

IMPACT ASSESSMENT PAPER

P5 Reflection Paper

Impact Assessment Paper

Technical University of Delft,
The Netherlands

Master Architecture
Studio

Msc 4
Heritage & Architecture
Revitalizing Heritage: Faro Convention Labs

Krist Van Herck

4631641

Supervisors

Ana Pereira Roders
Bruno Amaral de Andrade
Wido Quist

I chose this Studio for my graduation because of my personal interest in heritage, vernacular architecture in hot countries, the social issue that tourism implies and its management for the future. Being able to develop a project with a participatory perspective was a pleasant surprise for me. As for the place, for me it was a very good experience because of the language I speak, Spanish, being so close to Portuguese made my experience much easier and made it very rich due to the local friendliness.

The Studio is part of the Heritage and Architecture chair, it focuses on the Faro Convention Labs and the revitalization of heritage that has been abandoned or damaged. The Faro Convention labs promote a broader understanding of heritage, not just as objects that in themselves are all that matters. But as value for use and meaning within their communities. Based on these principles, the values that are applied to buildings and areas are sought, to discover their capacity for change in the future along with the strategies that guarantee their display through use.

Research

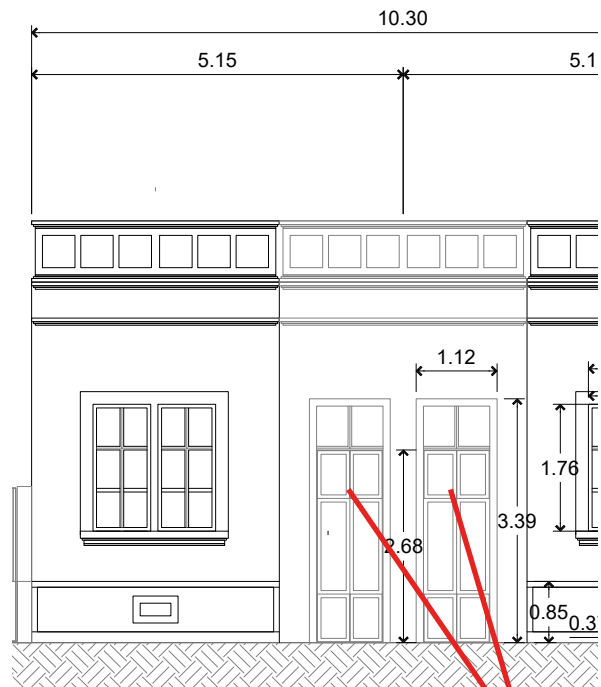
The studio was divided into two stages, beginning with the research stage in the first semester and design in the second. The specific case of the study takes us to Faro, Portugal where we carry out the necessary field work for the participatory methods that we prepare in the first weeks. Despite its size, the city of Faro represents an important center of tourism where heritage reveals the different layers of the city's history. We focus attention on the Sao Francisco neighborhood adjacent to the historic center.

With this context in between, the group focused the investigation on how tourists and local Farenenses value their heritage. These two groups of locals and tourists would be the main source of information. The starting point for the footprint that it currently has within society were social networks framed by the methodology developed by Manal and pereira Roders (2021) . Social networks provided us with a reasonable amount of information that we were able to analyze through different categorizations such as location, language, date, and hashtags.

The analysis of social networks led us to the creation of a survey game that would be applied on site to both communities of Faro. The game consists of a series of pictures and a series of words. The photographs are architectural attributes of facades in Sao Francisco and the words have a relationship with the values explained by Tarrafa and Pereira Roders (2019). Figure 1

From these valuations that were applied to 120 individuals, the analysis of these results gave rise to a Masterplan for the Sao Francisco neighborhood based on field work, consultation with local specialists and the potential of some lots. It represents our vision of the future of the Sao Francisco neighborhood. Within the masterplan, conservation and potential areas were detailed, which are the basis for the next stage of the Study.

Within the Masterplan three areas of intervention that were developed during the second part of the Study are considered. These areas have characteristics such as abandonment, deterioration and potential that make them interesting objects of study.



	1.1		2.1		3.1	
Value	Tourist	Locals	Tourist	Locals	Tourist	Locals
Social	1	1	3	5	1	7
Economic	1	1				
Political			3	1	1	3
Historic	31	24	32	26	25	22
Aesthetical	11	13	20	18	25	14
Scientific	7	3	13	10	12	7
Age	23	20	19	14	17	9
Ecological						

Figure 1

Value Based Redesign

The area to be intervened consists of 5 plots in different states of conservation and 4 plots respond to two local typologies from the 1930s. These two original typologies from the city of Faro are the subject of redesign during the second stage of the Studio. This link between value and damage informs the design strategy. The strategy is based on the application of a system of principles such as the correlation between damage and intervention (Figure 2). The contrast between the existing and the new addition (Figure 3).

The starting point was the preparation of plans of the current state of the five lots. With the drawn facades it was possible to make an assessment of the damage to the buildings. At the same time, the values of the previous investigation are translated into the facades of the intervention. The value plans synthesize the information derived from the previous investigation. This analysis of values and damage makes it possible to strategically focus the intervention. The attributes of the facades are measured in scale of the value of their attributes. The highest coincidence implies an added value for the building and an attribute to be preserved. It should be noted that in the group we focus on façade attributes. This as a criticism can work to perhaps expand the focus of the game and also implement other attributes beyond the facade. Overlaying these two sources of data: Damage and Value, in order to have a guide for the facade interventions to come. Figure 4

Once the context of the building was clear, it was necessary to draw up a map of challenges and opportunities. This blueprint of opportunities outlines the intervention according to the overlapping layers of information from the Value, Harm analysis and local regulations. The main intention is to revitalize this complex through a respectful and strategic intervention. Being a group made up of two different types and with different conditions, the focus had to be on both scales, group and individual by lot.

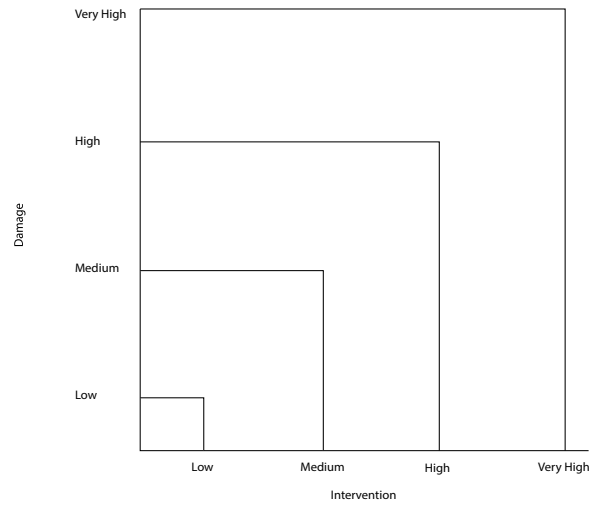


Figure 2

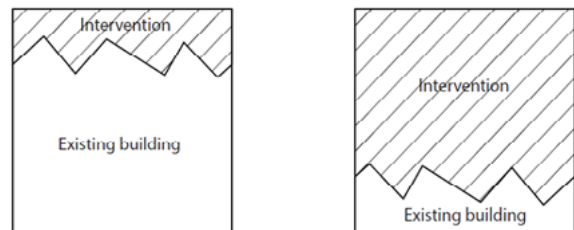


Figure 3

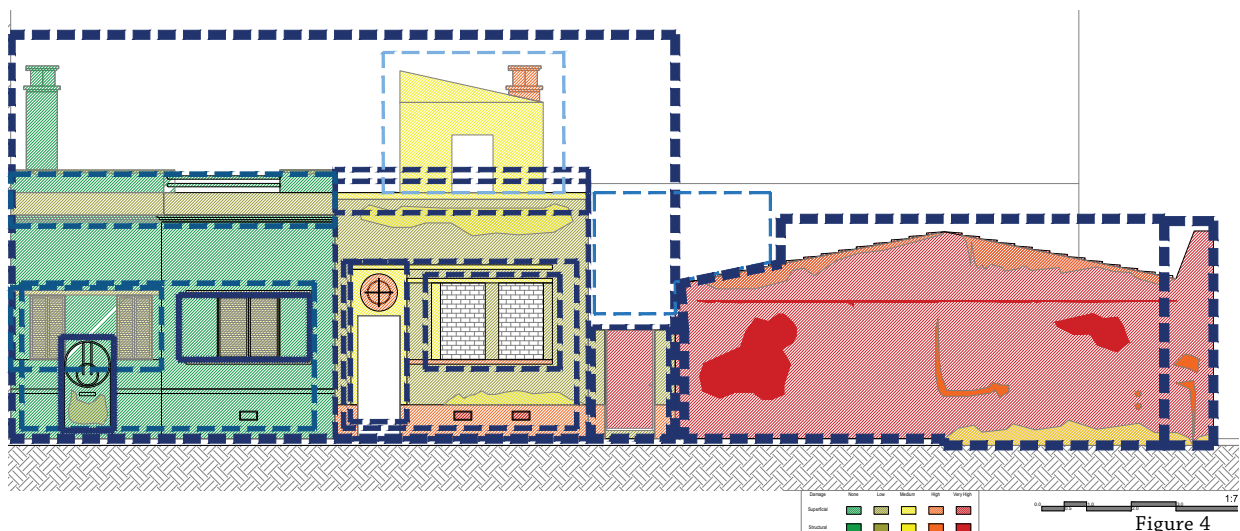


Figure 4

Design

As a design strategy, the process continued with the analysis of the existing typologies and their potential, as well as analogues that were close in concept to the idea of the intervention.

From this point on, experimentation took hold and the process culminated in the development of an architectural project that takes into account the state and value of the original building, the dimensions of the new structures in potential spaces, materials, shading/sunning, weight volumetric of intervention materials, programmatic needs and local regulations.

The final product is a comprehensive project for a set of 5 housing lots that gives detail to the superimposition of another layer of time within the heritage. Each batch represents a different approach due to material conditions, this forces us to think specifically within the rules established by the investigation.

In lots 1 and 2 the typology is respected as well as the facades that present minimal and superficial damage. The intervention for these two cases would follow the constructive logic in pairs. The additional program that is located at the back of the current house works on a concrete skeleton and a wooden structure on top that lightens the load and allows minimal intervention within the pre-existence. The seismic condition of the place determines that the regulations are of minimum dimensions determined for each material.

For lot 3, which is the corner, I want it to be the icon of the project and in some way the synthesis of the processes explained, from value to design. The current conditions of the lot are seriously deteriorated. There is no roof, the door and window openings were bricked up, the perimeter walls are damaged but consolidated.

In this case the intervention is very contrasting due to the introduction of 2 inhabitable boxes within the walls. The façade contains highly valued attributes in the investigation, therefore, the façade will receive a new gate and door and a new layer of plaster.

Lot 4 represents a dilemma. The dilemma consists of being surrounded by highly valued houses without being so, non-compliance with RGEU regulations and finally the spatial potential within the complex. Analyzing the program of each lot it is evident that a communal space is necessary for the daily life of a house in Faro. This argument, hand in hand with the low value on the facade and the non-compliance with the regulations, make this lot an opportunity to add values such as social cohesion.

The case of lot 5 is another different example where the damage to the original house is concentrated on the façade. The intention is once again that the intervention is minimal, always respecting the original layout of the house. By providing efficient and well-located services, most habitability problems are solved.

Regarding the use of energy and climate design, the challenge was very interesting because it is the combination of vernacular construction techniques with technical needs and services for the year 2022. It should be noted that, in the normal operation of the houses in Faro, the design of shades and ventilation. In some cases cross ventilation may be insufficient, especially during the summer. On the other hand, these same conditions make the city an ideal destination for solar energy, both for photovoltaic panels and for water heating.

Image of ground floor plan in red and yellow. Red for new, yellow for remove. Figure 5.



Figure 5

Conclusion

As architects many times we are made to think that the answers come from our acquired knowledge or inspiration. The architect as a source of correct answers. An almost divine and enlightened entity. This is why participation in our trade has traditionally been conditioned or silenced in favor of expert knowledge. This, despite bringing to the conversation the necessary technical issues, can be influenced by the personal biases of the architect.

At a time when we are increasingly involved in a greater variety of issues, the issue of participation in heritage fields is necessary. Participation is crucial for a community involved with its heritage. Social networks give us a new example of how heritage is lived at a time of unparalleled social media, connectivity, and access to information. Although the objective is similar, the tools change over time, and as architects it is crucial to open the debate to adapt our design models. These design models, being methods, have to be tried and failed. There is no single correct answer, but there are many ways to harm, especially when it comes to heritage. Errors in heritage design don't cost a client, they cost us all. Therefore, this responsibility that we share forces us to be much more careful.

In this case, the participation part aimed to hear the voices of two communities that share a common space, locals and tourists, perhaps in this part the voice of locals should have a greater impact than the tourists, without erasing it, of course. A 75% local and 25% tourist opinion would have been fair. Following this, the fact that the Studio was divided into research and design stages allows us to reach the design phase with much more information, but at the same time there is less time left for experimentation and you must be strategic.

Another issue that in the end seems a pity to me is the fact of re-evaluating on site. Returning to Faro with the experts to be evaluated by them would be a very good contribution to round the process. And to thank them for all their help in Faro.

An example of something I'm going to use from now on are the Red and Yellow blueprints which I found very helpful in the process and extremely easy to understand. A very good way of synthesizing the interventions.

As a final point, developing a series of principles with which to face the project was a good start, but over time the complexity of the problems exceeds the system and becomes specific. Also, the system could be more than 3 principles and be much more specific in terms of design criteria. In short, the system must be expanded, adapted and adjusted to suit the project in question.

References

De Jesus, Silvia, 2012. "Tourism in the territory and territorial planning. Case study: The municipality of Faro". Mestrado em Gestão e Desenvolvimento de Destinos Turísticos. From: https://sapientia.ualg.pt/bitstream/10400.1/3110/1/TESE_Final_SCabrita.pdf

Ginzarlya, Manal & Pereira Roders, Ana & Teller, Jacques, 2021. "Mapping historic urban landscape values through social media". *Journal of Cultural Heritage* 36 (2019) pp 1–11

Tarrafa Silva, A., & Pereira Roders, A. (2012, januari). Cultural Heritage Management and Heritage (Impact) Assessments. International Conference on Facilities Management, Cape Town, South Africa. From: https://www.researchgate.net/publication/323783537_Cultural_Heritage_Management_and_Heritage_Impact_Assessments

Tarrafa Silva, A., & Pereira Roders, A. (2012, januari). Cultural Heritage Management and Heritage (Impact) Assessments. International Conference on Facilities Management, Cape Town, South Africa. From: https://www.researchgate.net/publication/323783537_Cultural_Heritage_Management_and_Heritage_Impact_Assessments

Kuipers, M., & de Jonge, W. (2017). *Designing from Heritage: Strategies for Conservation and Conversion*. Delft University of Technology.

Van Reeth: colloquium :Hedendaagse architectuur in historische omgeving (APA citation required)

Clarke, N., Kuipers, M., & Stroux, S. (2019). Embedding built heritage values in architectural design education. *International Journal of Technology and Design Education*, 30 (2020), 867–883. <https://doi.org/10.1007/s10798-019-09534-4>

Yubin Luo & Luhui Qi (2019) Construction and practice of a conservation plan implementation evaluation system for historic villages, *Journal of Asian Architecture and Building Engineering*, 18:4, 351-361, DOI: 10.1080/13467581.2019.1661843