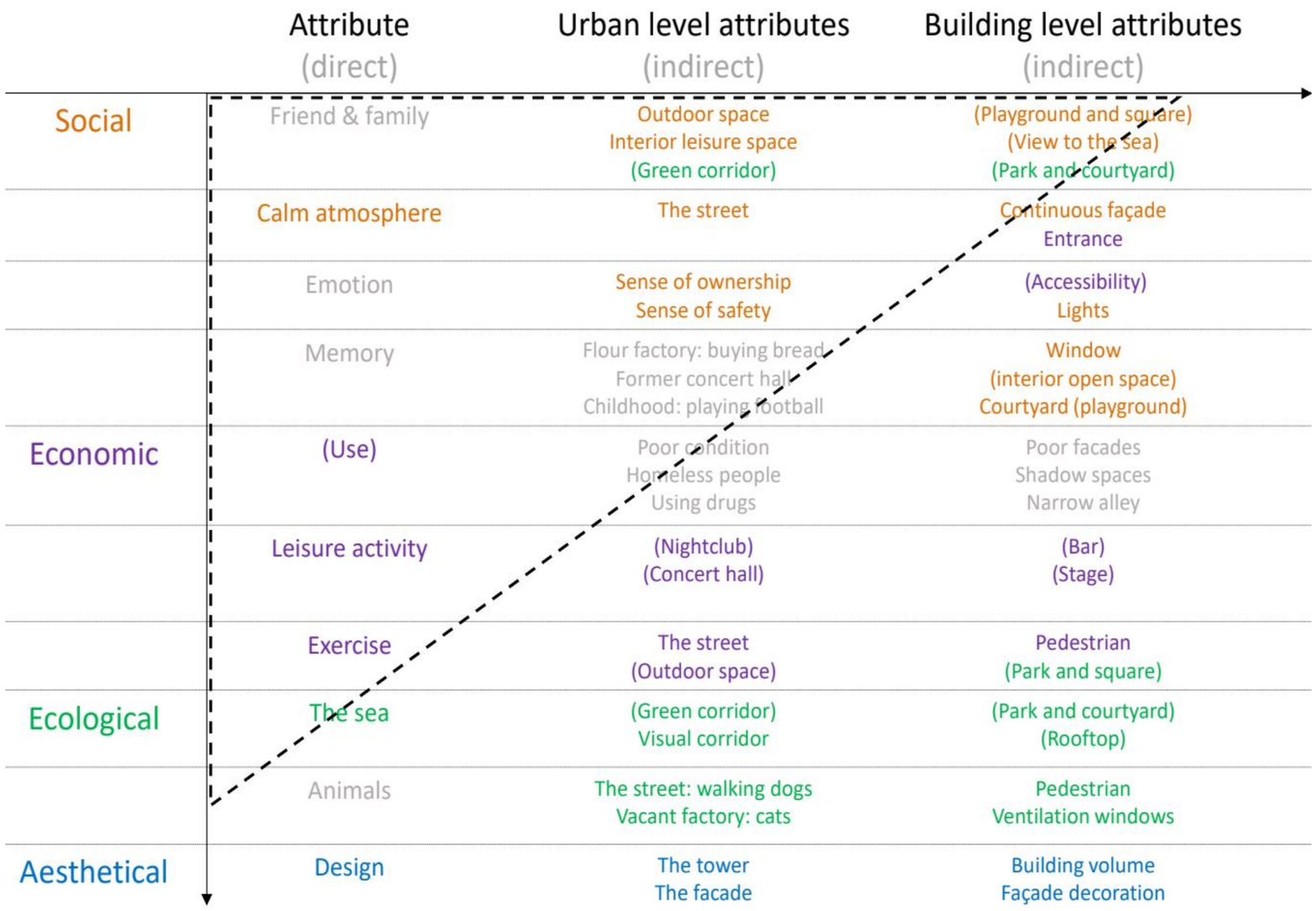
Firstly, the model translates the attributes result from the urban level to the building level. For example, one of the very high-frequency intangible answers from fieldwork is “I like Estacao because the neighborhood is quiet and safe”. At the urban level, what they mean are the three inner streets of Estacao including Bombadar Street. The reasons they told me include: the streets are long enough without branch roads, there is no place for people to gather, and they are bright at night. Therefore, at the building level, I could translate them into a continuous façade, entrances, and light through the window.

Then, the model takes two hierarchy orders to organize both the attributes the site currently has and the attributes residents want in the future. The cultural significant survey provides the value type hierarchy as Social > Economic >> Ecological > Aesthetical >> Others; and the attribute hierarchy as Direct > Indirect. In this way, the model gets the priority of project intentions. Because the triangle part is close to social and economic values and direct attachment attributes, the requirements inside need to be considered as the starting points of the redesign. As the result, the model provides the design proposal below.

Target: improve place attachment

1. (ADD) Make use of the outdoor space with nature and potential indoor activity spaces to support people’s interaction with family and friends, relaxation, and exercise.

2. (KEEP) Activate the abandoned areas without affecting the calm atmosphere of the neighborhood. Introduce new leisure use for the young generation without affecting the elderly’s memory and sense of ownership.

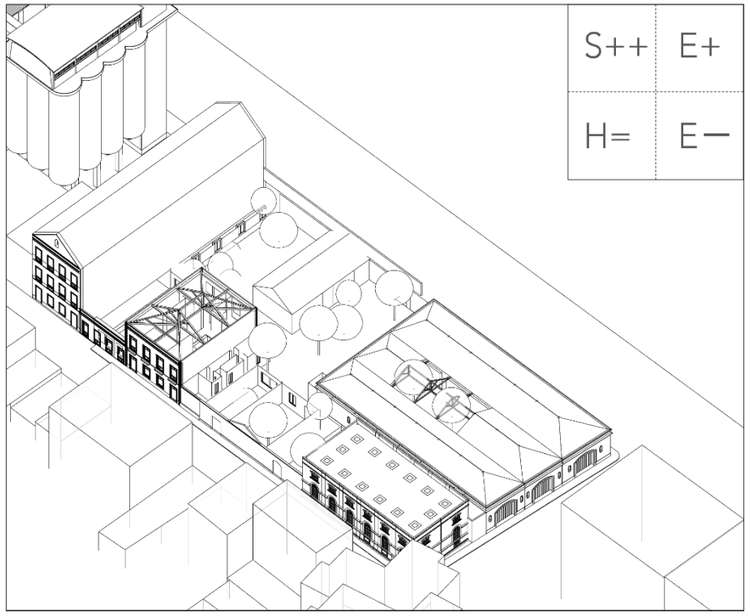


BLOCK ANALYSIS

The redesign start with block analysis. From a functional point of view, since the site is not directly connected to the sea and is on the edge of the city, the entertainment and commercial land use can only improve the ecological and social value to a limited extent. On the other hand, due to the good view and the accessibility brought by the station, the economic value of the site as a residential use land is very high, so the design will follow the background of the a residential function.

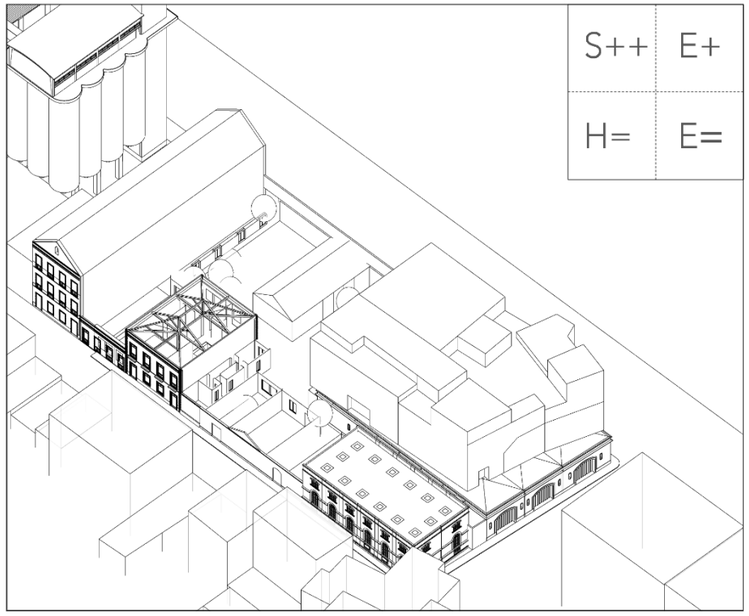
Entertainment use
(ecological value +)
no waterfront

city park
city square
museum
art gallery
industrial tourism
……



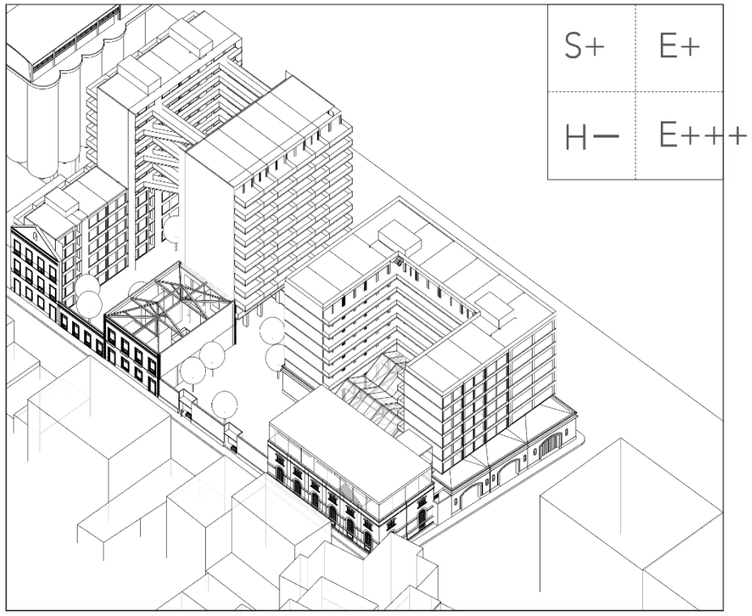
Commercial use
(social value +)
no public center or high-density area

Exhibition building
business center
Office building
public facility
(school/ hospital/…)
……



Residential use
(economic value ++)
make use of the accessibility

residential building
hotel complex
……

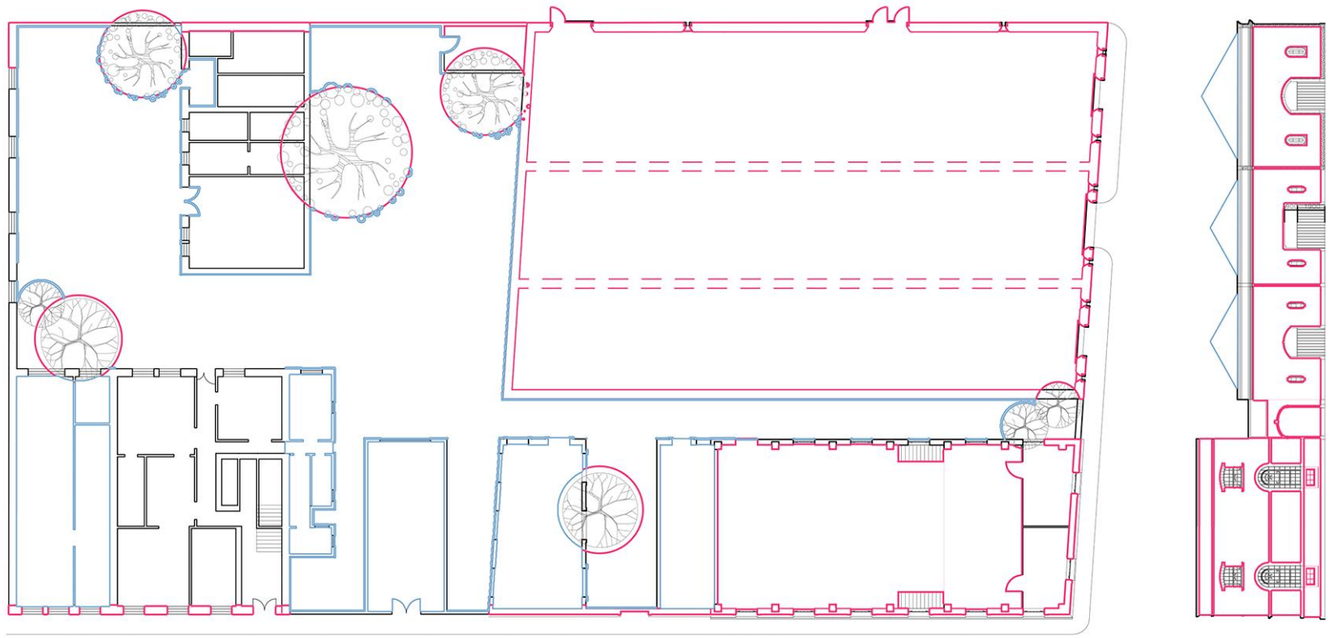


BLOCK ANALYSIS

From the perspective of space, the analysis about ground floor tries to keep the attributes from the fieldwork as much as possible, also introduces good-quality indoor-outdoor connection spaces according to the design proposal. The block analysis decides to take both plot A and B into consideration because the distance between vertical expansion volumes will influence the layout of ground floor. The preparation work is supported by the further clarified architecture level attributes we get from fieldwork:

For the first image, positive attributes are marked in RED, including the outdoor public space with nature, calm street atmosphere, and concert hall memory. The negative attributes are marked in BLUE, including the abandoned condition of the site, and the poor condition of certain structures.

The second image shows the first design of the ground floor based on ideas about courtyards in response to the design proposal. The designs that promote social value are marked in ORANGE; the designs that promote ecological value are marked in GREEN. Decisions relevant to keeping and demolishing are supported by the attributes in the first image.



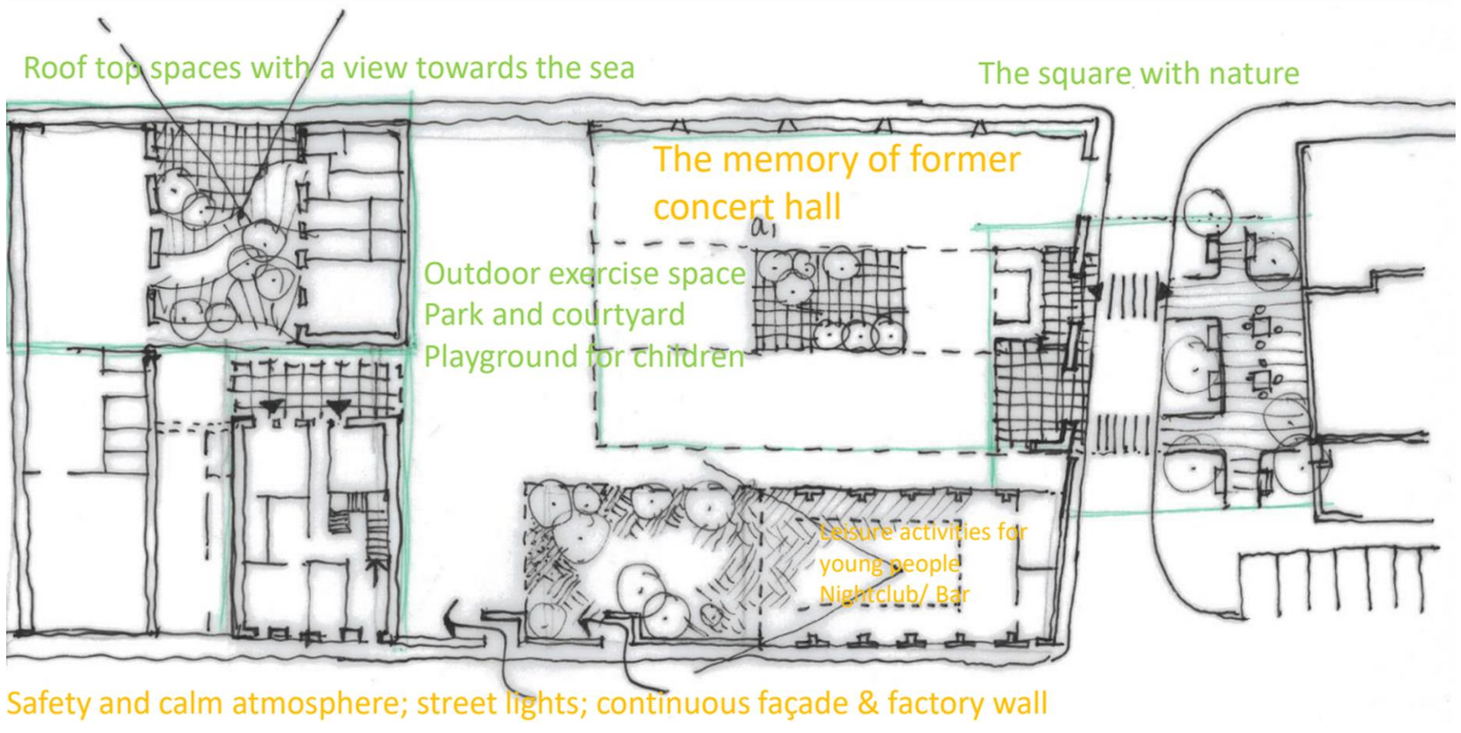


Fig 2-3 above. The architecture level attributes on site plan

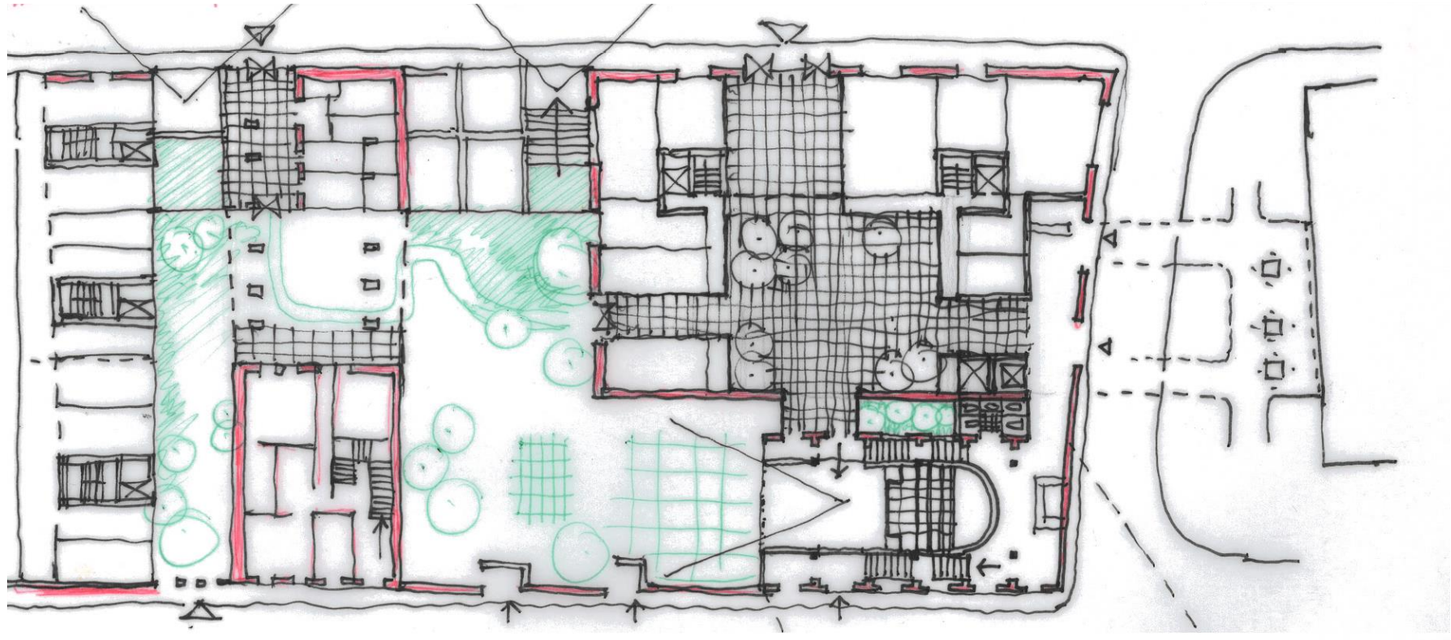
Fig 2-4 below. The first design of the ground floor only based on attributes and courtyards

BLOCK ANALYSIS

In a further design, the overlapping of the upper floor plan and the ground floor plan clarifies the limitation of vertical traffic and structural support to the public space on the ground floor. In order to decide the location and size of the research object, the design optimizes the volumes of the high-rise buildings based on the density and function of the actual ongoing project. Due to time constraints, the high-rise volume design has not been detailed and will just serve as a hypothetical design basis to facilitate discussions on the architectural design on the ground floor.

In consideration of the new traffic and construction needs of the vertical expansion, the ground floor design that follows the heritage layout was chosen to be the block analysis result. The first drawing highlights the old constructions in red and their relation with the traffic boxes servicing the vertical expansion spaces.

As the second image shows, the structure of public spaces from urban design decides the architectural focus. There are seven most important spaces that need designing in this project, including 3 entrances (a,b,c) for the site and 4 public spaces (1,2,3,4) inside: the café connected with the west entrance, the public living room with winter garden, the multifunctional theater, and the outdoor playground.



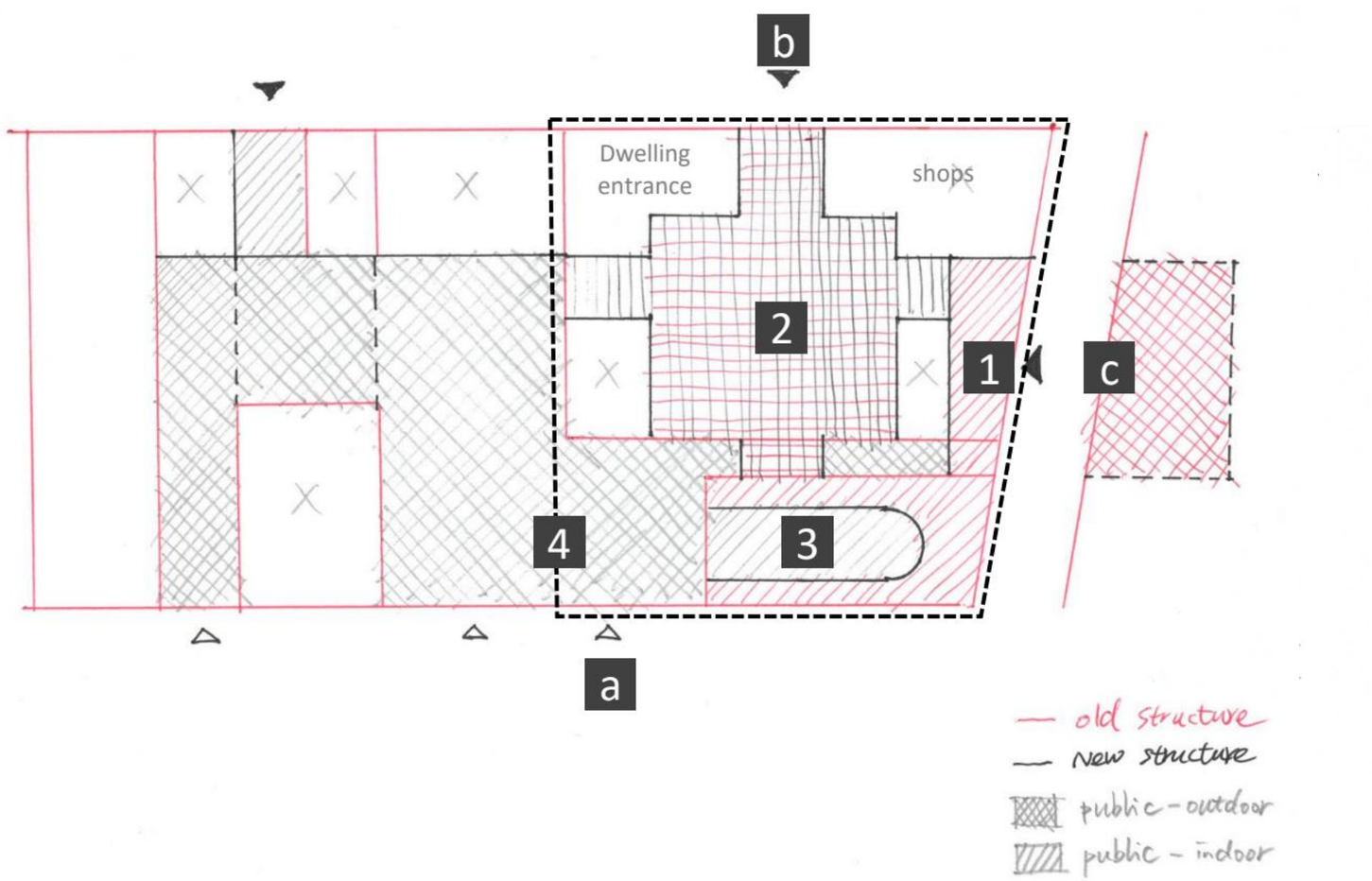
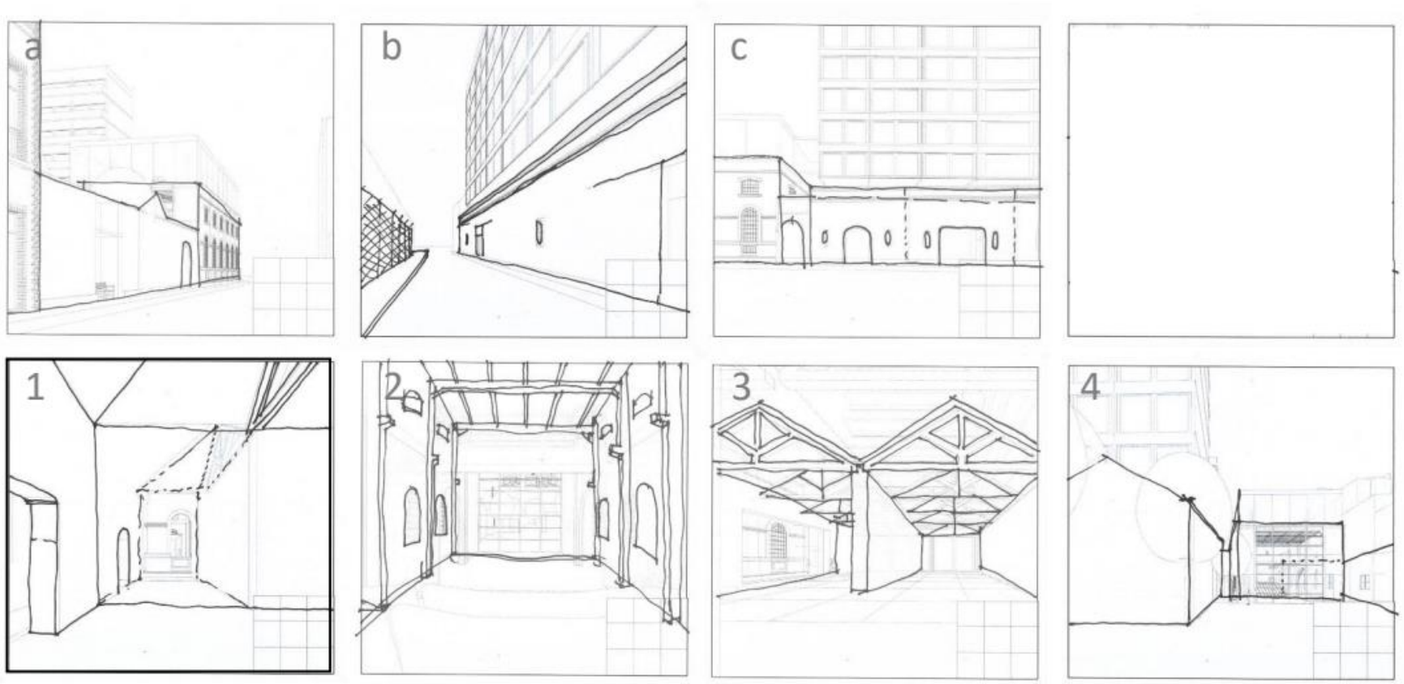


Fig 2-5 above. The ground floor as a compromise between the first design and high-rise towers

Fig 2-6 below. The result of public spatial structure

VALUE-BASED SCENARIOS

The scenario-making chooses the human perspective for the 7 spaces as research objects because they are closer to real experience. This paragraph will take the space 1 next to entrance c as an example to show how I create value-based scenarios. This is a corridor space which leads people to the little concert hall and connects both the street on the left side and the winter garden on the right side.



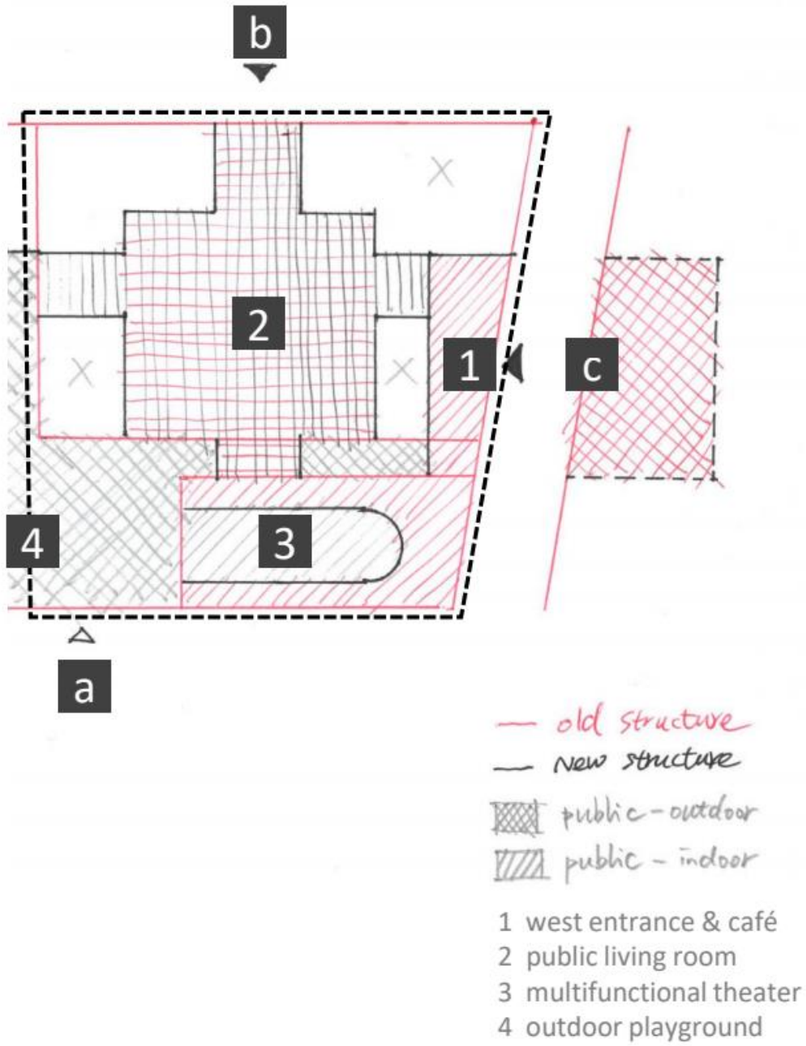


Fig 2-7 left. The seven scenes selected

Fig 2-8 right. Public spatial structure and the location of seven scenes

VALUE-BASED SCENARIOS

Firstly, the analysis lists all the attributes and their values in the scene. For example, all the built construction has historic value, and the wood truss of the roof has aesthetic value especially.

Then, the reasonable designs for each attribute will be evaluated through their influence on different values. For example, the ground could take the same material as the pedestrian to invite people coming into the building, which promotes the social value of the space; or setting café desks for relaxation, promoting both social and economic values.

In some cases, several designing options could happen at the same time, but sometimes we could only choose one option while the evaluation shows another option is also good but represents a different value. The second situation is what I think is controversial and therefore worth discussion. For example, keeping the original roof keeps its historic value, but adding a second floor provides more economic value.

After the analysis of all attributes, the value-based scenarios for space 1 are created based on the options about whether to keep the roof, with the staircase as the compromise of the second scenario to show the aesthetical value of the wood truss.

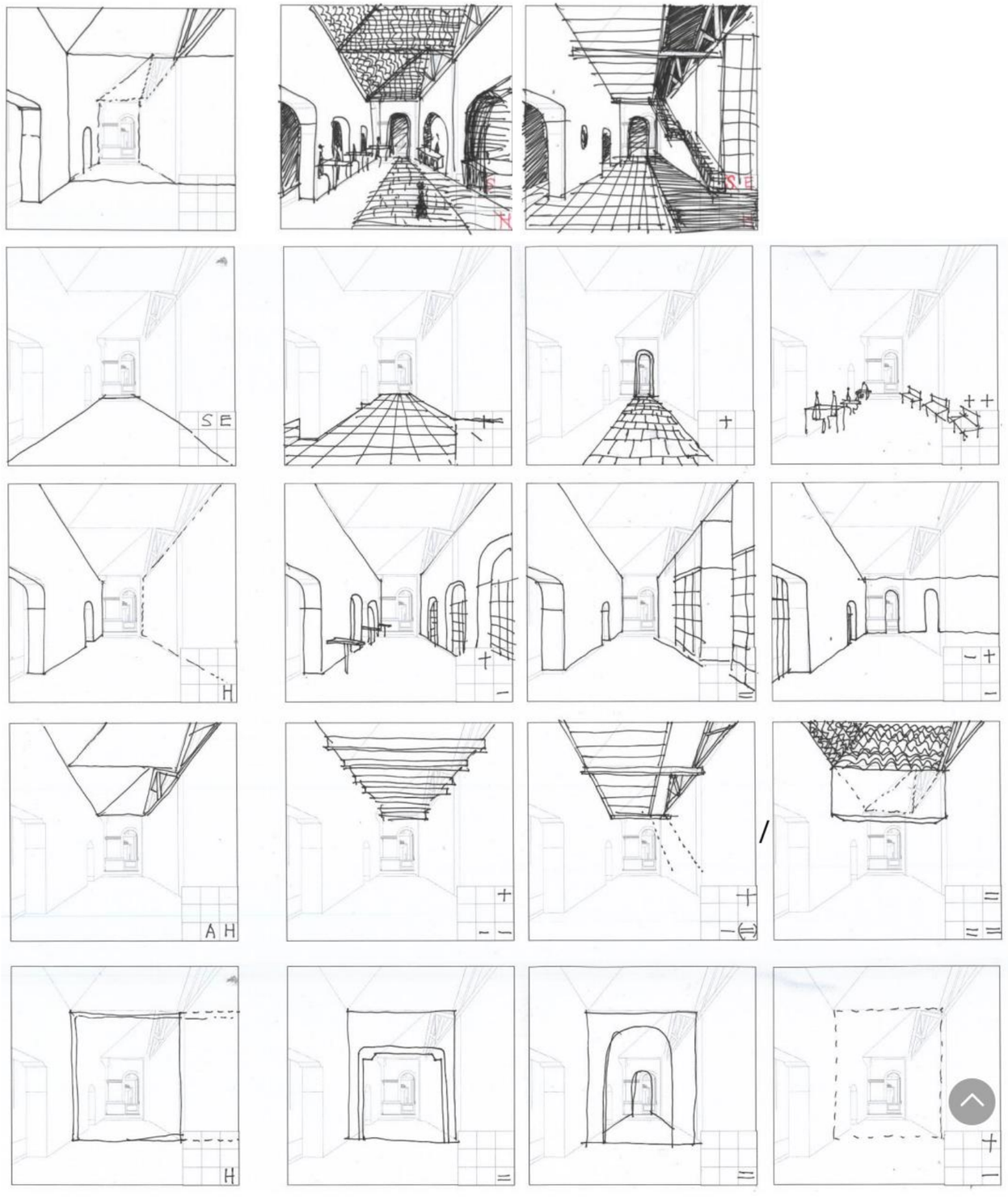


Fig 2-9 right. The scenarios-making process example of space 1

VALUE-BASED SCENARIOS

Through the same method, the scenarios for all 7 scenes were made, as well as the questionnaire through which stakeholders could choose their preference and explain the reason. There are mainly four value types involved: social and ecological values are the focus of the design proposal; economic and historic values are unavoidable for the heritage design.

As mentioned, some scenarios like space 1 are divided only into economic and historic. This division of scenarios doesn't mean social and ecological values are not considered, but the designing related to ecological value, such as decorating walls with plants, is not controversial.

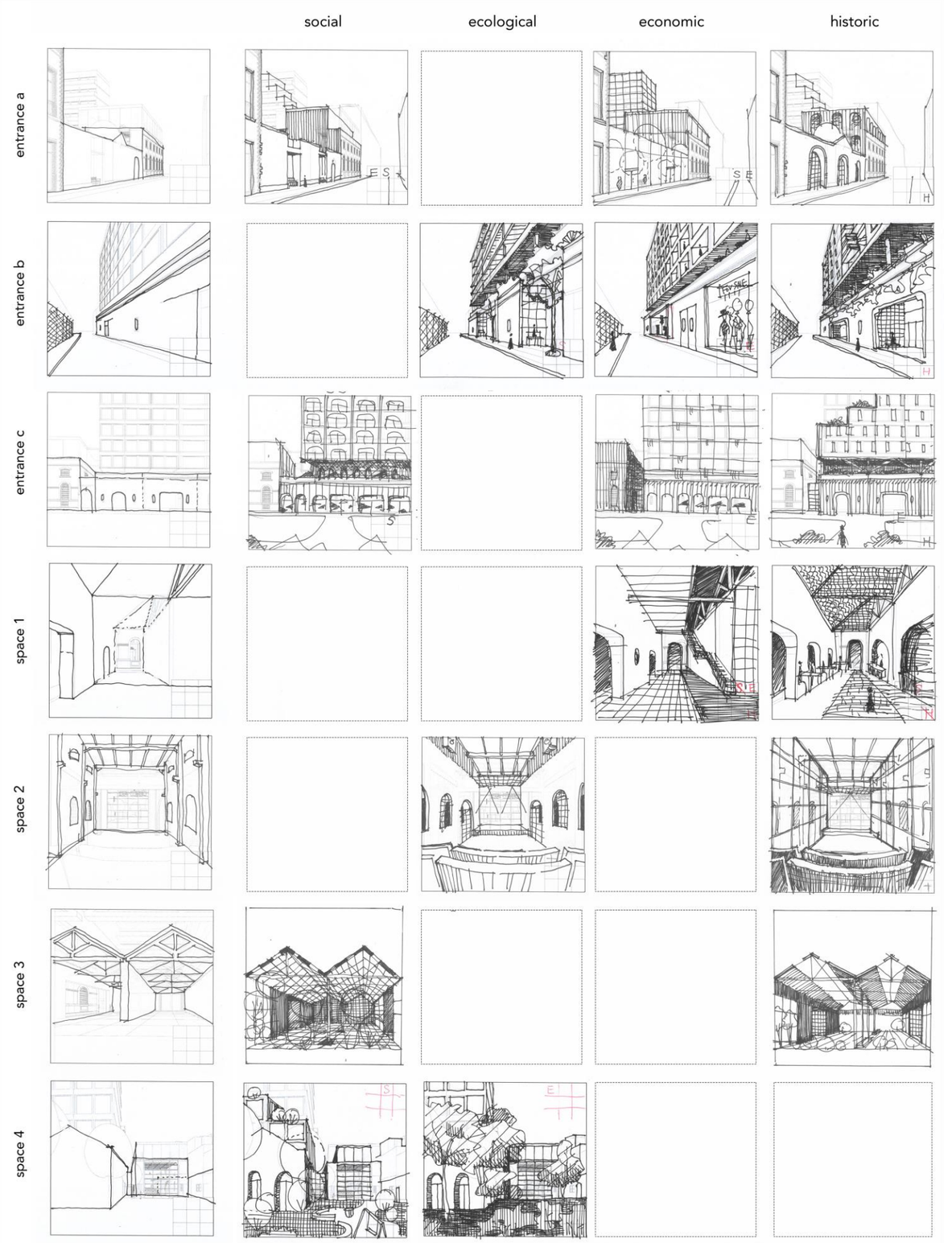


Fig 2-10 right. The scenarios matrix for all 7 scenes

DESIGN PARTICIPATION

As the application, I invited my colleagues to the survey of decision-making participation. The green group took the position of elderly stakeholders because they are more familiar with the neighborhood. According to the theoretical design judgment of promoting place attachment, they were asked *"Could you choose the scenarios you regard as upgrading scenes in Estacao that you are familiar with? Could you explain your choice?"*

The rest of colleagues took the position of young adults who are going to start living here with the question for them*" Could you choose the space scenarios that you could quickly get used to and enjoy? Could you explain your choice?"*

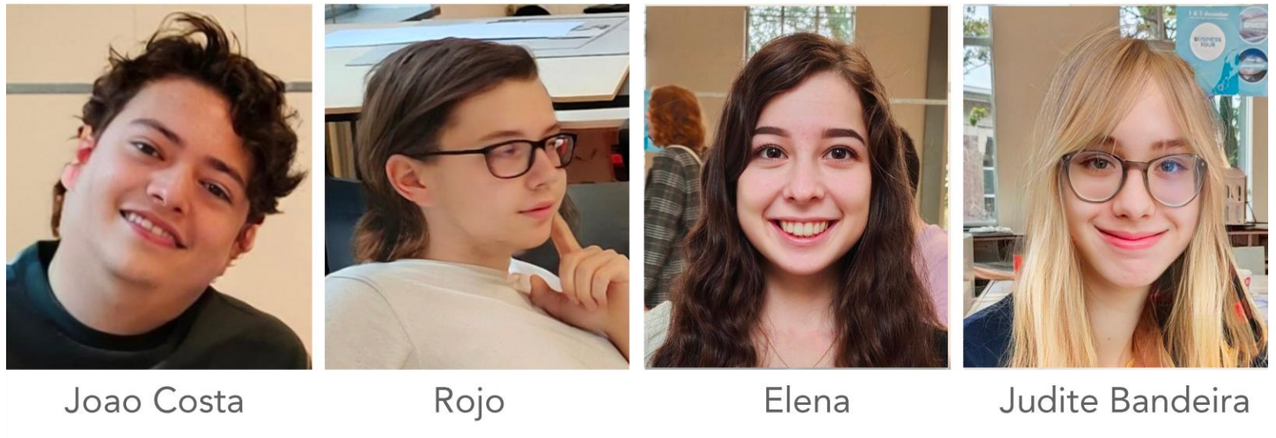
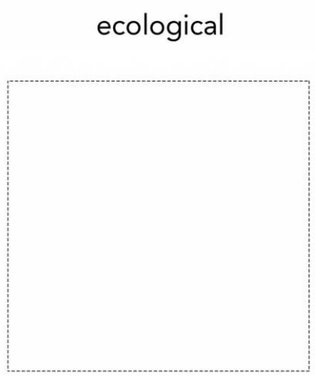


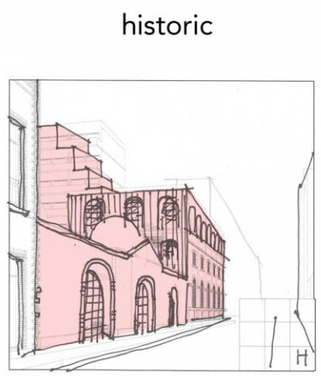
Fig 2-11 above. Group photo with part of the participants at faculty

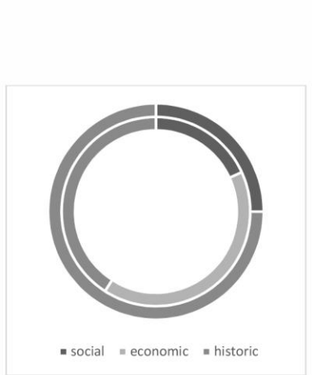
Fig 2-12 below. The characters of eight role-playing participants

RESULTS & DISCUSSION

Here is the result of decision-making participation. The popular scenarios are marked in red with participants' reasons on the right side. Elderly and young stakeholders made similar choices on entrances a, c, and spaces 1, 3, and 4. The keywords for designing are the typical character from arch form (entrance a); the openness of the ground floor and lively building outline (entrance c); keeping the original roof (space 1); the well-organized order from the former division of space (space 3); more furniture to support activities happening (space 4).

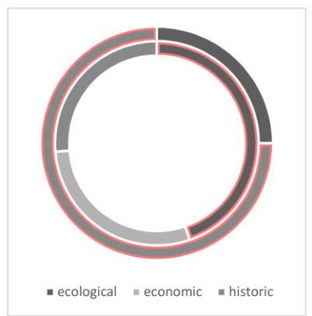






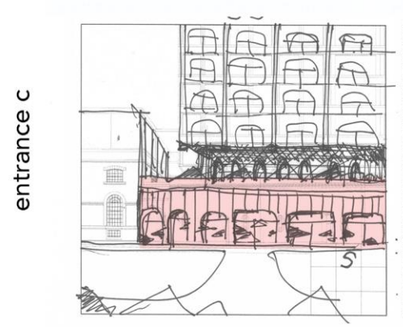
Adults (inter)
- I prefer the outline of building provides more sky from the street view
- The arch brings character to the buildings
- I like the transparent walls to see more trees
- I prefer the simplicity of new buildings
- The triangle wall suggests a clear entrance with specific importance
- I prefer simple buildings with transparent surface

Elderly (outer)
- The arch construction brings me the old memory of this site
- we understand the classical style in our lives
- I like arch form being connected with new materials
- I like it looks like a building that I know
- I like the new construction looks light and ordinary



Adults (inter)
- a dark square will become the illegal site during the nights, lights and brighter colors may help
- keeping part of the old wall and adding new walls is nice
- The square on smaller scale is useful when I shopping or meet with friends
- more sun light , building , trnsparent
- I don't like small narrow spaces, I prefer the square with more height

Elderly (outer)
- little square to meet people or rest when walking dogs
- interaction between people on the street and on the balconies
- nice open outdoor spaces
- the movement of people in the corridor will make the street more vibrant
- The entrarnces looks suitable for the identity of Estacao
- I like the entrance similar to the ones in my memory



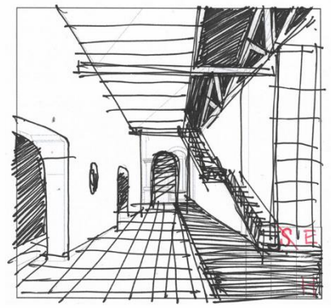
Adults (inter)
- The alley gap between two buildings should be kept
- because they are totally different especially when the functions are separate
- The new building should have strong contrast with the old ones
- The change in skyline makes the volume more friendly
- I like the balconies with green, the façade should be simple to highlight them

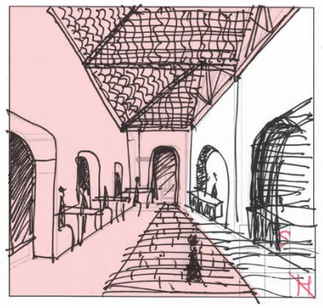
Elderly (outer)
- The platform provides eye contact between people
- open two floors would be too noisy
- Its fine for the site to be noisy if im just living around while not living here
- the open space on the ground floor is important for interaction
- the change in skyline makes me feel lighter and more lively
- I like the building to be simple and quiet

RESULTS & DISCUSSION

Elderly and young stakeholders made different decisions on entrances b and spaces 2. For scene b, the elderly prefer the entrance under a style suitable for Estacao, while young adults prefer a square with more height and sunlight. For scene 2, the elderly prefer the classical idea and better sound insulation of a non-transparent wall, while the young adults prefer the visual impact of the glass box.

space 1

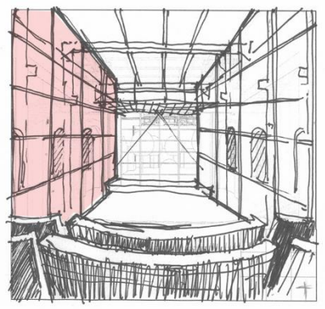


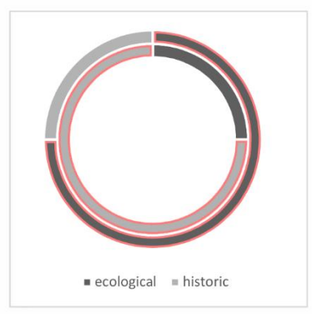


Adults (inter)
- Scenario B provides more possibilities (Multi-functional space)
- Seeing history makes the space looks better
- I like the tile material in roof and the arch form windows
- The roof is typical for faro, do not move them unless there is a reason

Elderly (outer)
- I like the things (roof and frame) that I knew
- The material changing of pathway forms guidance for us
- I don't want to climb the stairs
- Sitting in shadow is alsways nice for me
- I like the space looks clean and quiet

space 2

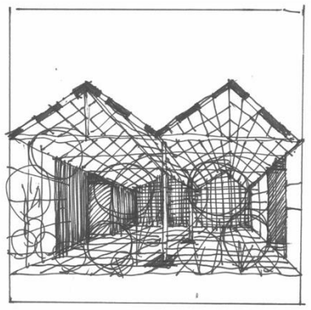


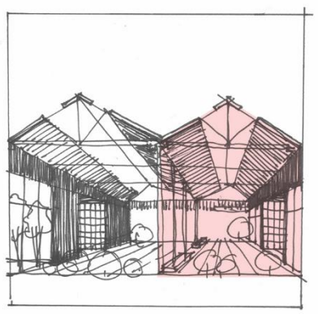


Adults (inter)
- The powerful lights will go out from the box and effect the street
- The transparent box will surprise the users
- The glass space is more open, making me feel more space and safe
- Glass is the material I fimilar wth, I think a glass hall is very cool

Elderly (outer)
- The noise from concert hall should be stopped
- I simply prefer classical style theaters
- I want to focus on the show while not disturbing by the old construction
- I like the magical feeling that colorful glass brings to the theater

space 3

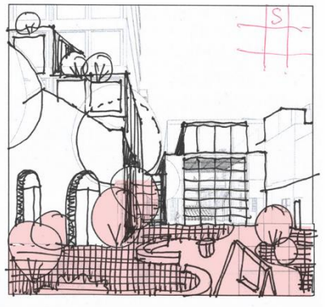




Adults (inter)
- I like the green feeling from more sun lights and the forest atmosphere
- Making the old space totally different is not a good idea
- seprating different types of spaces provides more activity possibilities
- The orfer from frames is one typical character of the building

Elderly (outer)
- I want to get sunshine as much as possible
- I like the design as upgrading of old scenes (able to be distinguished first)
- I like the well-organised feeling form old spatial hierachy
- I like the sun light in a white and pure space, its similar to my studio

space 4



Adults (inter)
- I like that we finally have real nature in urban environment
- It is activities while not trees that make a place real lively
- The trees give me more relaxation and I want to get the sunshine
- I can do more things like reading books if there are more furnitures

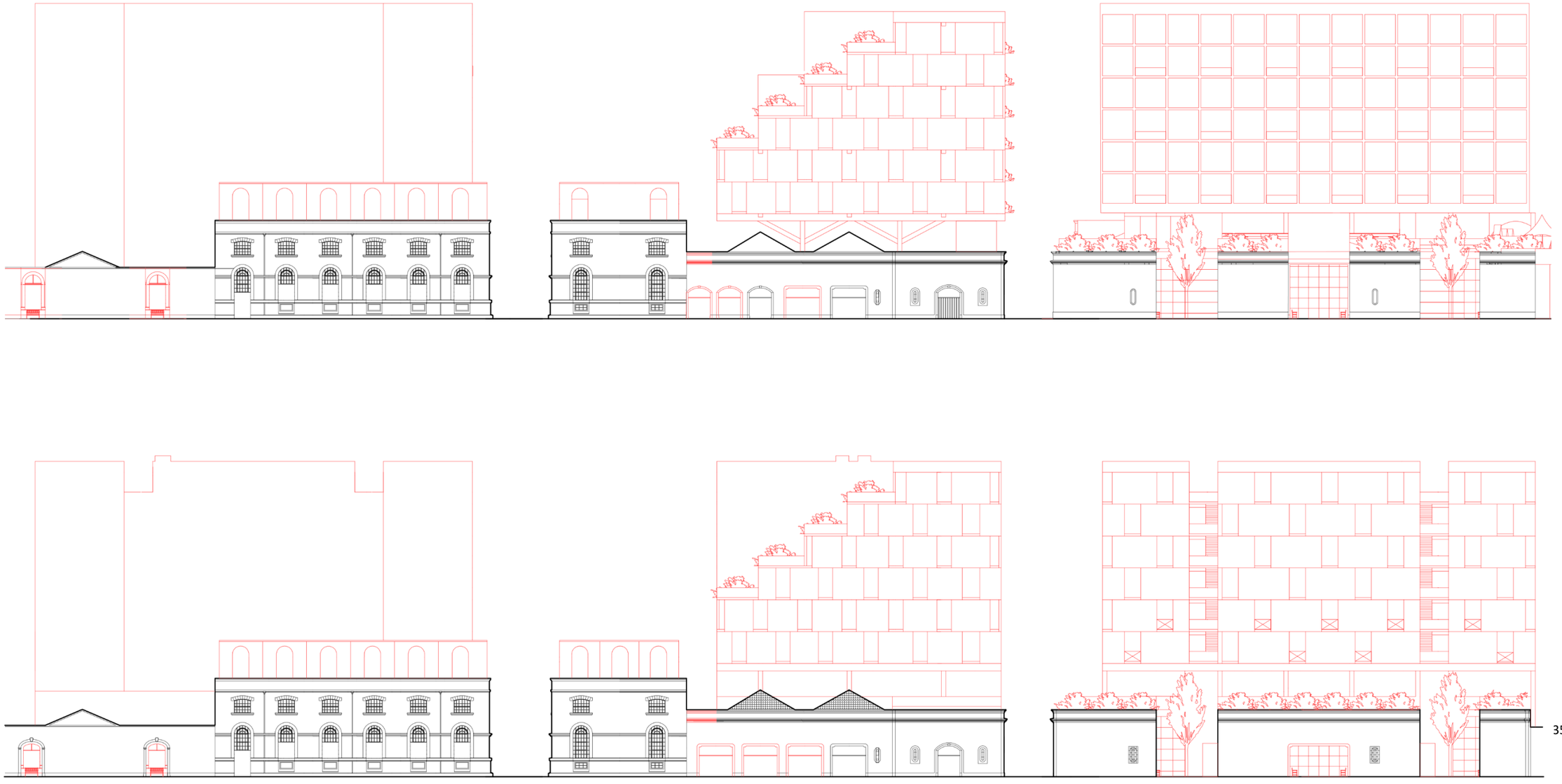
Elderly (outer)
- I like sitting with my back against the wall, seeing other people
- I like to watch my grandchildrn playing when we go out
- I like more green makes me feel relaxed, I don't care about playground
- I want sunshine more than trees since there is a big outdoor space

RESULTS & DISCUSSION

As part of the discussion, I tried to apply the research results to the design, but found some problems: 1. It is difficult to satisfy all the stakeholders; 2. Some details are overlooked when designing the scenarios; 3. The proposal which consists of all popular ideas is not coherent.

Taking the combination of the first three popular scenarios as an example, when the east-north-west (left to right) facades are placed together in the above image, the problem of style confusion arises. The north and west façades are clearly disconnected, and the type of entrance on the west façade does not satisfy the preferences of the elderly. Therefore, the actual design (image blew) should be adjusted, such as adopting a unified architectural style and setting different forms of entrances for different users.

Fig 2-13. The design adjustment for three facades

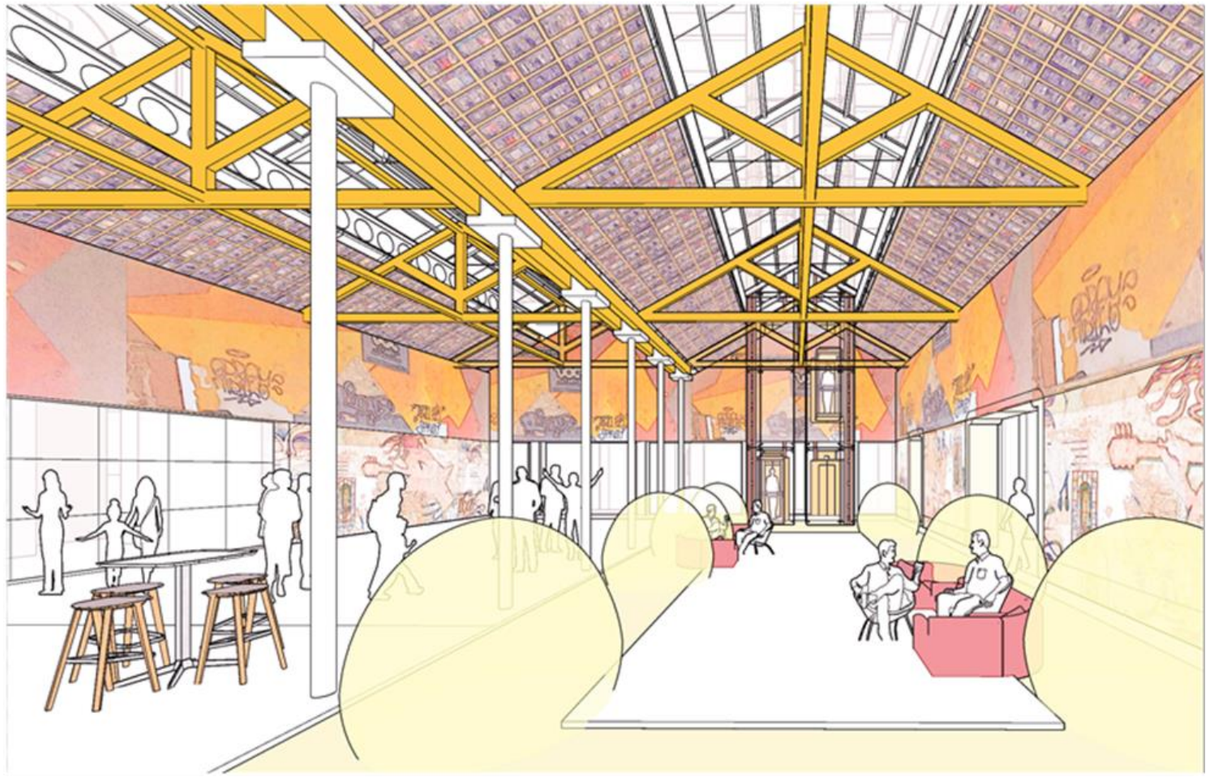


RESULTS & DISCUSSION

Unlike building façades, because each interior space is independent and unique, the result of spaces 1 to 4 cannot be discussed from the perspective of uniform style. As another way of thinking, scenarios for spaces 1 to 4 are discussions of varying degrees on a single topic. For example, the two options for space 3 differ only in how much to keep the historical separation of spaces. This allows the percentage diagram and the attributes in stakeholder interpretations (what people want to separate, and what they don't) to be applied. Taking the space 3 greenhouse as an example, 60% of the participants tended to maintain the feeling of being divided into two spaces, and the attributes they proposed that needed to be kept separated included "ground of different sizes and functions", "typical structural features" and "order". Attributes that do not need to maintain separation include "more sunlight" and "purely large spaces". As the application, the design adds non-structural columns (sense of separation, order); the space above 3 meters looks complete (lighting, pure huge space), and the space below 3 meters pays attention to the spatial separation that conforms to the human scale (multifunction, variety).

At the same time as further architectural designing, the technical design also starts systematically with three aspects as structure, details, and climate. Due to the building type of renewal and extension, this design requires an assessment of the original structural strength of the site before placing a new building density with as little intervention as possible. From a climatic point of view, Faro has a pleasant climate and does not require too detailed consideration of thermal insulation. The climate design focuses on summer sunshades and ventilation determined by space use. The in-depth design carefully discussed the selection of materials in key scenes. This part of thinking not only connects design and technology through atmosphere and details but also relates to the theoretical relationships between context and development. The material selection in the final design is based on the discussion of identity-similarity-difference. In the process of tutoring, I especially learned the method of combining spatial rendering and technical consideration, as well as the method of design discussion based on architectural theory.

Fig 2-14. The design adjustment for space 3



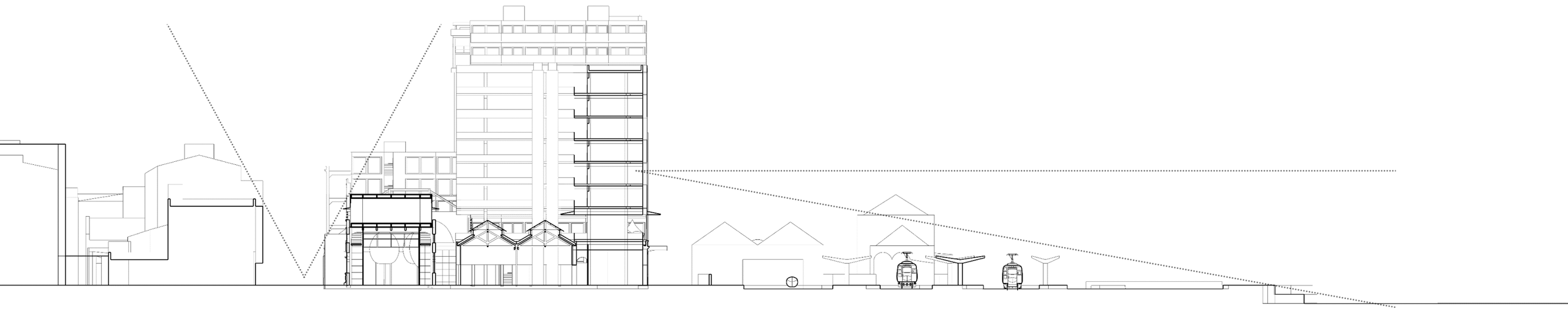
FINAL DESIGN

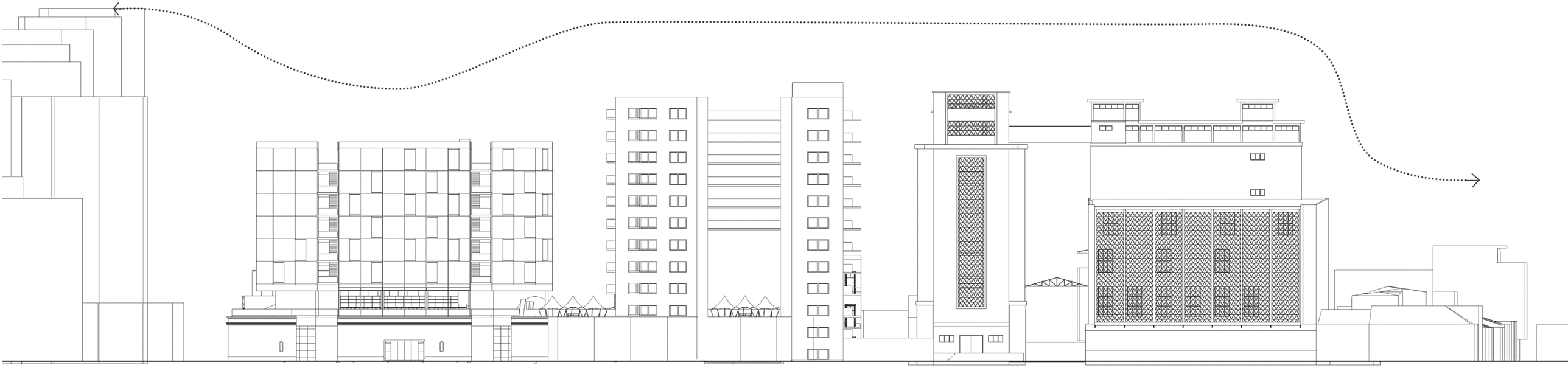
FINAL DESIGN

Master plan 1: 1000

FINAL DESIGN

Site sections

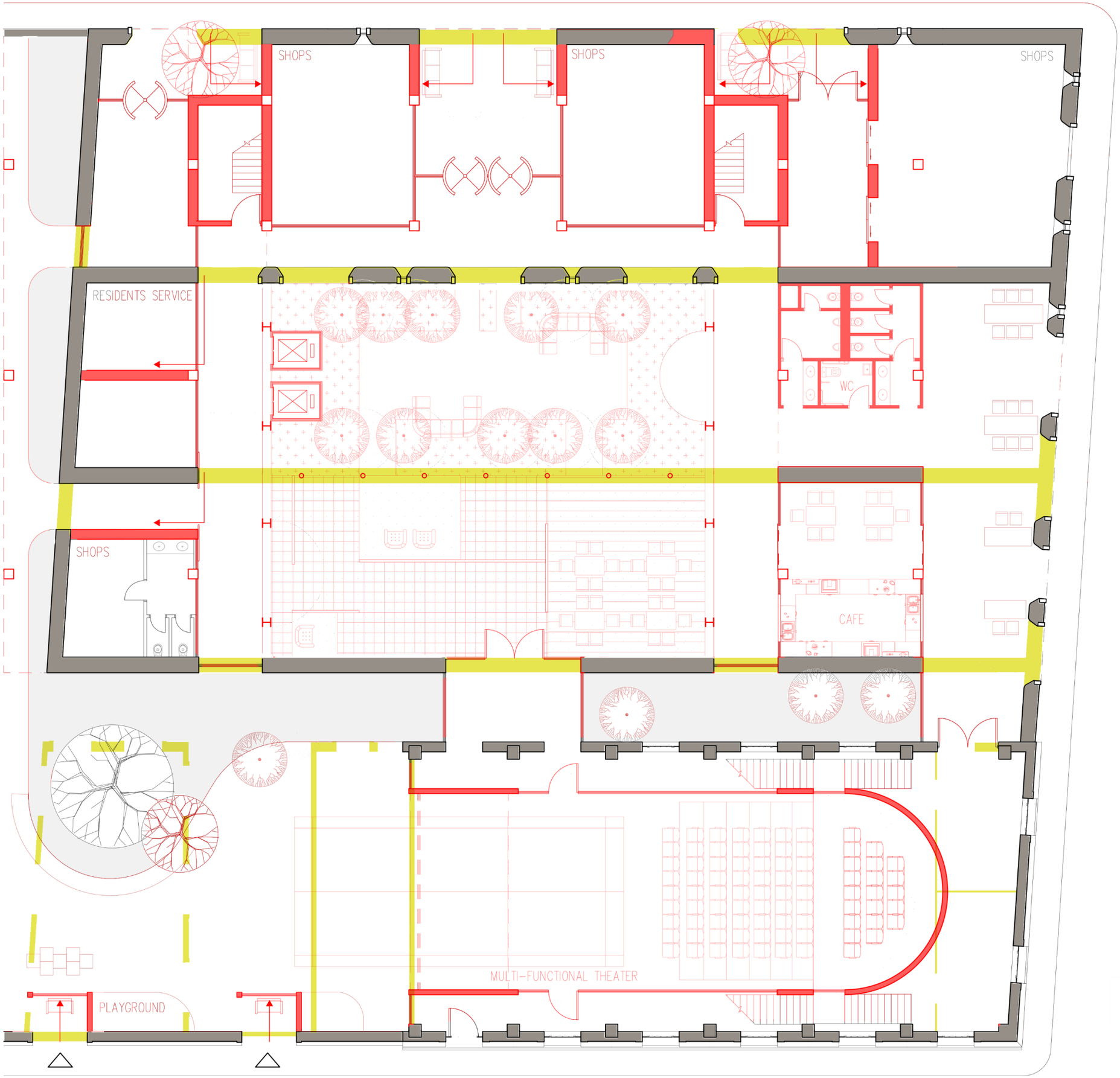




FINAL DESIGN

Ground floor plan 1: 150

Yellow – Remove
Grey – Keep
Red - Add

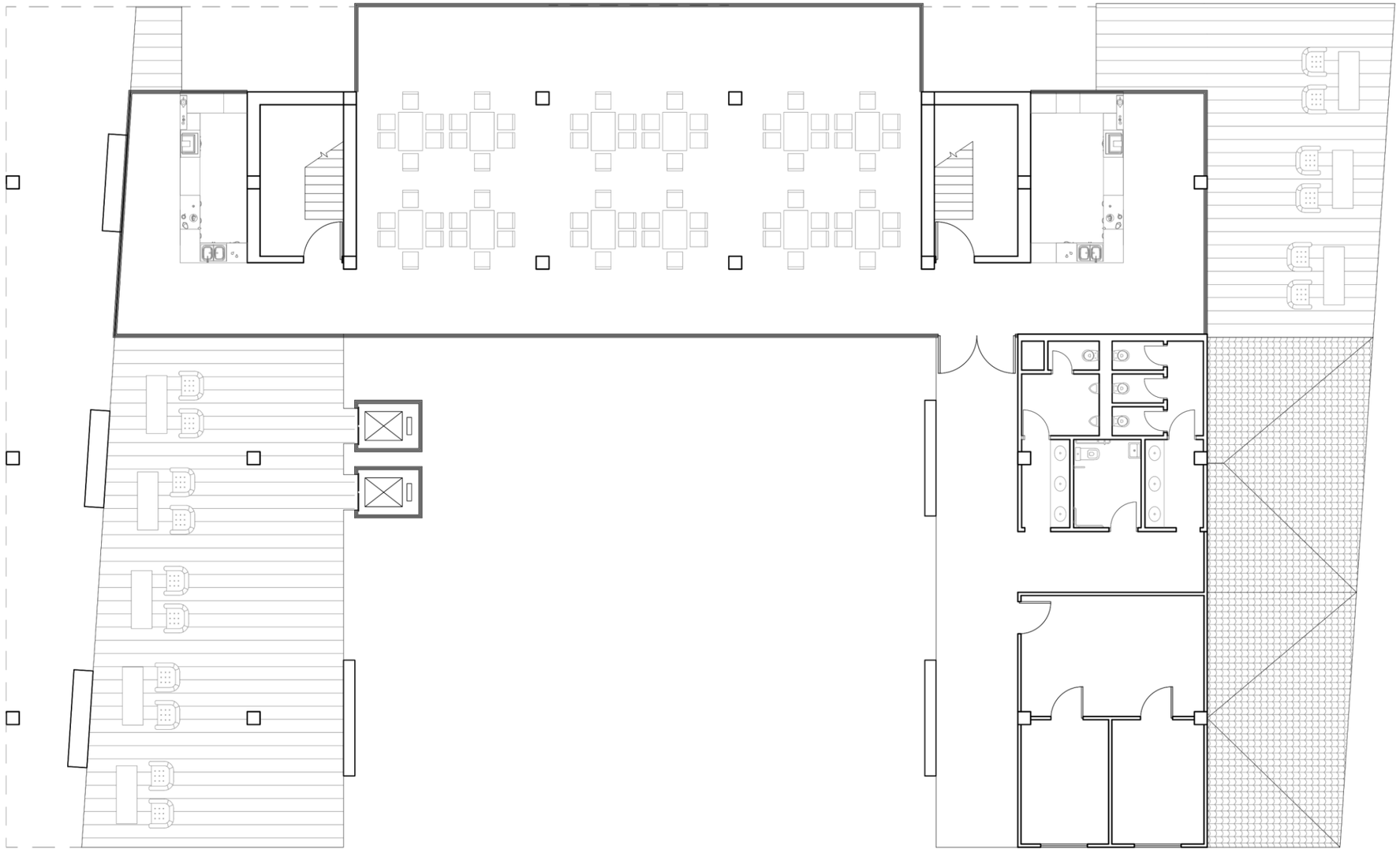


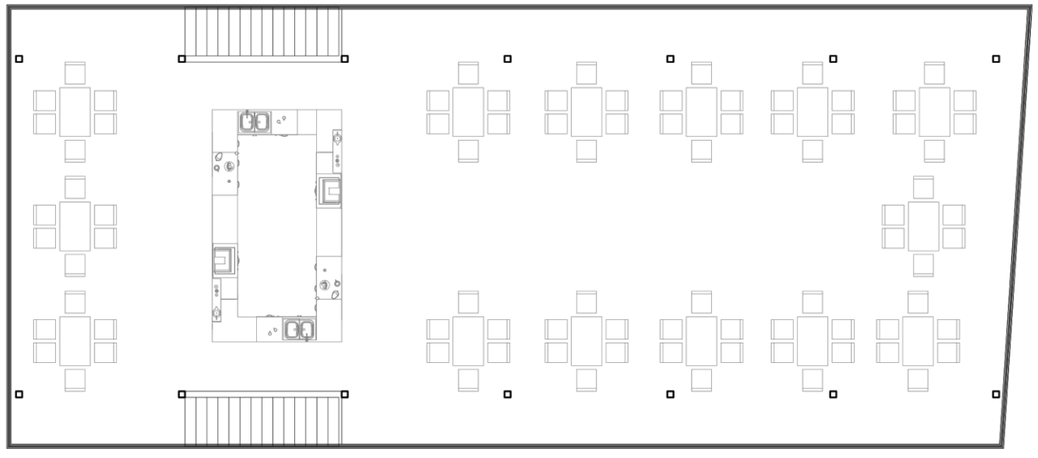
GROUND FLOOR PLAN 1:150

N

FINAL DESIGN

2nd floor plan 1: 150



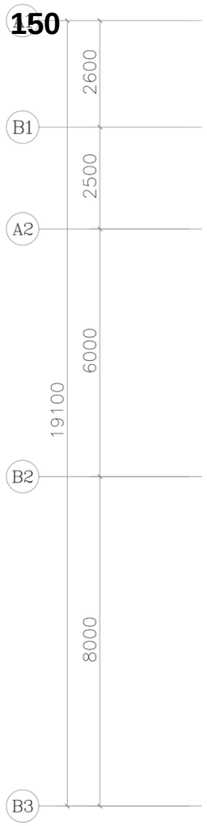


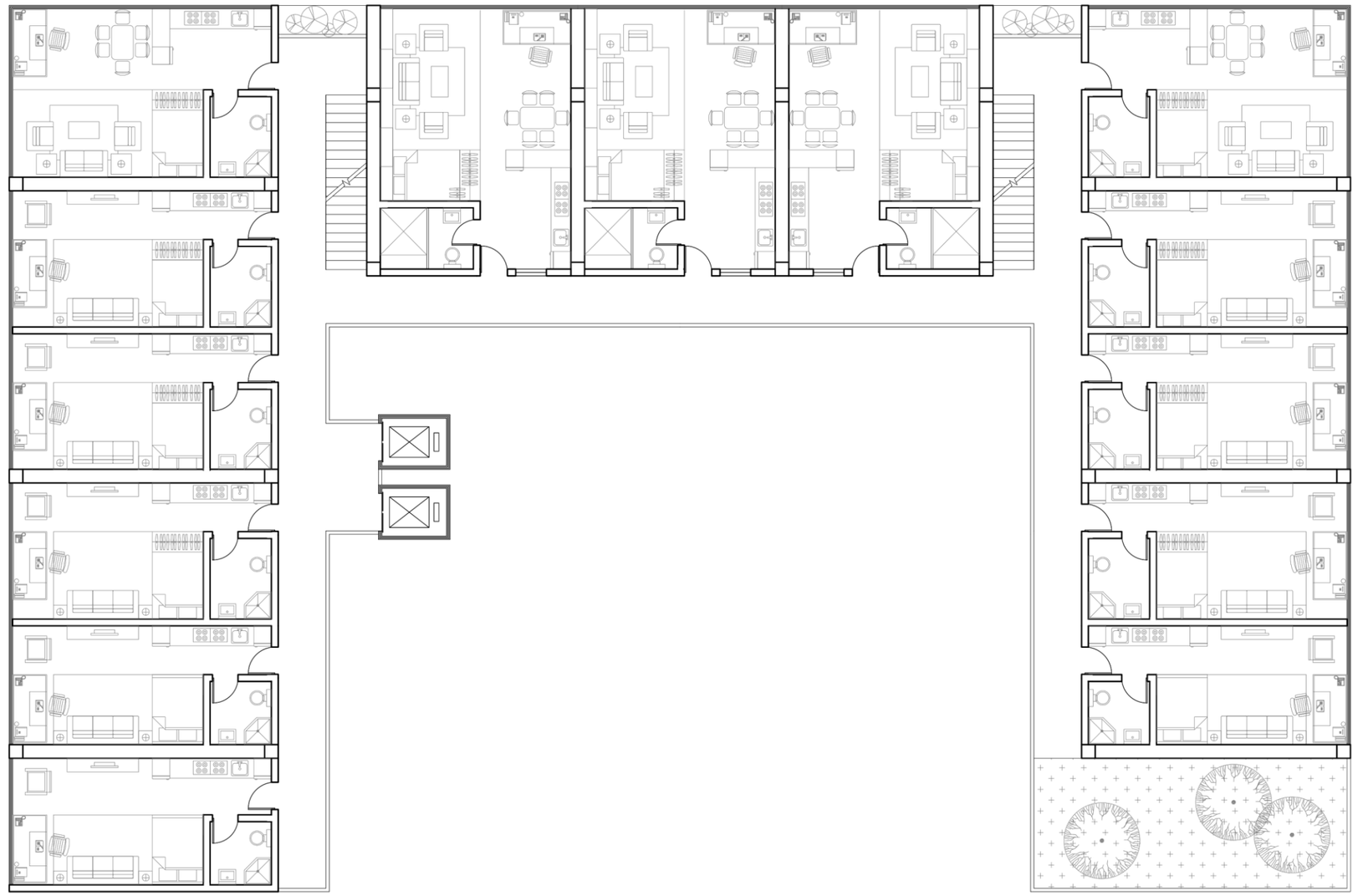
2nd FLOOR PLAN 1:150

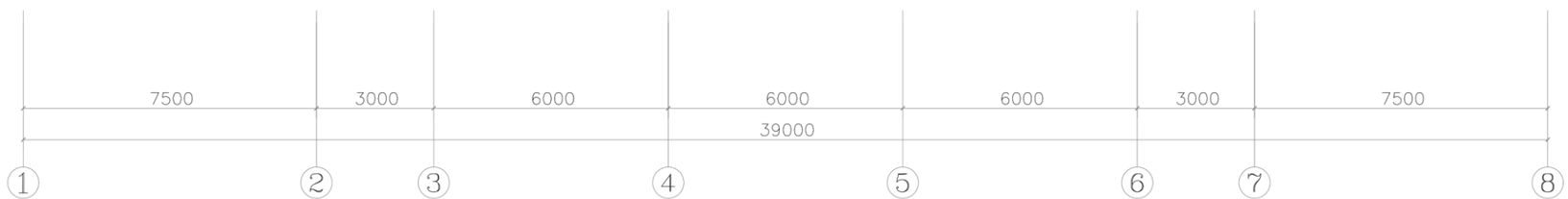
N

FINAL DESIGN

5th floor plan 1: 150







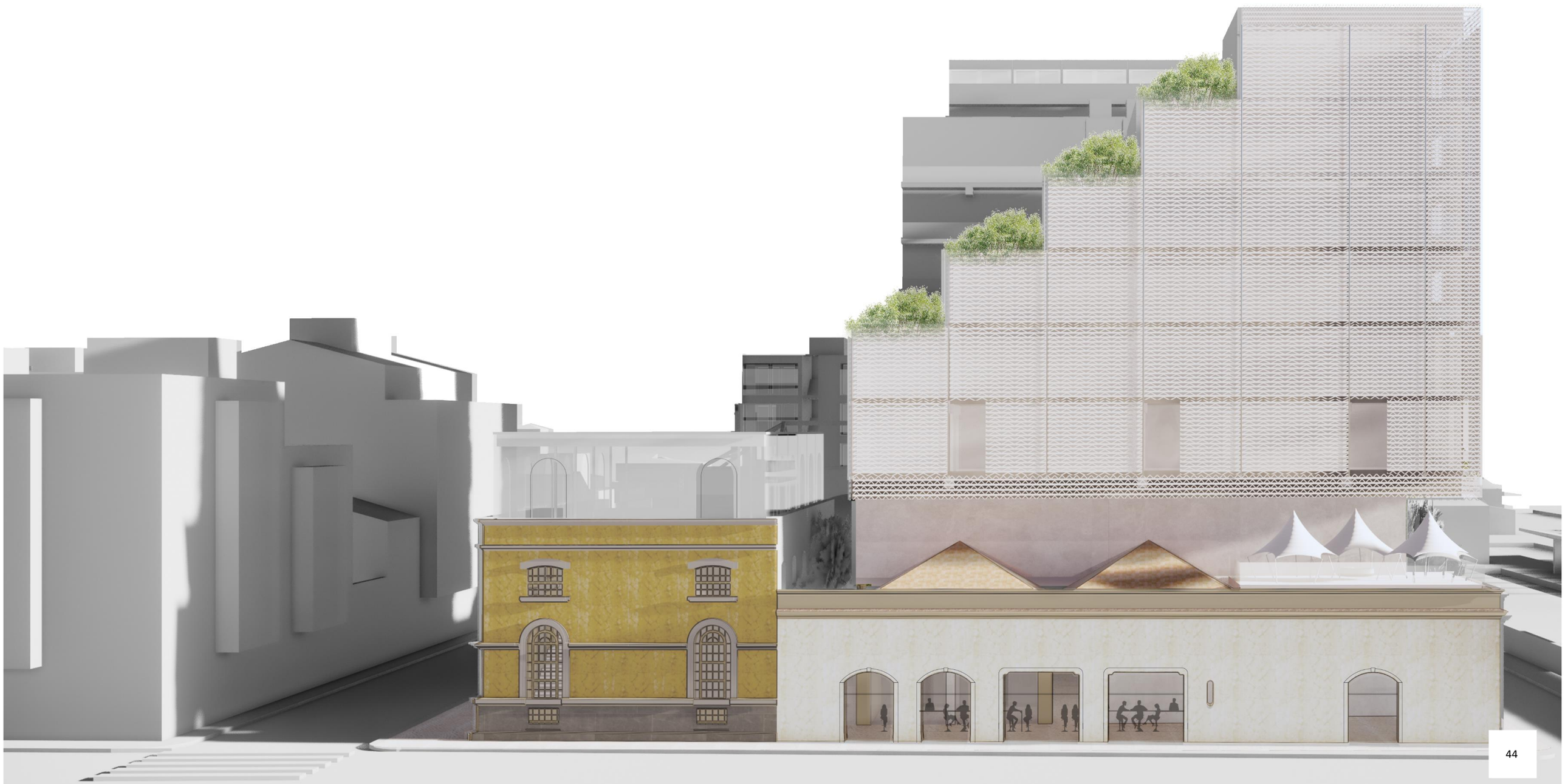
5th FLOOR PLAN 1:150

FINAL DESIGN

North elevation 1: 150

FINAL DESIGN

West elevation 1: 150



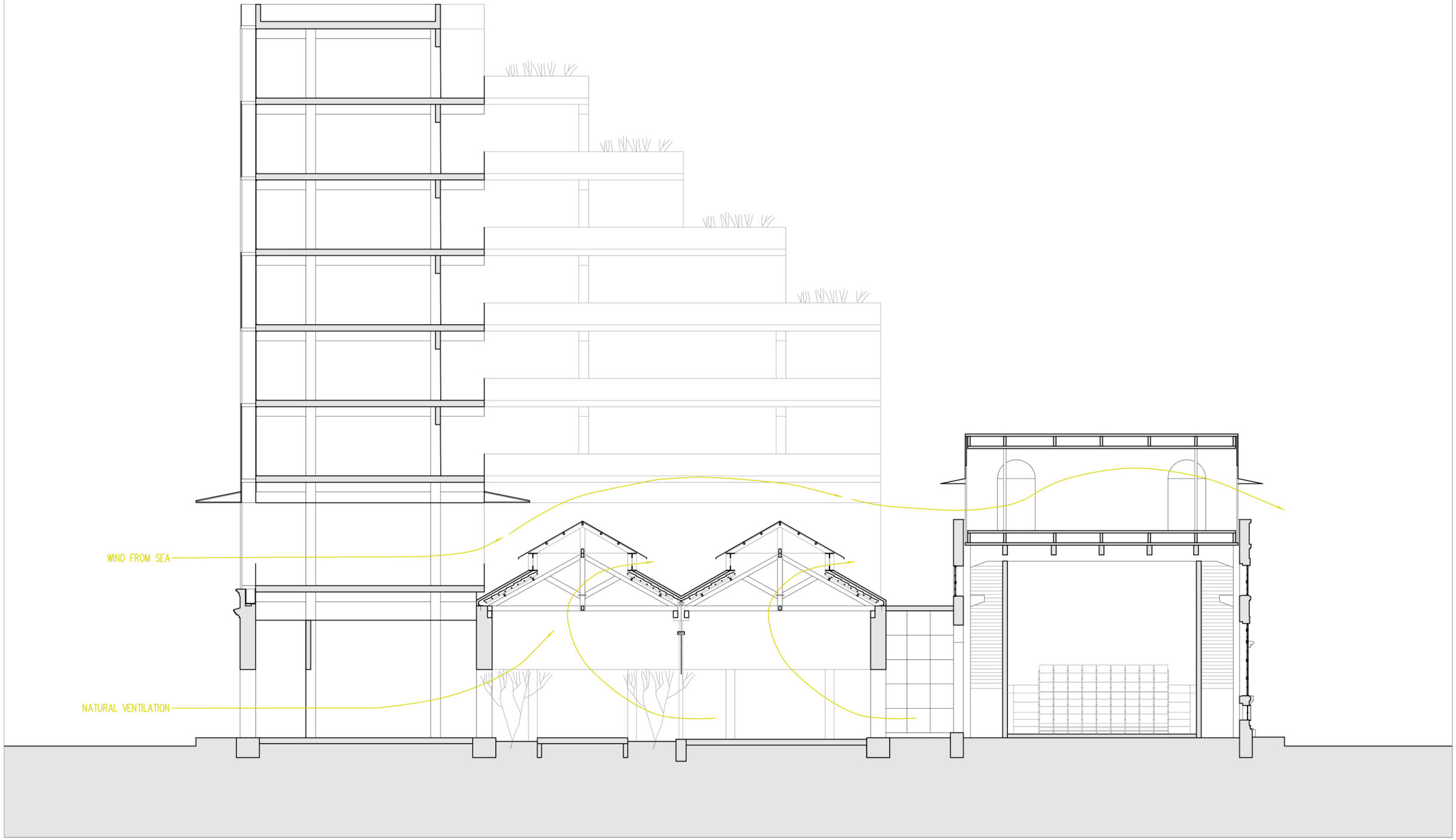
FINAL DESIGN

West elevation 1: 150

FINAL DESIGN

Site section 1-1 1: 150

1–1 SECTION 1:150



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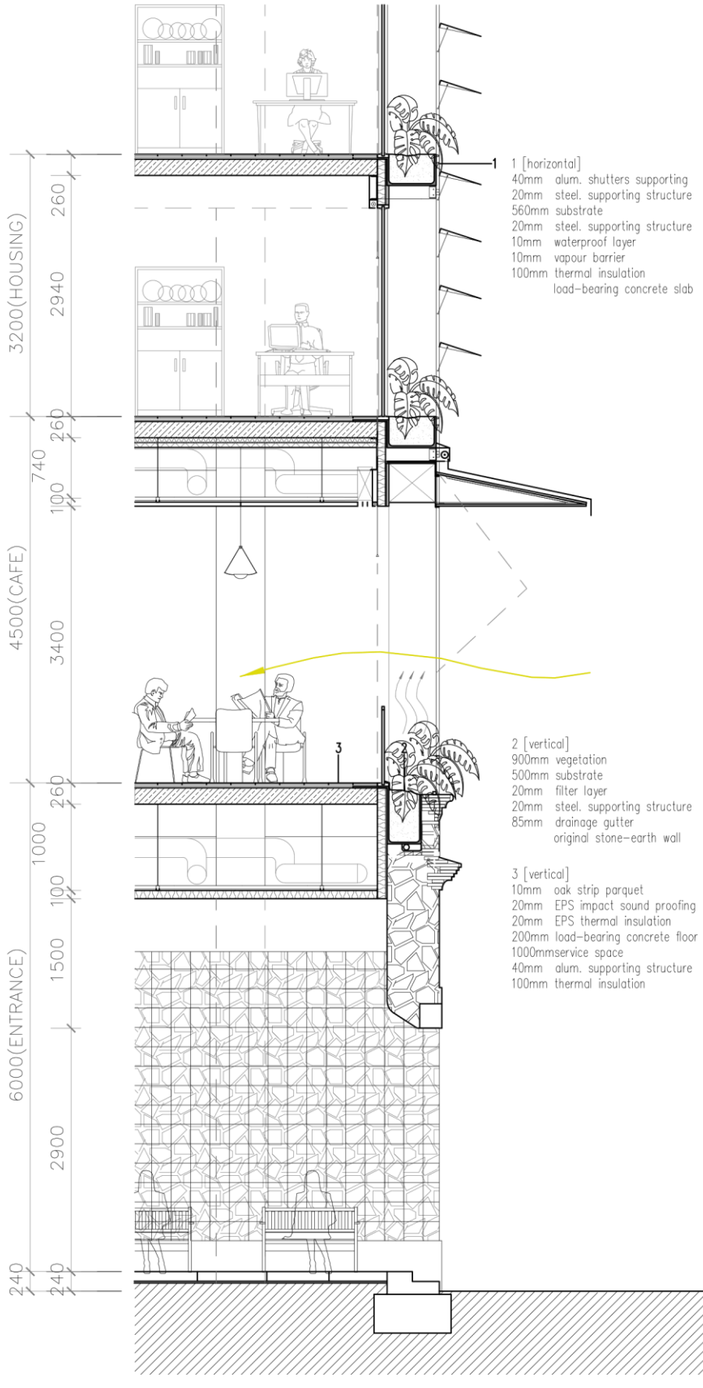
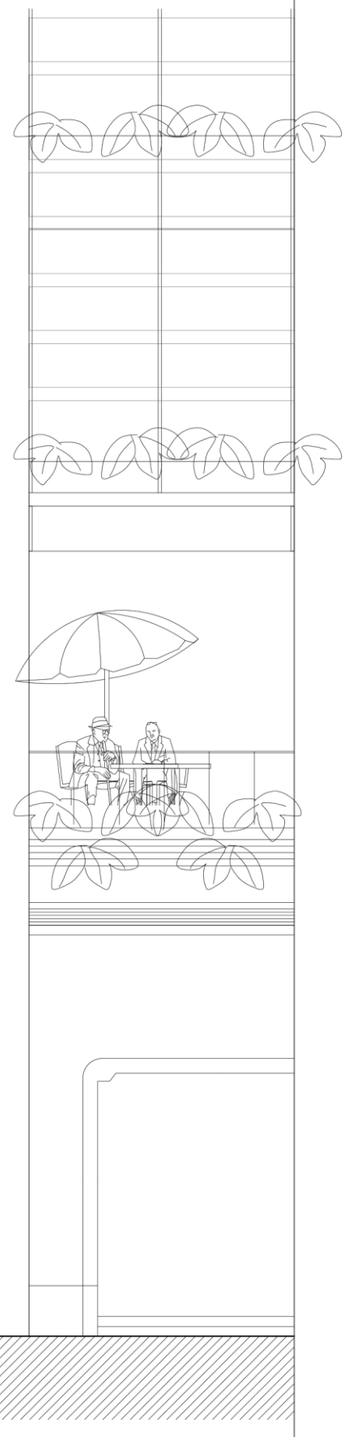
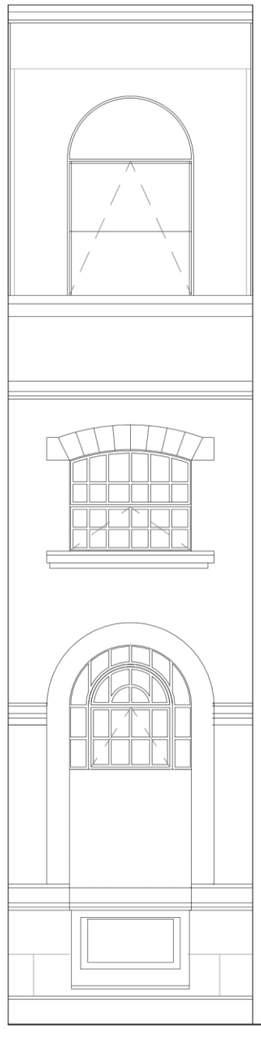
Site section 2-2 1: 150

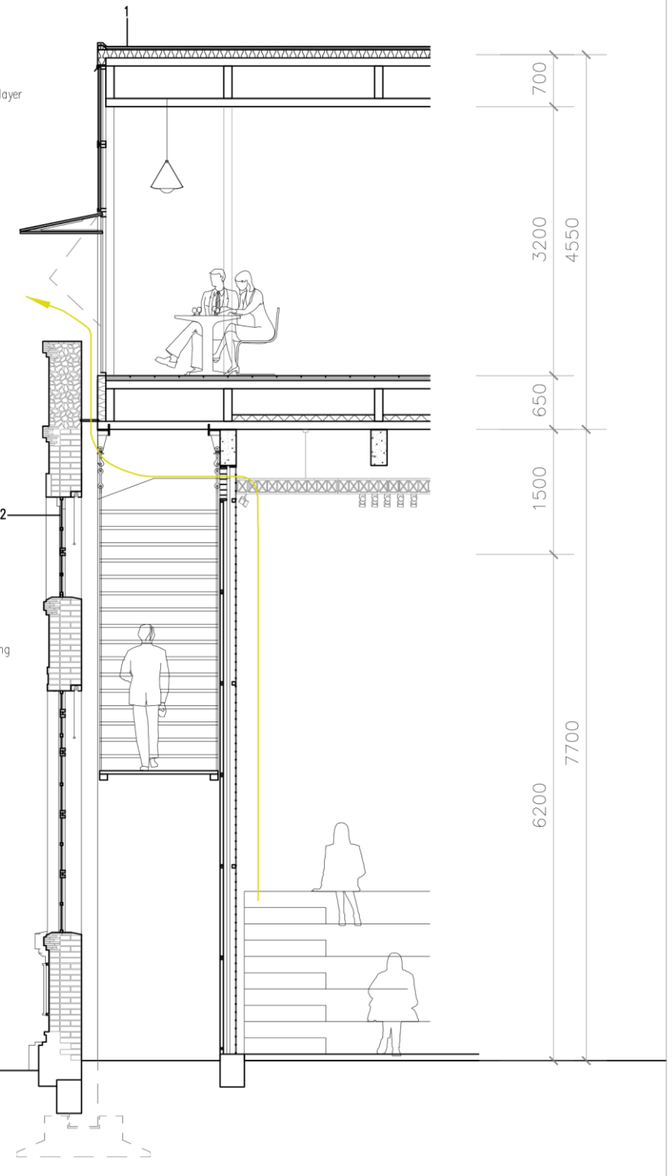
FINAL DESIGN

Wall details 1: 75



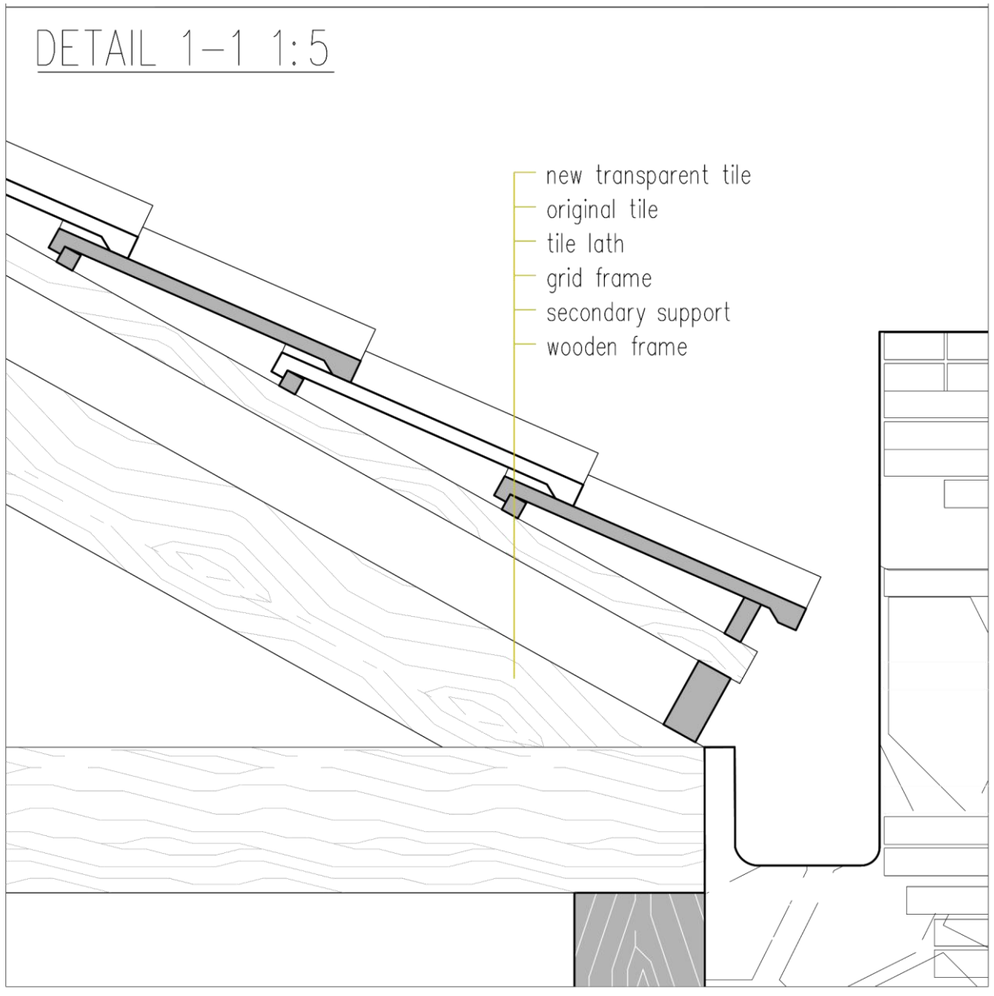






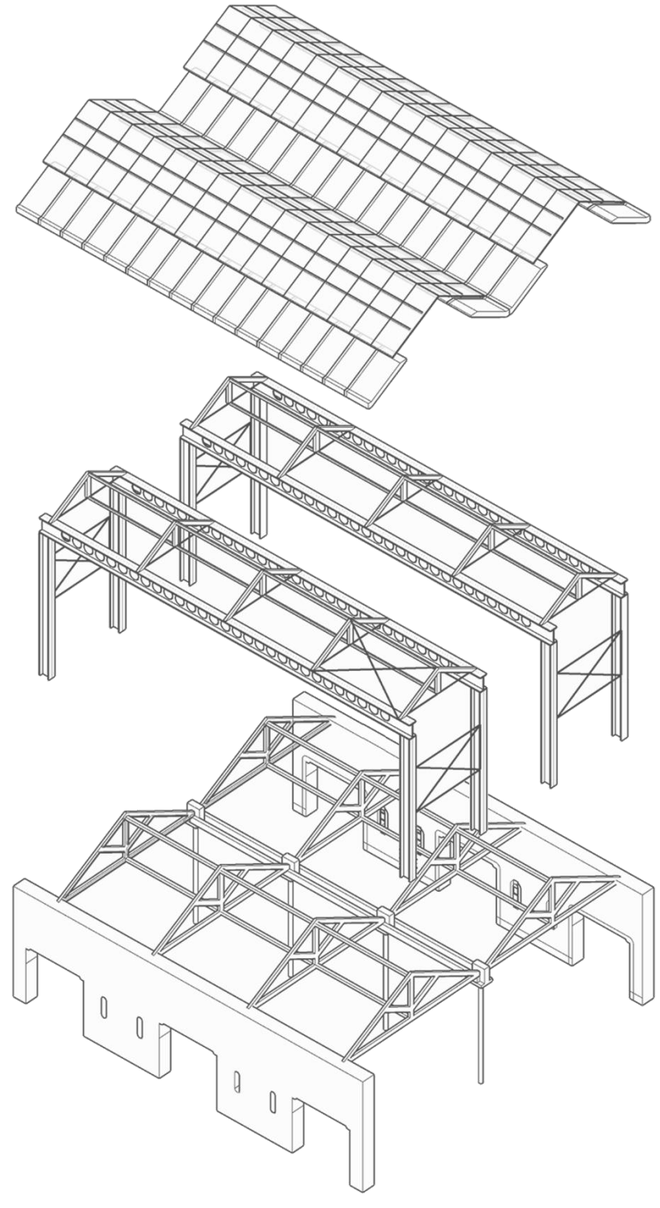
FINAL DESIGN

Space 1：West entrance & café



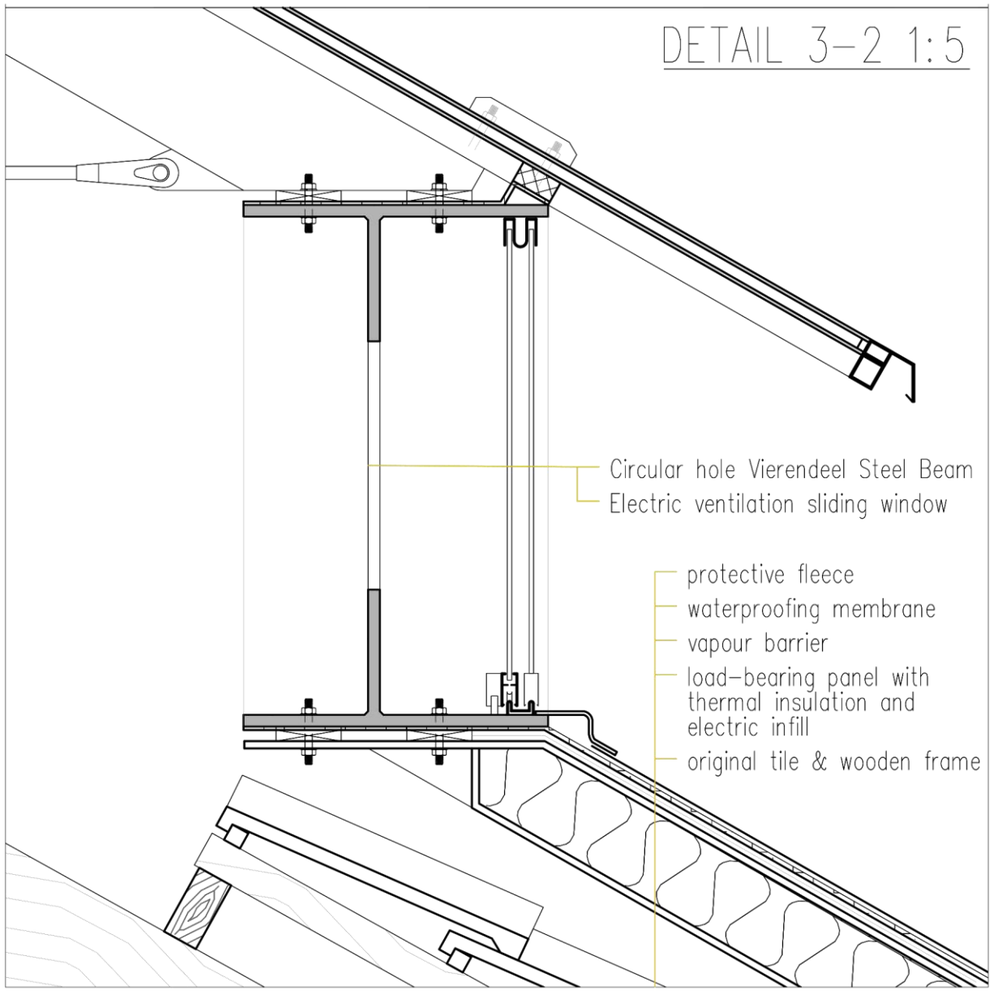
FINAL DESIGN

Space 2: public living room



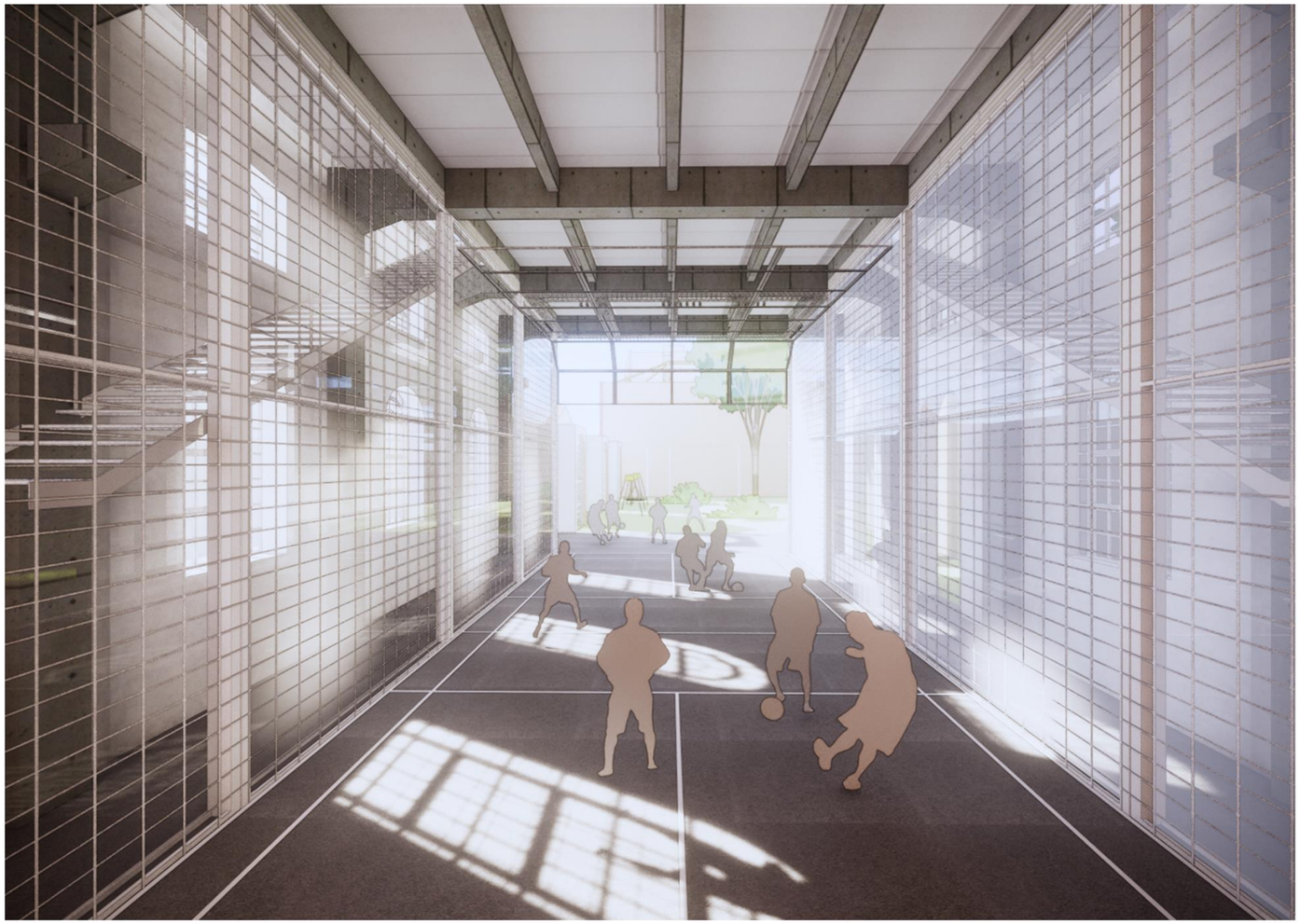
FINAL DESIGN

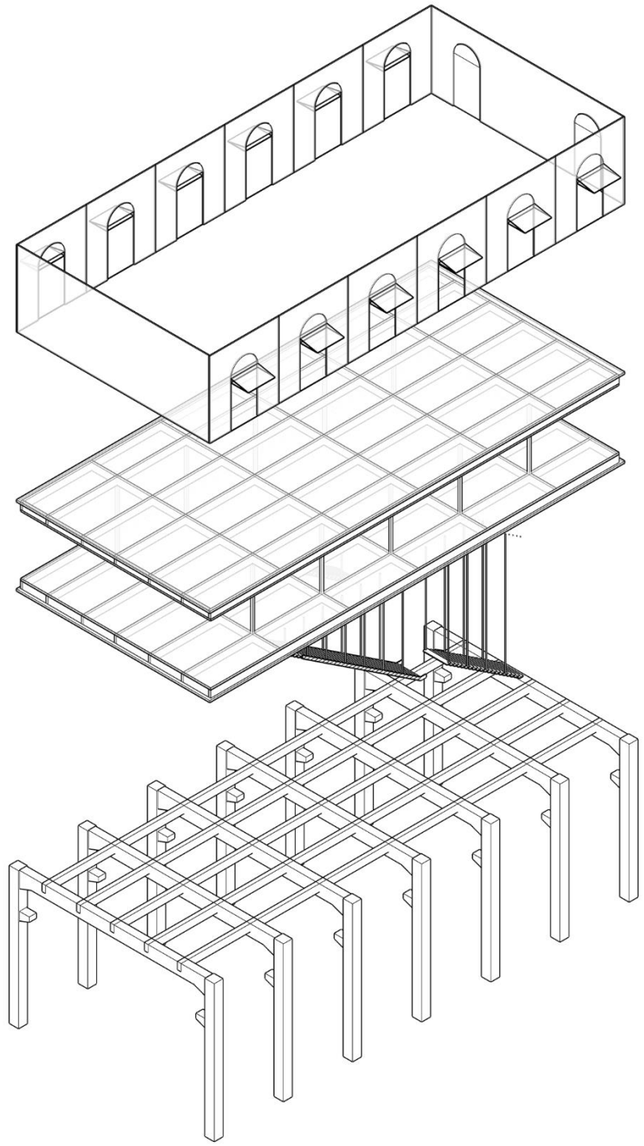
Space 2: public living room



FINAL DESIGN

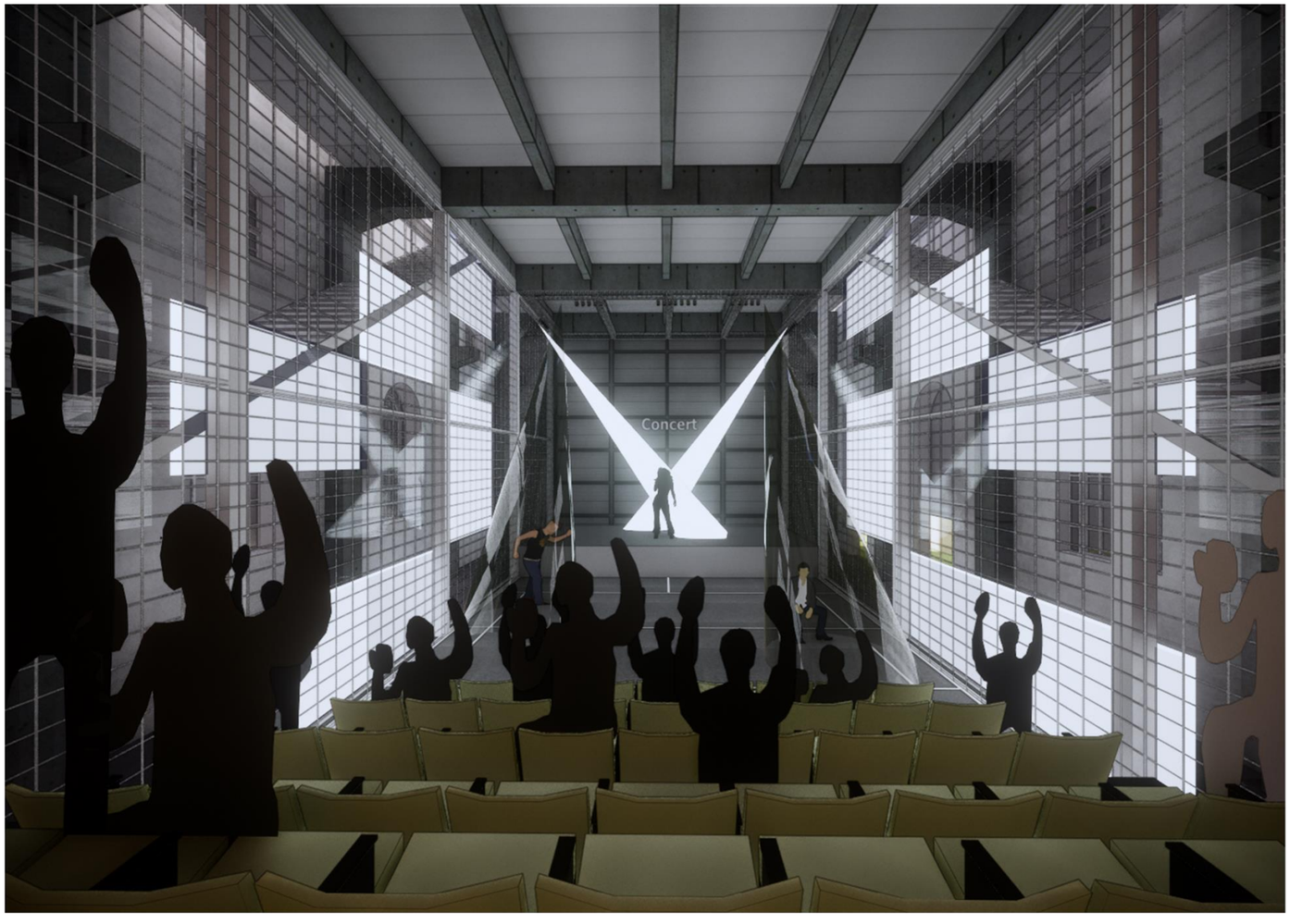
Space 3: multifunctional theater

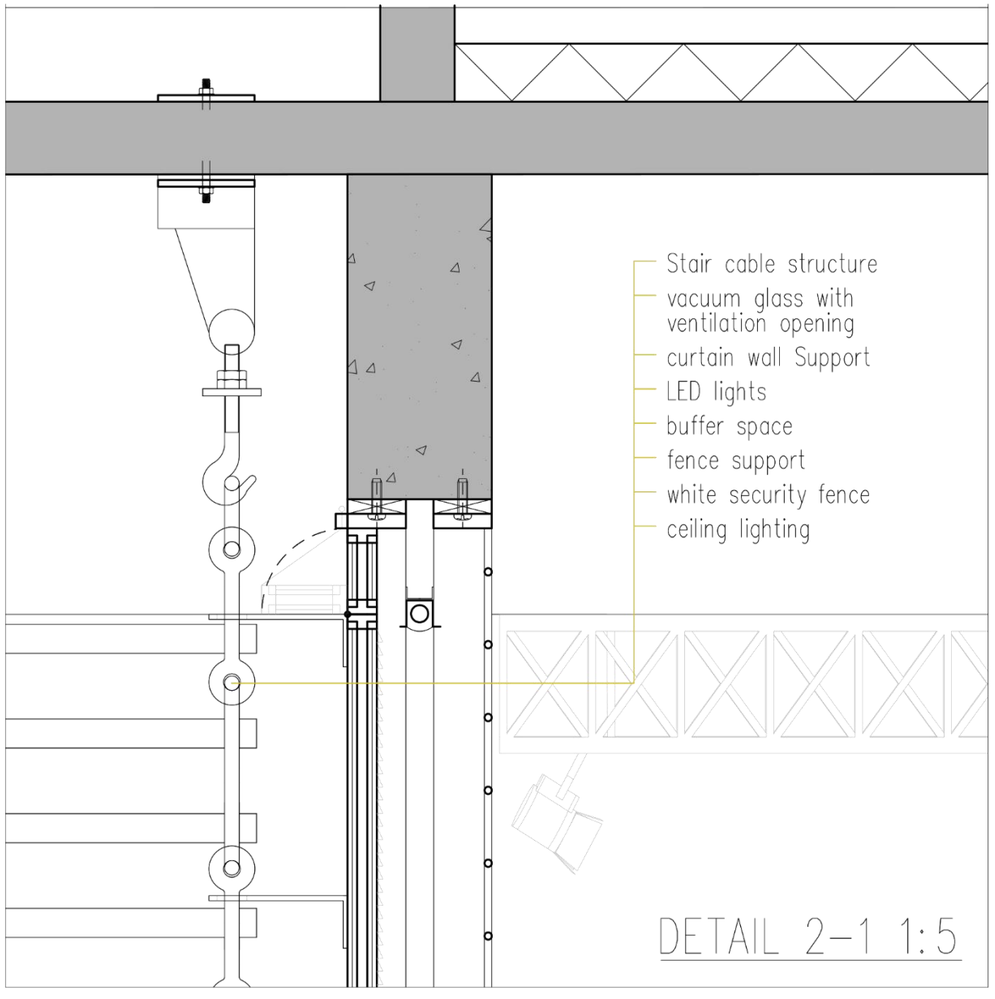




FINAL DESIGN

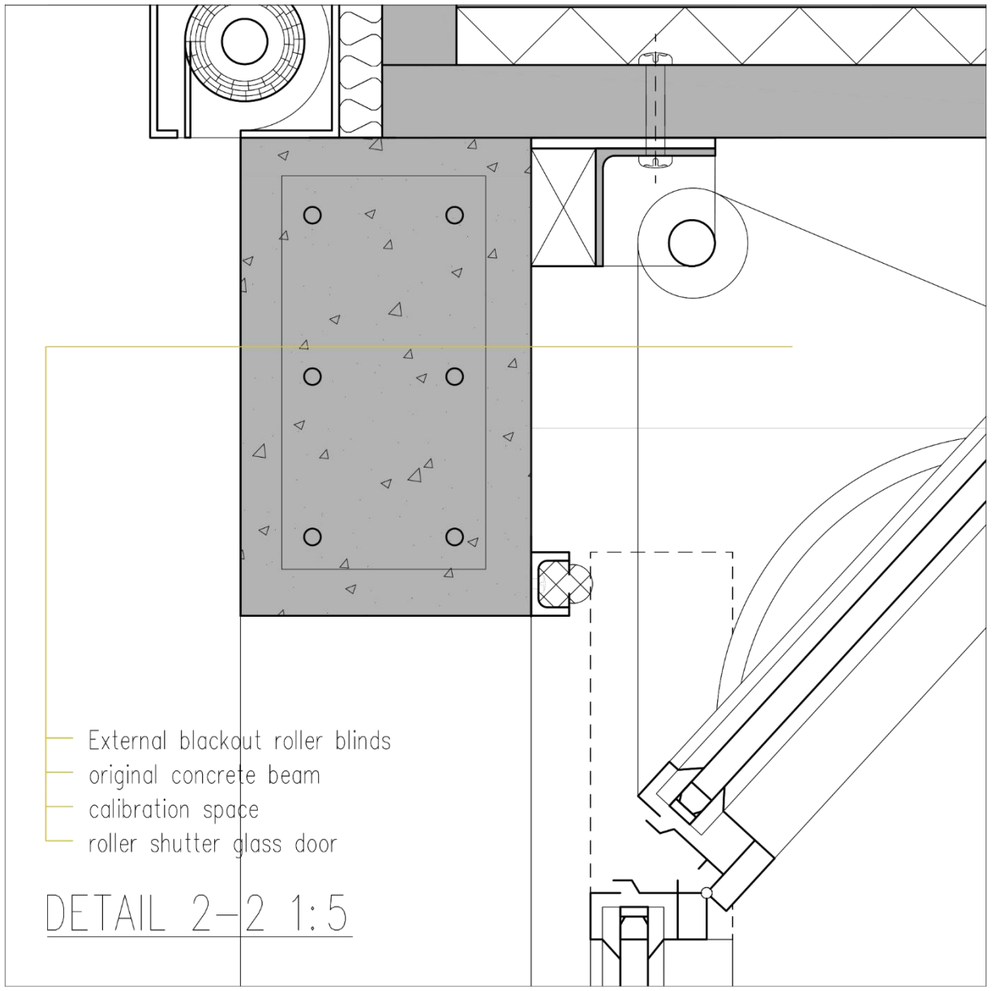
Space 3: multifunctional theater





FINAL DESIGN

Space 4: playground



FINAL DESIGN

Physical model

FINAL DESIGN

Physical model

Paper 3:

Heritage impact assessment

RESEARCH FRAMEWORK

Target

In order for this assessment to provide additional suggestions for the final design, the assessment object chose the adjusted version after the completion of the participatory research instead of the final design. Thus, this assessment is both a reflection and an “assessment meditation”. In response to the design proposal, the research focuses on ecological and social values.

Methods

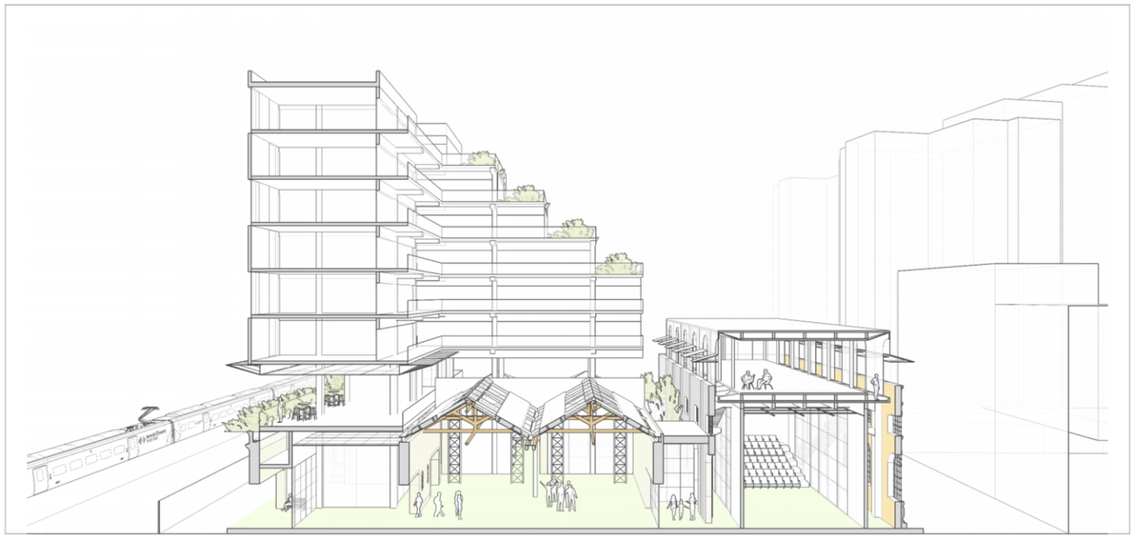
This assessment uses 5 scales for assessment of the magnitude of impact (derived from ICOMOS, 2011) to measure the degree of change of the original attributes. It also conducts value impact assessment through both document and stakeholder materials. The research on the change of site value focuses on the ecological and social value but also introduces the change of historical value to express the cost of changing the current situation of the site. From the perspective of assessment materials, the research uses both document assessment and stakeholder assessment. The writing document comes from the evaluation of each attribute change operation when making Value-based scenarios, and the content of stakeholders comes from the further coding of the comments provided by the stakeholders during the decision-making participation.

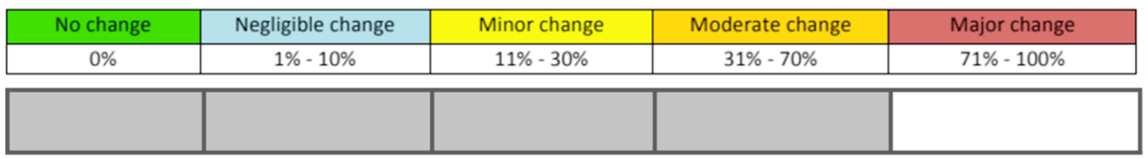
Result and conclusion

According to the general result of the assessment, the project has caused a "moderate change" to the original site, 40% of the attributes have been changed. From the perspective of value, this project has greatly improved the ecological value (about 400%) and social value (about 450%) of the site at the cost of reducing part of the historical value (about 30%). because of a relatively careful design process, such a result basically meets the design purpose. According to the conclusion from the cultural significance survey, this project will have a positive effect on promoting residents' place attachment to the Estacao neighborhood.

From a critical point of view, the degree to which the project changes the original attributes of the site slightly exceeds the designer's expectations. In comparison, social value is influenced by intervention much more than ecological value, which is the result of neglect in the design. This problem is especially obvious in the assessment of entrance 2 and space 1. (The specific evaluation of the 7 main design spaces of the project is placed on the following pages) As a design suggestion, these two scenarios have been further discussed in the final design from the ecology aspect.

Impact grading	Description
Major	Change to key historic building elements that contribute to OUV, such that the resource is **totally altered**. **Comprehensive changes** to the setting.
Moderate	Changes to many key historic building elements, such that the resource is **significantly modified**. Changes to the setting of an historic building, such that it is **significantly modified.**
Minor	Change to key historic building elements, such that the asset is **slightly different**. Change to setting of an historic building, such that it is **noticeably changed**.
Negligible	**Slight changes** to historic building elements or setting that hardly affect it.
No change	**No change** to fabric or setting.





40%

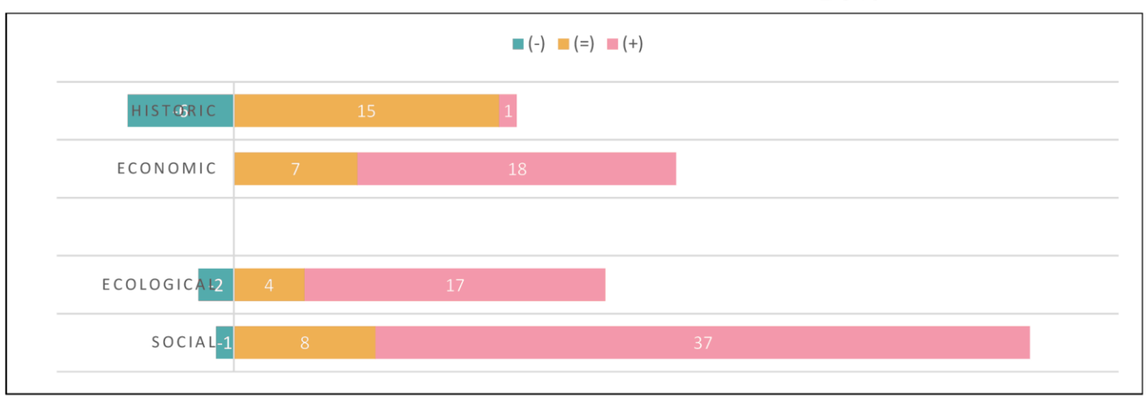
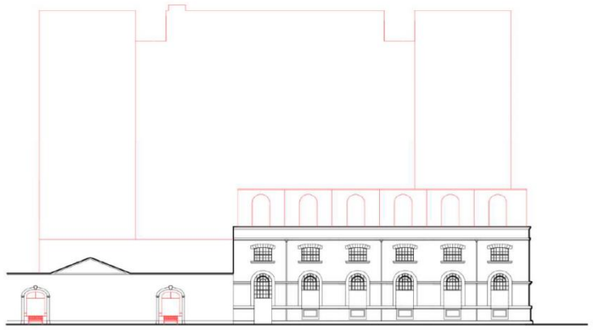


Fig 3-1 above. The 5-scales for assessment of magnitude of impact

Fig 3-2 below. The general result for project impact assessment

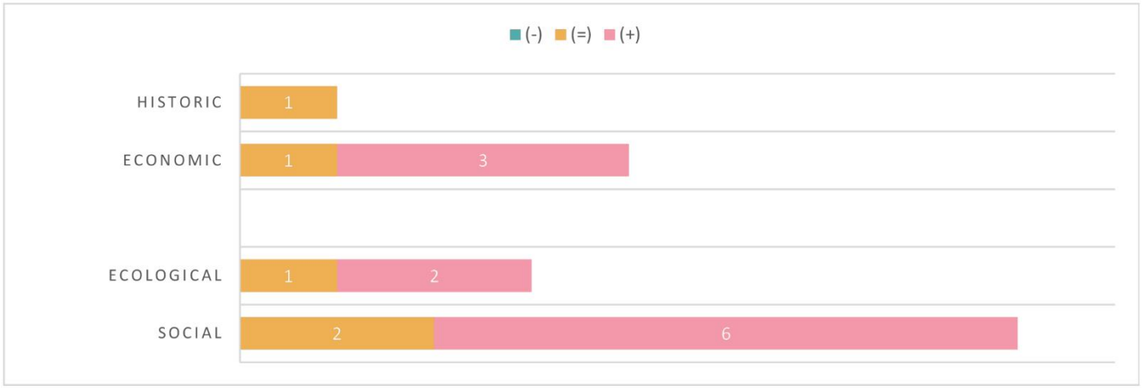
Following pages. The detailed assessment for each scene

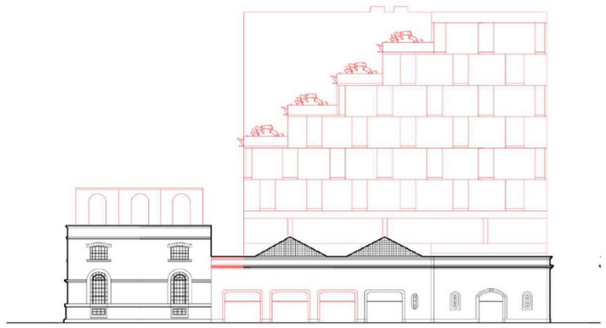
ASSESSMENT RESULTS



No change	Negligible change	Minor change	Moderate change	Major change
0%	1% - 10%	11% - 30%	31% - 70%	71% - 100%

20%





No change	Negligible change	Minor change	Moderate change	Major change
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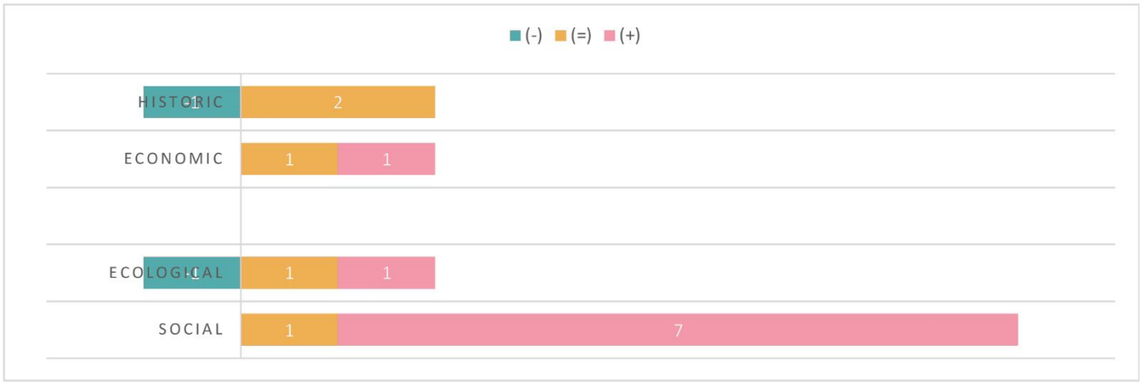
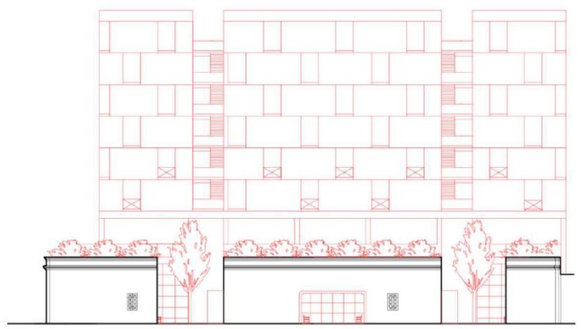
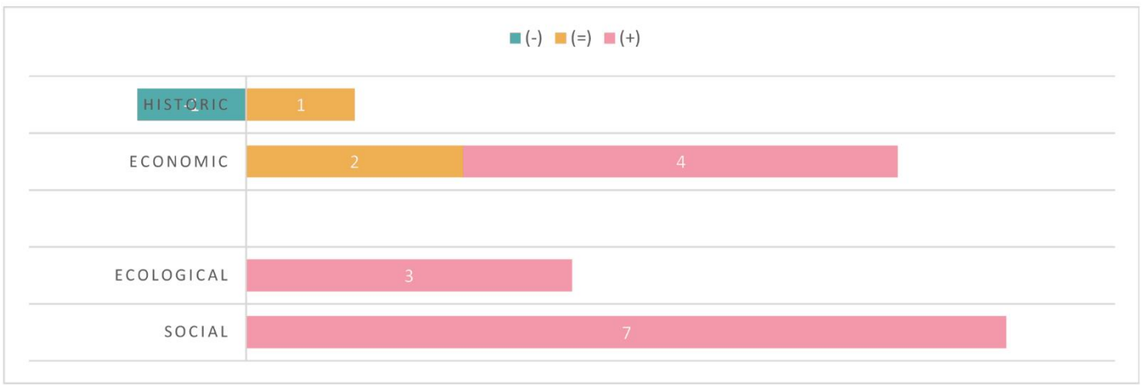
60%





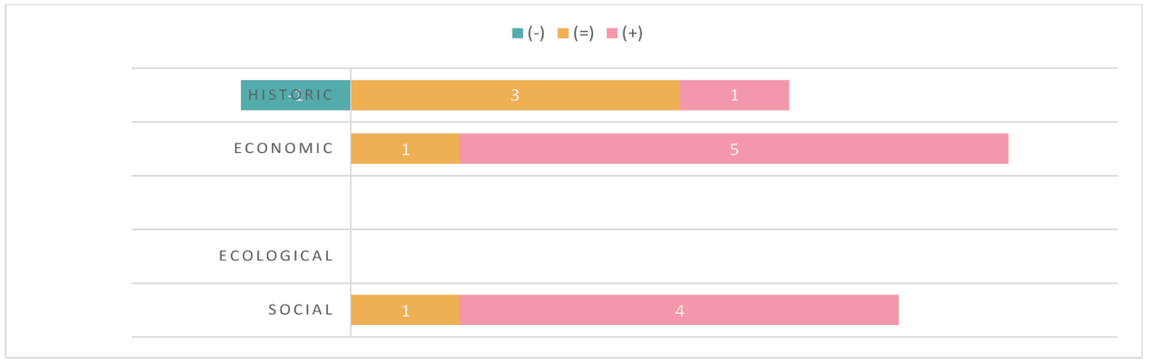
No change	Negligible change	Minor change	Moderate change	Major change
0%	1% - 10%	11% - 30%	31% - 70%	71% - 100%

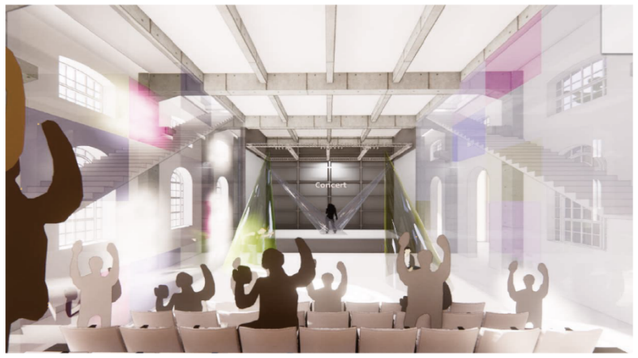


ASSESSMENT RESULTS

No change	Negligible change	Minor change	Moderate change	Major change
0%	1% - 10%	11% - 30%	31% - 70%	71% - 100%

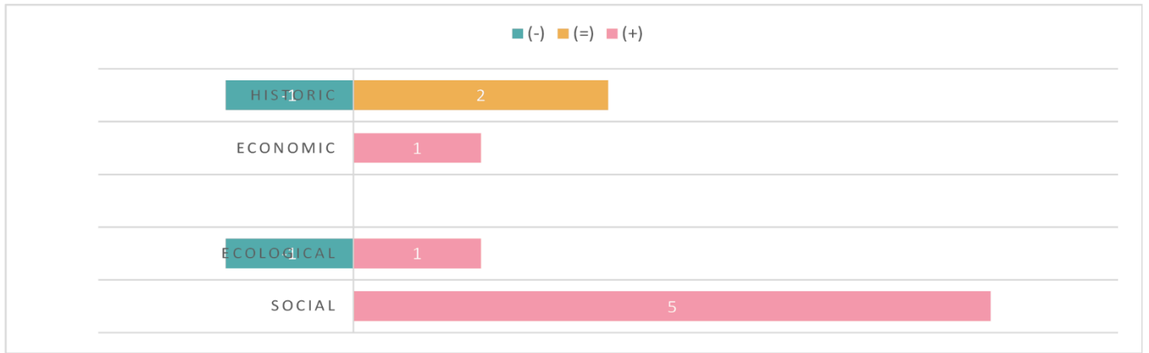
20%





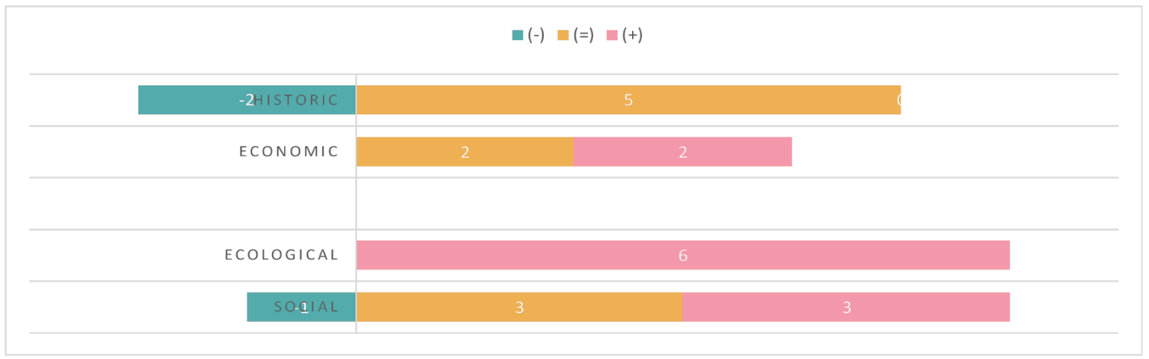
No change	Negligible change	Minor change	Moderate change	Major change
0%	1% - 10%	11% - 30%	31% - 70%	71% - 100%

20%



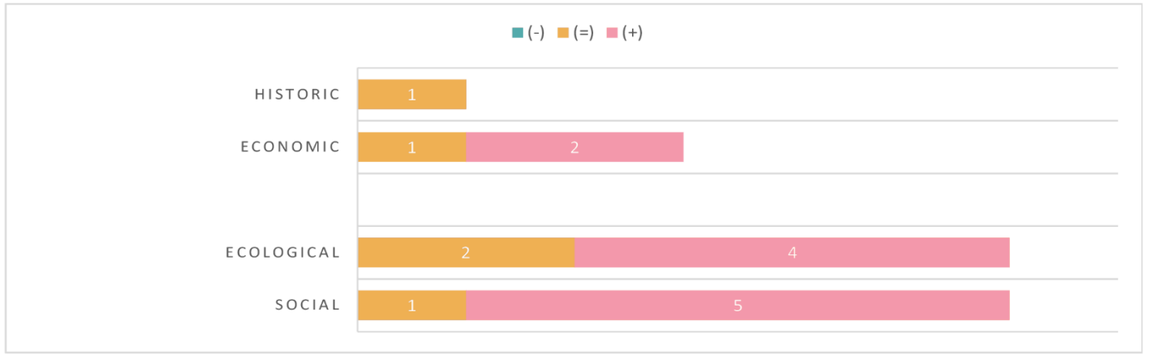
No change	Negligible change	Minor change	Moderate change	Major change
0%	1% - 10%	11% - 30%	31% - 70%	71% - 100%

30%



No change	Negligible change	Minor change	Moderate change	Major change
0%	1% - 10%	11% - 30%	31% - 70%	71% - 100%

60%



REFLECTION

This graduation design project belongs to MSc3 Graduation Studio: Revitalising Heritage. The aim of the studio is about developing and testing novel values-based models for redesigning built heritage. In addition to the social value of hosting the Faro Convention Labs in fieldwork and sharing the design results with the local government of Faro, this project is also committed to the transparent architectural design process and scientific heritage designing discussion, in order to create a certain academic value.

Revitalizing Heritage Studio has a rigorous structure with three main phases: cultural significance survey, values-based redesign, and heritage impact assessment.
First, the cultural significance survey of this project selected the topic of place attachment and applied the method of cultural mapping to engage local stakeholders. The results of the research, the hierarchy sheets of values and attributes, were translated into a redesign proposal, clarifying stakeholders' demands.
Second, the value-based redesign of this project applied the method of decision-making participation with value-based scenarios. In further discussion, the architectural design utilized the theories of contextual relationship and value-attribute; the technical design systematically discussed three aspects: structure, detail, and climate.
Third, the reflection of this project applied the method of heritage impact assessment to visualize and evaluate the changing in the original values and attributes. The assessment result told whether the project proposal is realized.

The outcome of this project is an architectural design with the accompanying technical design and research report. According to the results of the heritage impact assessment, this redesign intervention has greatly enhanced the ecological and social value of the site with a limited reduction of the historical value. The design result meets the design proposal and according to the conclusion from the cultural significance survey, it will have a positive effect on promoting residents' place attachment.
As a reflection, I think there are the following shortcomings of this project: in terms of design, the demonstration of urban design is relatively insufficient; in terms of research, the initial keyword "place attachment" is relatively abstract, resulting in insufficient influence in the later stage of the project.

During the tutoring process, the first thing I gained was the simultaneous working mode of research, writing, and design advocated by the studio structure. Through communication with the tutors, I gradually learned the method of connecting research and design and constantly compared this process with my practical working experience to upgrade myself.

During the research process, I learned the significance of community participation in heritage design, the charm of field research in the form of games, and the social value of participatory research itself. During the design process, I learned about scientific discussions on design decisions based on architectural theories, especially using value-based models to evaluate design decisions and impacts. The feedback from my mentor gradually influenced my former working habit of relying solely on aesthetic taste for subjective design. From a technical point of view, the structure, details, and climate considerations of this project are far more adequate than my other previous projects. The new method of combining spatial rendering and technical consideration in designing inspired me especially.

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APPENDIX

1. Management of interview materials

Attribute type Adult positive	Attribute category	Frequency (qualitative analysis)	Attribute coding Tangible attributes Intangible societal attributes Intangible relation attributes	Frequency (coding and counting)	value coding Aesthetic economic Social political Historical ecological Age scientific
Tangible attributes	Natural Asset	3	I like the sea and beach to be close to my working place I like all the places along the sea coast, I like the view there It is close to the sea and the waterfront	25	I like Estação because I like the sea and beach to be close to my workplace It is close to the sea and the waterfront I like to walk on the beach I like all the places along the sea coast, because I like the view there I naturally like the sea and everything else about nature because I was born in a little village full of trees and water, the same as my parents' hometown
	Context	3	Proximity to both downtown- the traditional area, and the nature I like the great access of Estação to all the city leisure areas It is very close to the city center		I like Estação, because Proximity to both downtown- the traditional area, and the nature I like the great access of Estação to all the city leisure areas It is very close to the city center
	Non-nature Asset	2	I like the outlook of the factory I like the design of the pink buildings, also the square between them. I like the roof of my apartment		I like the train station, it is an important building for the whole city. Because the station supports the movement of tourists and help to expand the city I like the outlook of the factory, But I don't like its condition I like the design of the pink buildings, also the square between them. I don't like the condition of the square. I like those old buildings with beautiful decorations in my neighborhood I like the roof of my apartment because I could do leisure activities there and I have beautiful view of the city The view on top of the tower is amazing, you can imagine that city on your left and nature on your right
Intangible societal attributes	Community (family)	2	I do Leisure activity with Family member, especially like sitting on the beach with my son to see sunset. I currently move to live with my boyfriend in his house in Estação	23	I do Leisure activities with Family members, especially sitting on the beach with my son to see the sunset, I love my family Sometimes I do exercise by myself around the platform and street nearby. I like Estação, I recently moved to live with my boyfriend in his house in Estação I like Estação, I like to walk the dog with my two kids here I like the little square on Rua Francisco Street because my kids could play there, I have a great impression of the little square with plants. I love Estação, I really hope my kids could grow up here, it is "an ideal place for my children's growth" for me.
	Community (Neighbor)	1	We have very nice people here, they are easy to get close, polite, willing to talk and support my business.		I like Estação, We have very nice people living here I like Estação, We have very nice people here, they are easy to get close, polite, willing to talk and support my business.
	Association	2	I have very nice memory with the old concert hall I liked to pay a visit to the concert hall in Estação, which used be the best place for music, I like its cultural function.		I have very nice memory with the old concert hall I liked to pay a visit to the concert hall in Estação, because it used to be the best place for music, I like its cultural function. I met my husband there.

	Use (hobby)	5	I like to watch very different people pass by, I like to talk with very different people Working in a café that next to the train station support me to meet new and different people I like (to walk the dog with) my two kids I like the little square on Rua Francisco Street because of my kids could play there, I have great impression to the little square with plants. I like the convenience of the neighborhood		I like Estação, because I like watching the aircraft and I could do it here When I pass by some café during my route, I will stop, drink, eat something and watch football sometimes. I like Estação, because I like to watch very different people pass by, I like to talk with very different people Working in a café next to the train station supports me to meet new and different people When the municipality decided to move the concert to the beer factory, we made protest against this. After that, I come to Estação less I like doing exercise with my fellow-townsman friends. We exercise on the street in the morning When I was a kid, I always played football with my friends in the old factory and bus station I like (to walk the dog with) my two kids I like the little square on Rua Francisco Street because of my kids could play there, I have great impression to the little square with plants. I like the convenience of the neighborhood I used to play football with my friends inside of factory during my childhood
	Use (function)	3	I have been working here for 7 years to run my little store. The store business supports my life I know a nice restaurant here Nowadays the most important building here is the train station for me, because the traffic function I need.		Here we have a Bus stop for going to the beach I have been working here for 7 years to run my little store. The store business supports my life I like Estação, The price of renting a house here is acceptable I like Estação, we have Theatre and shows in this area I like Estação, because I know a nice restaurant here *3 Nowadays the most important building for me is the train station, because of the traffic function I need.
Intangible relation attributes	Character (atmosphere)	3	I like the neighborhood because it is calm and safe, it is also “my working place” ”where I grew” I like the neighborhood because it is calm I like the sense of history in Estação	12	I like Estação, because I like the quiet atmosphere *2 I like Estação, I like to work here in a calm neighborhood I like the neighborhood because it is calm and safe I like the streets in Estação because they make me feel safe, which is important for ladies who walk alone. The street is safe because it is full of lights, people from parties, and the doorkeepers for buildings along the road. It is a clear road without branches or dark corners where some people could hide there. I like the sense of history in Estação I like the neighborhood because it is calm and safe, it is also “my working place” ”where I grew”
	Relation (Memory)	1	My father and I were the friend of the old lady as the owner of the yellow building in front of the train station. We used to have party at her house, where we create a lot of memories		I like Estação, Although I’m not living in this neighborhood, it means “the place where my kids grew up” for me, I have a lot of memory of my kids playing in the square. I like Estação, it contains my memory of university time, when my friends and I drink beer here My father and I were the friends of the old lady as the owner of the yellow building in front of the train station. The building is meaningful to me because we used to have party at her house, where we create a lot of memories I like the little square with the status because it is named by a famous local scholar who was my grandpa's friend
	Relation (meaning; first-time)	0			I like Estação, it is also “my working place” ”where I grew” I like Estação, This place means “working place” for me I like Estação, it contains My memory about my first coming to the city Faro, living in the hotel in Estação. I also met my boyfriend in the train station, we drink a lot of coffee together that day I like Estação, here I got My first house in Faro
	Concept (identity-Algarvio)	1	I’m working in the train station, my work is to clean the track. I learned how to clean the track from my dad since I was a girl and I’m continuing his work now, I’m proud of this.		I’m working in the train station, my work is to clean the track. I learned how to clean the track from my dad when I was a girl and I’m continuing his work now, I’m proud of this. I like the history of my neighborhood and the fact that we have always been able to find some ancient construction under the floor of our courtyards. Sometimes people have no awareness to protect them, which is a problem

Attribute type **Adult negative**	**Attribute category**	**Frequency (qualitative analysis)**	**Attribute coding**	**Frequency (coding and counting)**	**value coding**
Tangible attributes	Assets	0		11	I don't like Estação, The neighborhood is lacking of public spaces I don't like Estação, I live with my son, and I really need some entertainment places like a park for him. I don't like Estação, There is very few public space in Estação to support any activities I don't like the fence in front of the train track, because it stop people's view to the sea. I don't like the trains station forbidding people from passing by since 10 pm, because we have to walk very far to meet other entrances to the sea then
Intangible societal attributes	Community (The elderly)	2	I don't like so many annoying old people here this place seems to be "a street drama of the elderly"	14	Generally I don't like the place, because I don't like so many annoying old people here, this place seems to be "a street drama of the elderly"
	Use	6	I live with my son, and I really need some entertainment places like a park for him. I don't participant in neighborhood activities There is very few public space in Estação to support any activities There is no activity in this neighborhood 2 The corona stop me from experiencing and getting attached to the place in two years		I live with my son, and I really need some entertainment places like a park for him. There is very few public space in Estação to support any activities The corona stop me from experiencing and getting attached to the place in two years I don't like Estação, I like to go out at night for party or beer, we don't have this kind of activities I don't participate in neighborhood activities I don't like Estação, there is no activity in this neighborhood I don't like Estação, I wish the neighborhood could have more local activities I have no time for any activity I like go out at night, there is few party, clubs here I like the outlook of the factory, But I don't like its condition I like the design of the pink buildings, also the square between them. I don't like the condition of the square. I don't like the single roads in Estação because there is only one way to leave the downtown through Estação now, which causes trouble for my traveling and parking I don't like the homeless people and people using drugs under the rain shield of the factory, that street has no lights at night and is very dangerous during the night. My car was stolen there two years ago.
	Use - community	3	I don't participant in neighborhood activities. I seldom participate in any big cultural or social events because I don't have many local friends. Now my wife has to bring our kids back to Bangladesh, because I still cannot afford a house here, that's sad.		I don't participant in neighborhood activities. I seldom participate in any big cultural or social events because I don't have many local friends. Now my wife has to bring our kids back to Bangladesh, because I still cannot afford a house here, that's sad.
Intangible relation attributes	Character (atmosphere)	2	This place need to be more lively There should be more people on the street	3	I don't like Estação, This is truly a place with the noise from heavy traffic This place need to be more lively There should be more people on the street
	Relation (sense of ownership)	2	After the old lady passed away, the house was sold for hostel now and I cannot feel the "sense of ownership" now, I'm sad about that. I don't like the factory is turning to luxury apartment, which separate the part from the neighborhood		After the old lady passed away, the house was sold for hostel now and I cannot feel the "sense of ownership" now, I'm sad about that. I don't like the factory is turning to luxury apartment, which separate the part from the neighborhood

Attribute type **Elderly positive**	**Attribute category**	**Frequency (qualitative analysis)**	**Attribute coding**	**Frequency (coding and counting)**	**value coding**
Tangible attributes	Landscape	3	The neighborhood has nice environment *2 Everything is nice here	28	The neighborhood has nice environment *2 Everything is nice here
	Natural Asset	2	I like the sea and beach I love the sea		I like the sea and the path by the sea *8 I love the sea
	Non-nature Asset	1	My house as my important property		The train station 1234 The outlook of the tower of factory 12 The factory is beautiful I like the old building facades along the main street
Intangible societal attributes	Community (family)	1	I came to this place only because my husband worked in the train station.	23	I came to this place only because my husband worked in the train station.
	Community (Neighbor)	3	This is a place full of nice people with kind heart This is a place full of nice people I have a group of friends in Estação		There is a social network along the main street, the print shop owner exchanged cash with the café owner and help the supermarket owner print advertisements.
	Use (hobby)	13	Go to the sea with friends, each of us owns different kind of boat and we like to show our boats to each other Use the café, the restaurant, drink and watch football in bars here. *2 Drink and talk with friend in the bar *6 I like to eat the specific type of local fish as sardinha here I like to walk to Estasao's little square between two pink dwelling buildings, because I could watch kids playing there I like doing gardening in my garden		I like to talk with neighbor 1 2 I like to sit in café and discuss politics with friends I like watching movies, cycling (along the coast), I have my dog, I am still working, running my print shop. I like to watch people fishing I walk my dog here This is my workplace I like doing gardening in my garden The hospital is important for my son's health I like do leisure activity along the beach to the new park every day, because there has beautiful environment and no traffic. It is also close to my home. I like to feed the cats living in abandoned factory About the café: Elderly people like to gather in all kinds of café around Estação after 4 pm, if the day is sunny enough. a. There is a bar like a winter garden on the right side of the train station entrance, travelers sit inside and local grandpas sit outside. The grandpas know each other very well. Grandpas gather here, maybe they like the busy and

					lively atmosphere in front of train station. b. Another bar at the edge, also the corner of the neighborhood. An old lady brings her daughter (adult/seems) here to meet their friend. The mother and daughter live on the east of Estação, but they come to use this place. c. Another bar at the edge of the neighborhood. A bar just like any bar. Another group of grandpas gather here, they know each other very well. An old lady with dementia was sitting in the corner, they know her situation. d. A coffee shop with bright Spaces and large floor-to-ceiling Windows
	Use (function)	1	This is my working place		I know a very nice restaurant in this neighborhood I need to wait trains in train station About working place: Certain elderly are still working in Estação, but in a relatively relaxing way. a. The print shop is like a bright, elegant private castle for the owner, also for friends gathering and talking with snacks on the top of printing machines. b. a shop in platform of northern high-rise buildings) the courtyard of the high-rise complex is really empty, cold, hard material, not lively, but it still provide ground floor shop rooms for gathering people, the sun side is much more lively.
Intangible relation attributes	Character (atmosphere)	4	I like the quiet atmosphere of the neighborhood 3 The neighborhood is calm	18	I like the quite atmosphere 1 2 3 4 This is a place of escape About the atmosphere of the street: a. Just like many streets in Faro, the pedestrian is narrow with parking cars' invading b. Estação has especially heavy traffic because the neighborhood is close to bus and train station, and cars always neglect the street in front of the factory. It's difficult to pass the road here, and the noise is huge. c. The center area of Estação has very few walking people, which is an opposite to the public traffic, that's why people feel the area is calm and quiet, especially around morning.
	Relation (Memory)	1	My kids used to play in the little square between two pink dwelling buildings		The street where I met my wife I could remember when the factory still worked, we bought bread from the factory
	Relation (meaning)	3	This is where my family lives and where I grow up. 2 This place is my "home" 6 I used to work on the train, so it just become my habit to come to this place. My root is here. "my working place" "where I experienced my childhood"		This is where my family lives and where I grow up. 2 This place is my "home" 6 I used to work on the train, so it just become my habit to come to this place. My root is here. "my working place" "where I experienced my childhood"
	Concept (identity-Algarvio)	3	The facades along the main street help to identify the city Faro I like so I stay I once lived in France for 2 years but I came back. I'm still ALGARVIO and I'm proud of this		The facades along the main street help to identify the city Faro I like so I stay I once lived in France for 2 years but I came back. I'm still ALGARVIO and I'm proud of this I miss the place where I came from because people there are more open and friendly I love the atmosphere of my hometown, I have a great memory of that place When I come here, my daughter's classmates laugh at her accent

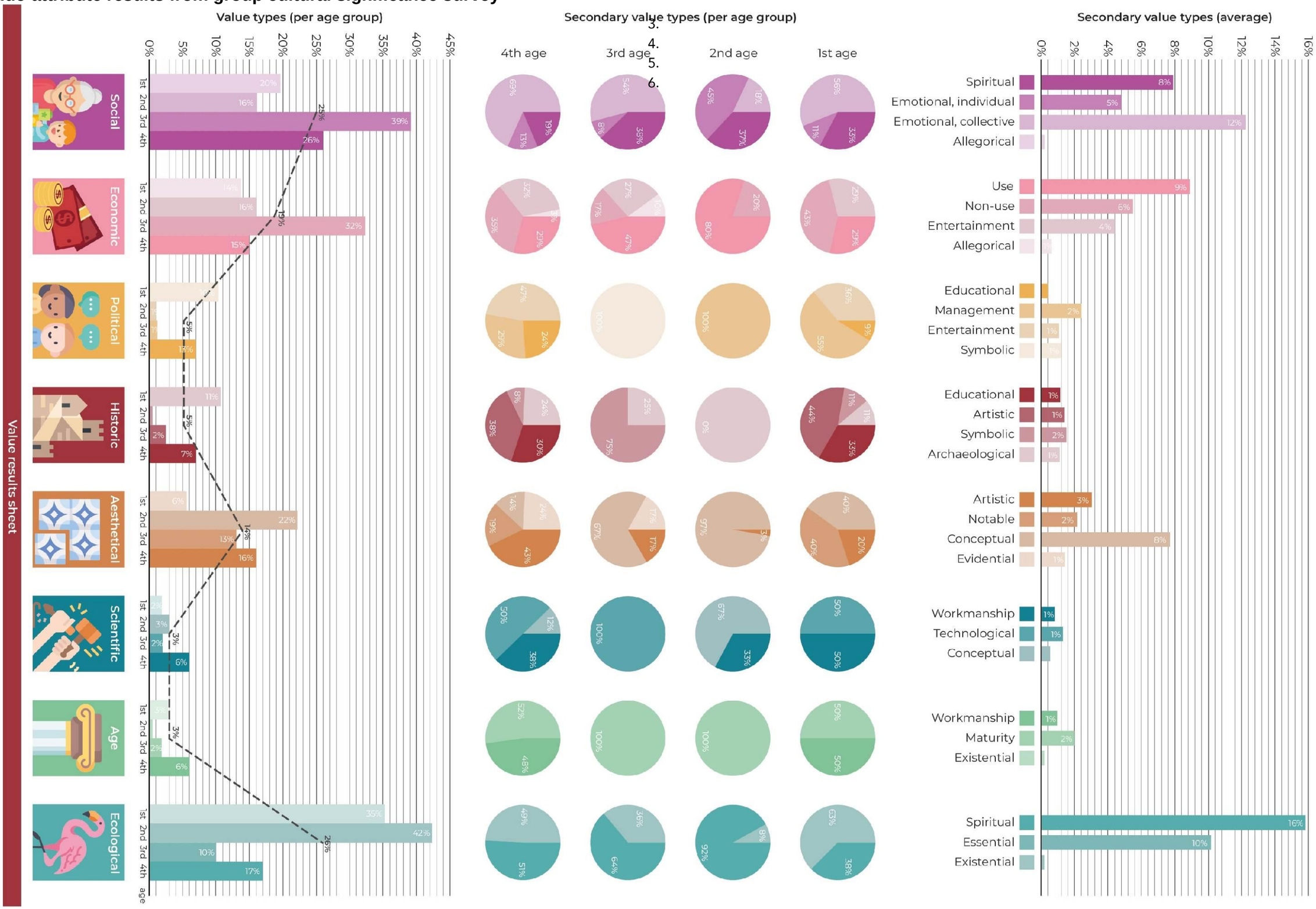
Attribute type Elderly negative	**Attribute category**	**Frequency (qualitative analysis)**	**Attribute coding**	**Frequency (coding and counting)**	**value coding** “E” means “I like Estação, because” in text
Tangible attributes	Non-natural assets (Public space/elements)	1	I hate the factory, The factory should be pulled down	6	E, The neighborhood is lacking of public spaces The historical façade of Estação is not clean and well-painted I hate the factory, The factory should be pulled down
Intangible societal attributes	Community	2	I don’t have local friends My kids have grown up and left me, I live alone	3	E, The square is the place where my kids played, now they have grown up and leave me, I live alone. I’m living in a block where neighbors share one courtyard, all the others died. Children dropped into the well, and that is why we have to cover the well. Neighbor building is turning to hostel or dormitory for students. Truly all the people living here that I knew has passed away.
	Use	0			EB, The factory is abandoned There is no reason for me to stop in this neighborhood, I just pass by it and then forget it
Intangible relation attributes	Character (atmosphere)	1	There should be more people on the street to make the neighborhood lively	7	There should be more people on the street to make the neighborhood lively
	Concept (identity/ ?	3	I don’t like this place at all, I feel more attached to the place where I came from This is the place a lot of people passed away I have just moved to this place for 6 months, I miss the place where I lived before Spain is the dream place for me with more colorful life		I don’t like this place at all, I feel more attached to the place where I came from This is the place a lot of people passed away I have just moved to this place for 6 months, I miss the place where I lived before Spain is the dream place for me with more colorful life
	Relation (meaning)	2	“the place of escape” Some important places in my memory has changed		“the place of escape” Some important places in my memory has changed

Attribute type Teenager negative	**Attribute category**	**Frequency (qualitative)**	**Attribute coding**	**Frequency (counting)**	**value coding**
Tangible attributes	Non-natural assets (Public space/elements)	0		0	E, The neighborhood is lacking of public spaces E, I live with my son, and I really need some entertainment places like a park for him. E, There is very few public space in Estação to support any activities I don’t like the fence in front of the train track, because it stop people’s view to the sea.
Intangible societal attributes	Community (The elderly)	1	This neighborhood lives too many elderly people, make it less lively maybe? It might be an idea to have coffee with friends here, but I will never enjoy beer party here.	4	Generally I don’t like the place, because I don’t like so many annoying old people here, this place seems to be “a street drama of the elderly”
Intangible relation attributes	Character (atmosphere)	1	I don’t like the heavy traffic in Estação.	1	E, This is truly a place with the noise from heavy traffic

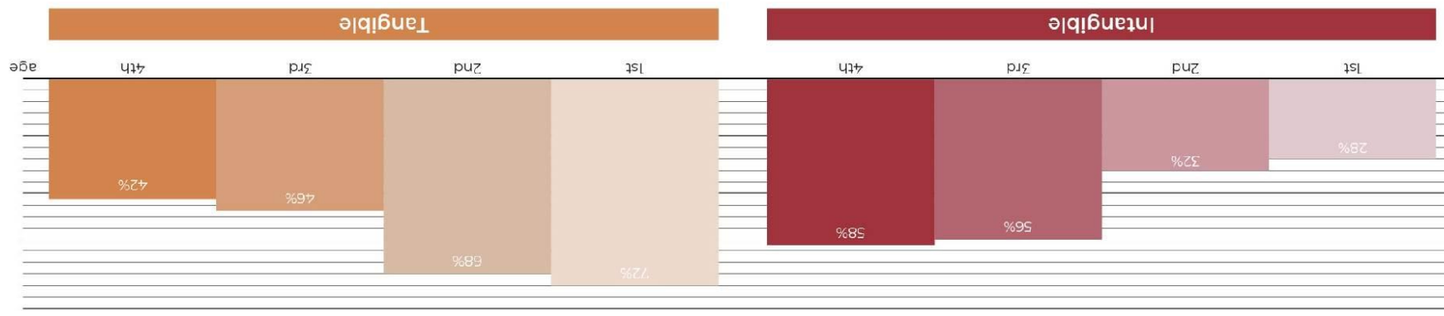
Attribute type Teenager positive	**Attribute category**	**Frequency (qualitative analysis)**	**Attribute coding**	**Frequency (coding and counting)**	**value coding**
Tangible attributes	Natural Asset	2	My friend and I like to sit around the platform next to the sea to see sunset together. We also like to drink together.	21	E, because I like the sea and beach to be close to my working place I like to walk on beach, because? I like all the places along the sea coast, because I like the view there
	Non-nature Asset	2	I like the façade of street in Estação, they are traditional, some of them are also old, I like old buildings. I live with my parents here, we like the square environment just in front of our house. We prefer to meet people in the square, I could even play with my cat through the window.		I like the train station, it is an important building for the whole city. Because the station support the movement of tourists, and help to expand the city I like the outlook of the factory, But I don't like its condition I like the design of the pink buildings, also the square between them. I don't like the condition of the square.
Intangible societal attributes	Community	2	I share the house with three of my friends, we like to drink coffee and watch the sea together. I like to have Leisure activity with Family member	13	I do Leisure activity with Family member, especially like sitting on the beach with my son to see sunset, because I love my family. Sometimes I do exercise by myself around the platform and street nearby. E, I currently move to live with my boyfriend in his house in Estação E, I like to walk the dog with my two kids here I like the little square on Rua Francisco Street because my kids could play there, I have great impression to the little square with plants. E, I really hope my kids could grow up here, it is "an ideal place for my children's growth" for me.
	Use	5	I like the train station. I like traveling, I always move my living place, but living next to the train station brings me a lot of convince. I could go to other cities easily and frequently. I like waiting my traveling friends in the café by the side of the train station. I like the feeling of waiting. Estação is like my "base of traveling"		I like watching the aircraft, because? When I pass by some café during my route, I will stop, drink, eat something and watch football sometimes. E, I like to watch very different people pass by, I like to talk with very different people Working in a café that next to the train station support me to meet new and different people I liked to pay a visit to the concert hall in Estação, because it used be the best place for music, I like its cultural function. I met my husband there. I like doing exercise with my fellow-townsman friends. We exercise on the street in the morning
Intangible relation attributes	Character (atmosphere)	2	I like the calm atmosphere and easy life style in Estação, I feel no crowd here, and could enjoy better rest. It is a safe place.	10	E, The quiet atmosphere 12. I like to work here in a calm neighborhood E, I like the neighborhood because it is calm and safe
	Relation (Memory)	1	I like the sea, the beach in Estação, the image always remind me of my hometown.		E, Although I'm not living in this neighborhood, it means "the place where my kids grew up" for me, I have a lot of memory about my kids playing in the square. E, My memory about university time, when my friends and I drink beer here My father and I were the friend of the old lady as the owner of the yellow building in front of the train station. The building is meaningful to me because we used to have party at her house, where we create a lot of memories
	Relation (meaning; first-time)	0	Estação is the first impression of the city for me. It is the first stop of my trip. It is the location where means I started a new life. I get my first apartment in Estação. I get my first job as the waitress in a restaurant there. I met my first local friend here		E, it is also "my working place" "where I grew" E, This place means "working place" for me E, My memory about my first coming to city Faro, living in the hotel in Estação. I also met my boyfriend in train station, we drink a lot of coffee together that day. E, My first house in Faro
	Concept	1	I like our house in the ground floor of the pink building, Estação means "home" for me. I think Estação is a place with long history		I'm working in the train station, my work is to clean the track. I learned how to clean the track from my dad since I was a girl and I'm continuing his work now, I'm proud of this.

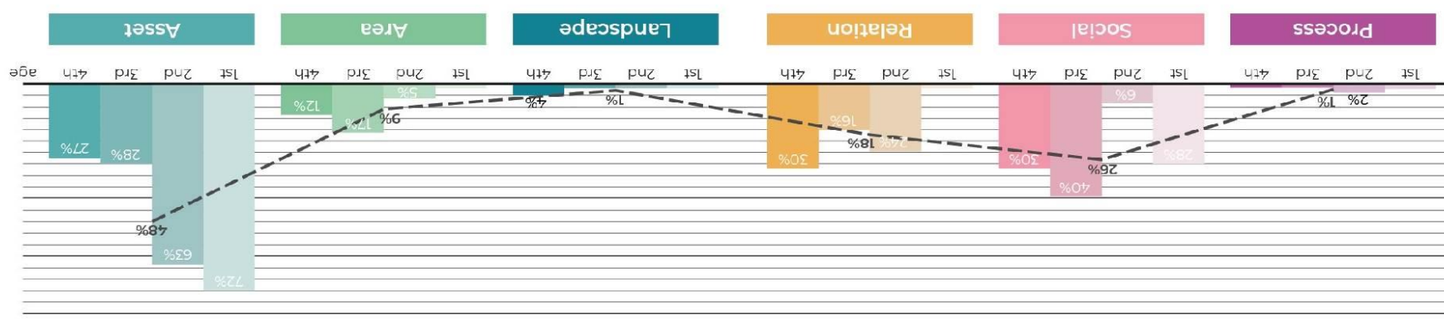
APPENDIX

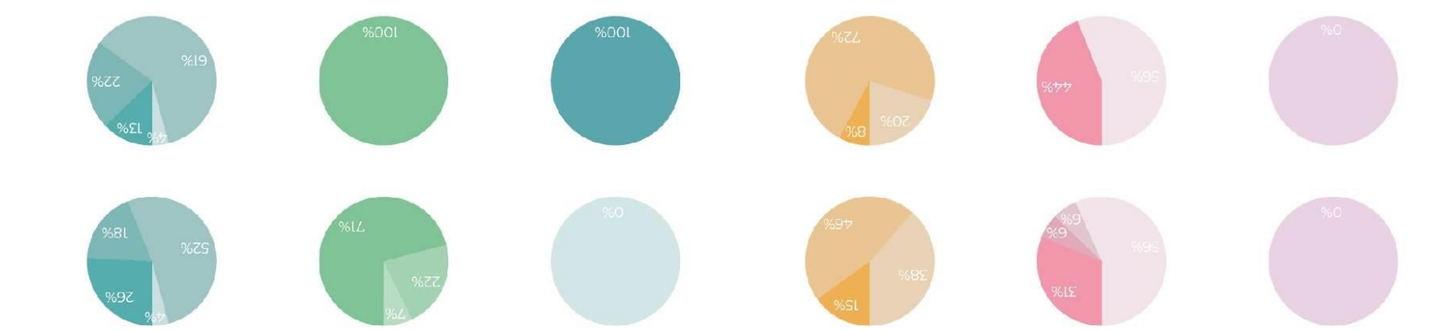
2. Value-attribute results from group cultural significance survey

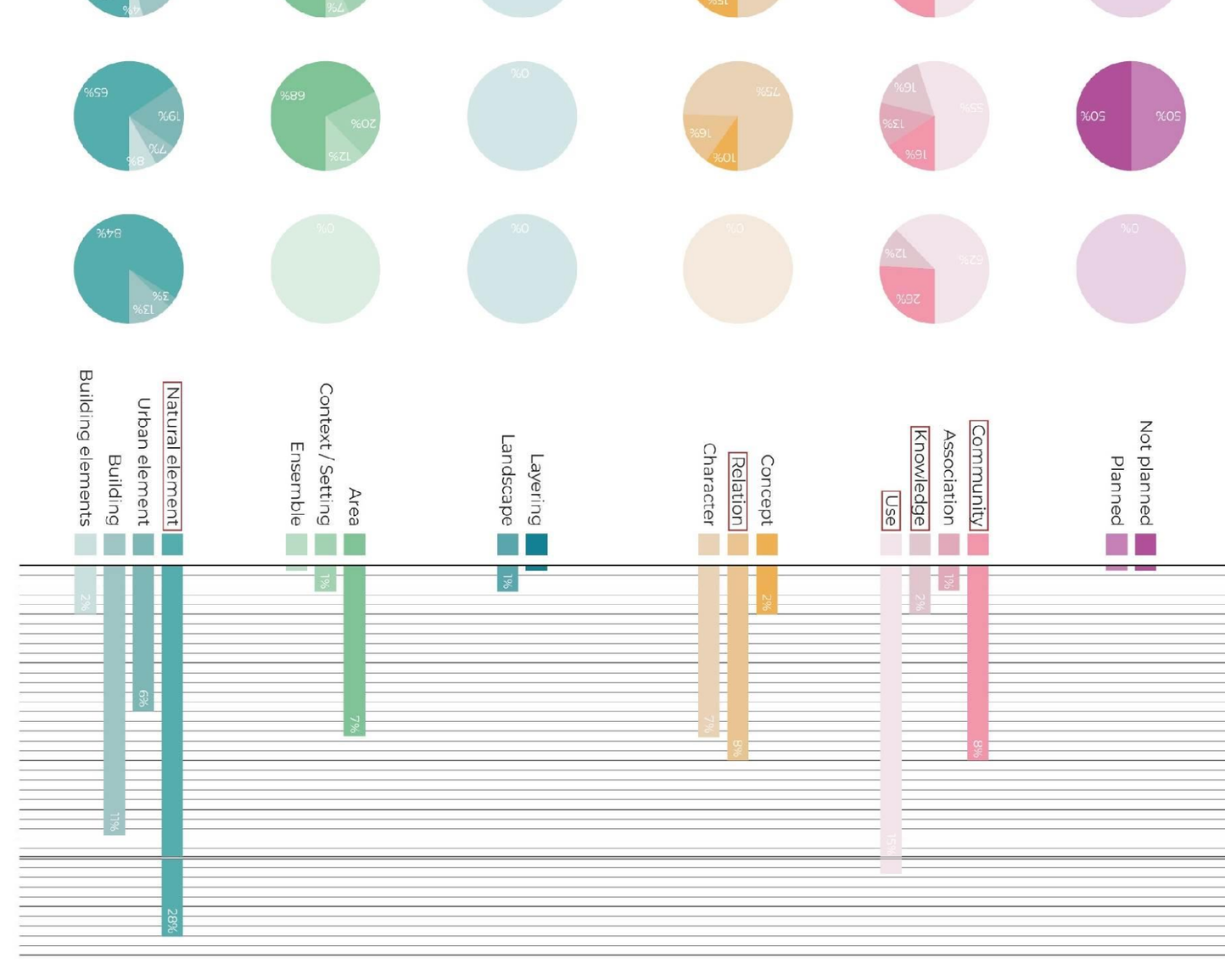


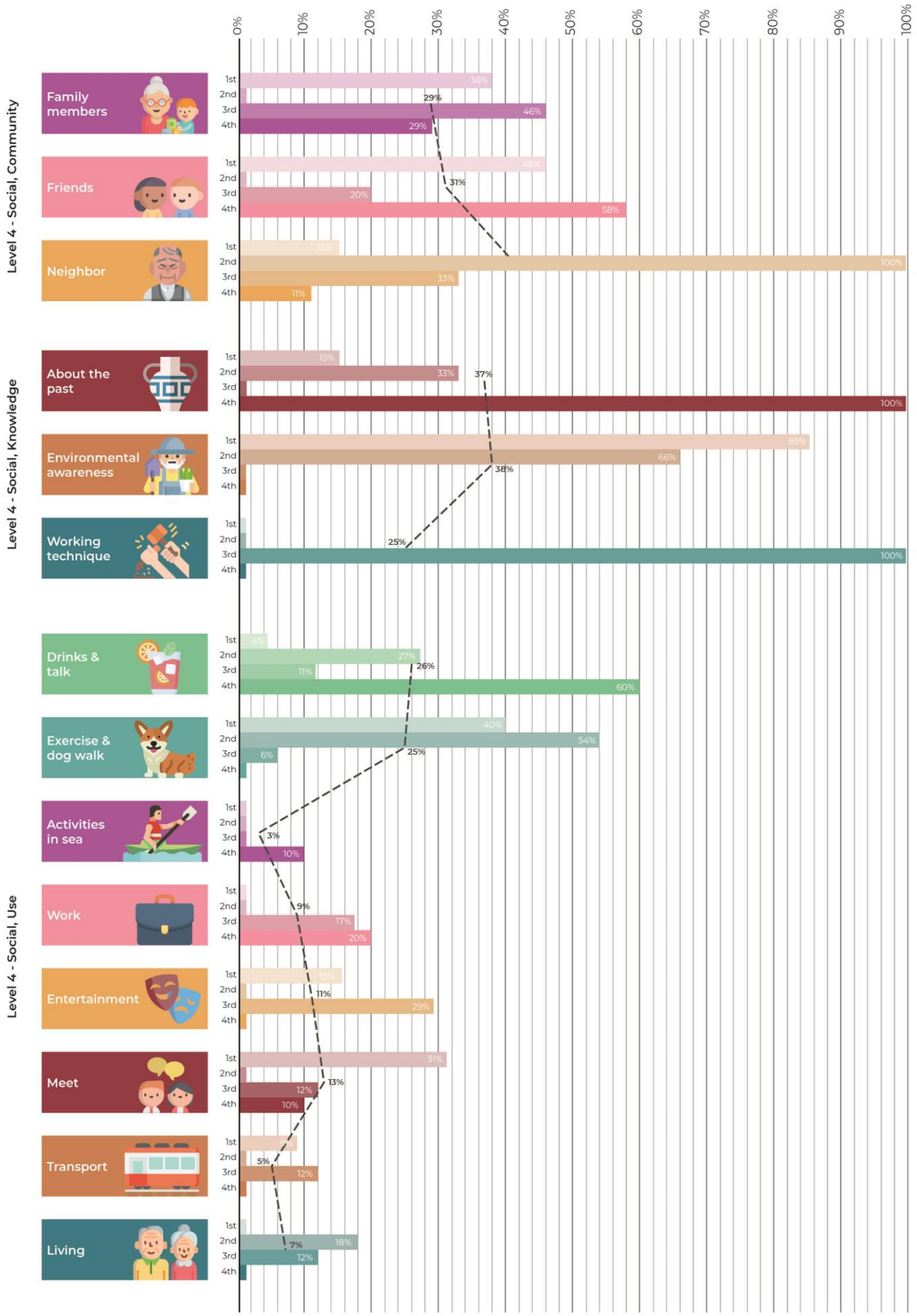
Attribute results sheet

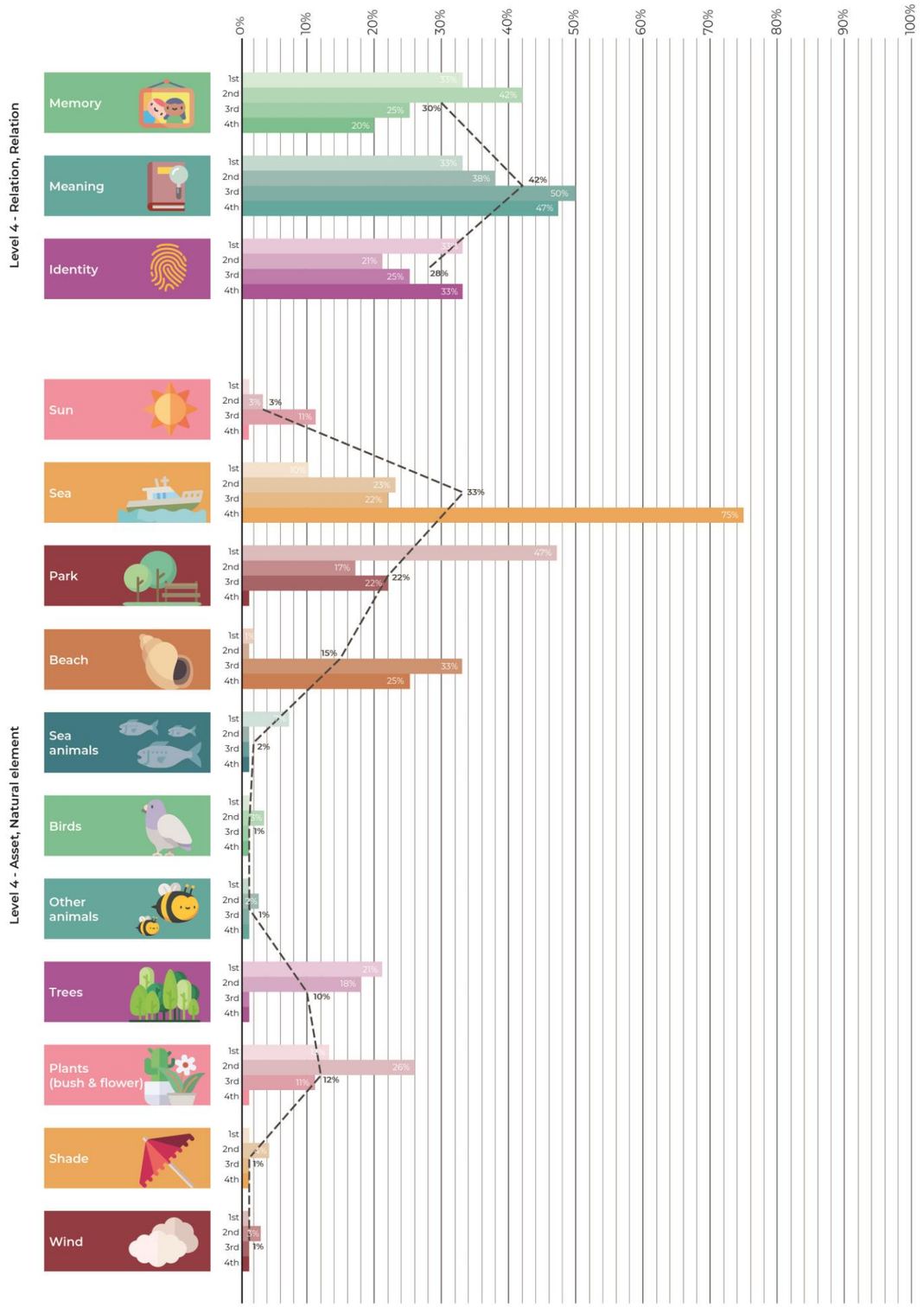












Attribute results sheet