REVEALING BUILT HERITAGE THROUGH SOCIAL MEDIA

Comparing the attributes and values conveyed by locals and tourists in Faro, Portugal

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Cultural Significance Survey Paper

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Master Architecture Studio Msc 3 Heritage & Architecture Revitalizing Heritage: Faro Convention Labs

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Ana Pereira Roders Bruno Amaral de Andrade Ana Tarrafa Pereira da Silva **ABSTRACT** | Society conveys values to cities and their buildings, the key to sustainability, only in part recognized as heritage values, when protected by urban and/or heritage planning. There is a growing recognition of the importance of acknowledging the values conveyed by locals and tourists in heritage management and urban planning. However, the knowledge and tools available today remain predominantly expert-based. Their contribution to heritage listings and conservation plans is therefore limited. Moreover, some cities tend to unbalance locals and tourists' needs, leading to overly touristic areas, gentrification and communities' exodus. Although research on the values conveyed to cities and buildings is growing, there is seldom research comparing them. Hence, how do the attributes and values of Faro's heritage conveyed by locals and tourists set the frame for transformation? This research aims to reveal the cultural significance (values and attributes) conveyed by locals and tourists, taking the neighborhood São Francisco (included in an Urban Rehabilitation Area) in Faro, Portugal, as case study. And will provide a masterplan as a visualisation of the results gathered by this research. The guidelines provided by the masterplan address the current challenges of the neighbourhood further than the actual policies in place. By using multiple methods to perform spatial analysis, which includes (1) photographing, mapping and categorization of the facades and their attributes in São Francisco, and, (2) social media analysis, where hundred Instagram posts were manually collected following strict guidelines, heritage attributes could be identified. (3) Public engagement was used in the site survey game in which pictures of the attributes would be shown to locals and tourists who would connect predefined words to them in order to collect the heritage values. By following these methods, this research aims at revealing patterns and relations between: a) attributes, in particular, buildings' facades and their characteristics and b) values (distinguishing local and tourists). After the fieldwork, results showed clear concurrences and contradictions between both communities. Results revealed low values for contemporary apartment complexes and higher values for pre-existing typologies in both groups. Furthermore, attributes such as the street art, the materialisation of facades, and the authenticity of attributes developed into design guidelines for a masterplan in which these relations are portrayed. By understanding these relations, the Municipality of Faro can improve their awareness of who values what, and why, in order to support their strategies about how to accommodate new functions in historic buildings while respecting the limits of acceptable change of built heritage according to these stakeholders. Hence, the expected impact is to raise awareness about the cultural significance of both societal groups in order to better inform heritage management and urban sustainable planning.

Keywords | cultural significance, urban rehabilitation, building attributes, tourism, São Francisco - Faro

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1. Introduction

Our world has been globalizing at an accelerated pace in recent decades. Due to this phenomenon, local attributes are fading away and being replaced by more and more generic features, which can be found almost everywhere on the globe. As a result, cities are becoming more difficult to distinguish, geographically or culturally (Pacescu and Thiery, 2015). Urbanization is a phenomenon that has occurred more and more over the last centuries. The United Nations has predicted that 86% of the developed world will be urbanized by 2050 (Merry, 2017).

European Environment Agency (2006) concluded that, from the 17 European countries included in their research, Portugal had the largest increase of artificial surfaces within the 10-km coastal zone between 1990 and 2000. This is the zone where most urban areas of Portugal are located. This increase of artificial surface was the greatest in the Algarve region in the south of Portugal (Freire, 2009).

Part of this urbanization can be explained by the increase of tourism in the Algarve region. This has become an industry on its own in the past decades and asks for more facilities which need to be built, hence, the further increase of artificial surfaces (De Jesus, 2012). This brings added pressure on the housing market in Faro to a level where housing is becoming unaffordable for the local community as owners try to monetise their property as much as possible (Alves, 2019)

Also, this new floating population also brings new sets of values to the area. Where in the past the values of the locals were most important, now the values of the tourists are becoming part of the question. Faro is in the touristic crossroads that many touristic cities face at some point: lacking a response for conveying what is valued both by locals and tourists. These values are often not the same. Therefore, the importance of finding a model which can provide a more democratic understanding of issues and opportunities that the industry brings to a city such as Faro.

In 2005 Faro hosted what is now called the Faro Convention. A Council of Europe convention that emphasizes the importance of heritage in relation to human rights and democracy. It encourages people to recognize that buildings listed as cultural heritage are important for varied reasons, including the meaning that people attach to them and the values that they represent that make them important (Tarrafa, Pereira Roders, 2012; Fairclough et al., 2015).

The municipality of Faro has the goal of making the city a destination that focuses on cultural, gastronomical and heritage related tourism. This can serve as a case study for other Mediterranean cities in a similar situation (De Jesus, 2012).

A building facade is assumed to portray the city's image. Facades are essential in historical cities because they represent a country in tourism, through brochures, social media, and postcards, illustrating different city districts (Askaria, Dolaa & Soltanib, 2014).

Even if research has been developing in the field of cultural significance, seldom are the theoretical frameworks that include attributes and values, as well as, their definitions. This research applies the theoretical framework by Tarrafa Silva and Pereira Roders (2012) and Veldpaus (2015) to further identify and determine the values (why is it important) people connect to attributes (what is important).

Colomer (2021) reflects on the gap between research and practice. Accordingly, 'What is needed are new ways of entering into dialogue on the basis of the wishes and inspirations of the public regarding what they value most strongly and consider as their heritage and regarding their deepest understanding of what the human experience should involve.' As such, rather than developing new methods that can be used for research, actual participation is needed in order to develop a more democratic way of dealing with heritage.

Social media as a cultural expression contains information that previously was not available and now sheds a whole new light on the opinions regarding heritage. Giaccardi (2012) describes participatory culture nowadays and takes social media as a framework on how heritage is experienced. The methods for revealing the cultural significance of urban heritage through the social media analysis applied in this research developed from research by Ginzarly, Pereira Roders and Teller, 2021, Foroughi et al, 2022 and Bai et al, date. This phenomenon is taken into account as part of a cultural expression showing what is most valued by the amount of interactions it gets. The amount of data produced every day can be testimony of values.

By revealing the cultural significance and how they differ in attributes and values, between locals and tourists, the results can then be compared to set the frame for future transformation by answering what is valued, how it is valued and what to redesign. By understanding these relations, the Municipality of Faro can be aware of who values what, and why, in order to support their strategy in how to accommodate new functions in historic buildings while respecting the limits of acceptable change of these stakeholders. The expected impact is to raise awareness about the cultural significance in order to better inform heritage management and urban planning for greater sustainability. São Francisco was chosen because this neighbourhood is facing patterns of fast urbanization, is close to the city center and is also included in an urban rehabilitation area proposed by the municipality of Faro (figure 1). This neighborhood contains a number of buildings with historic value of which some are vacant and is therefore the perfect area to conduct this research and serve as an example.



Figure 1. Historical zone with São Francisco (yellow), retrieved from https://www.cm-faro.pt/pt/Default.aspx

In this given context a question arises:

How do the attributes and values of Faro's heritage in São Fransisco, Faro, conveyed by locals and tourists, set the frame for a new masterplan?

This paper reveals the cultural significance (values and attributes) of Faro's buildings, conveyed by both locals and tourists, to better set the frame for transformation in São Francisco, further detailed in a masterplan. In particular, a survey was conducted to reveal the values of different attributes, within the building facade (attributes) of the buildings in this neighbourhoods.

1. What are the attributes and values conveyed by locals and tourists through social media?

2. How are the attributes of the façades valued by the locals and tourists?

3. How do the values on these attributes root the redesign guidelines?

2. Methodology

This research applied three methods, integrating social media analysis, fieldwork in the neighborhood of São Francisco and a site survey game. The first set of data was collected through the manual analysis of social media posts on instagram regarding the city of Faro in which the occurrence of attributes being posted were counted. The second set of data was collected through the analysis of pictures taken of specific attributes from the facades in the São Francisco neighborhood. The result of the analysis from social media along with the collection of attribute information in the area gave place to the game O jogo de palavras (The word game) which was part of the methodology used to analyze value among locals and tourists. In this game locals and tourists would value specific attributes through the selection of predefined words which show their personal opinions connected to values.

For this research firstly, hundred social media posts were found on instagram using the most popular hashtags: #tourismodefaro #faroalgarve #faroportugal, and following up with other hashtags such as #visitfaro #farocity #farooldtown #faroportugalpt #farotourism, found used in the first posts. Second, the posts were manually structured and classified by role (locals and tourists), location, caption, hashtags and season. The amount of posts to analyze (hundred) was defined to enable in-depth analysis.

The inclusion/exclusion criteria were the following:

- reference to the built environment, excluding posts on e.g. beach, food or advertisements for local companies.
- dated between January 2021 and April 2022.
- equal number from each season (spring, autumn, winter, summer) to diversify the range of tourists.

The research team is aware that results might be affected by its context, considering the Covid-19 pandemic in 2021, and slow recovery of the tourism industry in 2022.

Secondly, the architectural attributes of the building façades are being analyzed and mapped through field research. By knowing the typologies and categorizing the pictures taken in the fieldwork, the following step was using these categories combined with the social media analysis to obtain the base for "O jogo the palavras". The pictures used for the game are also fed into the attribute-value matrix.

The third part was the O jogo de palavras. By asking the two different target groups: locals and tourists, it is possible to investigate if there is a difference between people that are in the city for a short period and people who live in the city. The size of the sample was determined by the time frame from the fieldwork. This time frame consisted of the participation days that enabled us to have a sample of 45 tourists and 45 locals. The amount of time spent in each game took approximately 10 minutes and some exceptional cases a bit longer.

The steps for the game, once the subject is accepted to participate, were divided in 3: Introduction to the game, explanation of the game mechanic and playing time consisting of showing the ten pictures one by one and letting the questionnee connect at least two of the hashtags to the picture.

In the serious game, the locals and tourists would combine the hashtags with facade attributes found in the facade analysis from the fieldwork and the manual social media analysis. Each hashtag is linked with one or multiple values, after the game each survey was analyzed and translated into values based on Tarrafa's and Pereira Roders' research (2012).

By looking for differences, things that both groups have in common or stand out, these results will then be translated into text using the dictionary definitions of the hashtags which can be found in (Appendix 1). As a result, the game-result graphs and attribute-value matrix were filled with opinions and values from both groups. From this, conclusions surrounding attributes and values from São Francisco were made. By connecting these attributes to each facade in the neighborhood, organizing them into categories and color coding them accordingly to illustrate the value score that each plot acquired after the analysis, a masterplan has been set up. These scores will turn into the design guidelines for the masterplan of São Francisco. The masterplan will take into account the results from fieldwork in order to have a set of guidelines regarding; building heights, facade conservation, street art and opportunities for further development in the neighborhood.

3. Result

3.1 Social Media

The cultural significance, conveyed to Faro, through social media is broader than the architectural attributes on building facades. When focusing on these attributes, the posts could be organised into a table where all the social media posts were analysed and displayed, which can be seen in appendix 2. This table categorises the posts according to the following criteria: origin (local or tourist), hashtag of origin, posted picture, location, nationality of origin, caption, translated caption, source language of the caption, hashtags used, attribute, post date, post season and link to the post.

From all posts selected the attributes were extracted from the posted picture itself, the caption and the hashtags. By counting all the attributes extracted, i.e. doors, the percentages that fed into the game were based on facts (Table 2).

Attribute	Count	Percentage	Percentage into Game
building detail	14	13,21%	10%
building	28	26,42%	20%
street	15	14,15%	10%
streetart	4	3,77%	10%
street accessoire	3	2,83%	10%
city view	5	4,72%	combined with streetview
tiles	10	9,43%	10%
door	15	14,15%	20%
greenery	8	7,55%	10%
windows	4	3,77%	10%

Table 2: Social media analysis attribute count.

3.2 O Jogo de Palavras

To gather the information linking attributes and values, a card game was implemented departing from the manual analysis of social media. Pictures from the fieldwork analysis were used in this game following the percentages of the occurrence of certain attributes in the social media analysis. The pictures and their location in the São Francisco neighbourhood can be seen in figure 2.

The words, sometimes referred to as hashtags, used in the game, are based on the value chart made in the research of Tarrafa and Pereira Roders (2012). Per value two, sometimes three, hashtags were defined which were not descriptive but showed the opinions or ideas about the attributes. These hashtags are: pride, memories, expensive, cheap, affordable, legal, illegal, typical, authentic, beautiful, ugly, classic, innovative, aged, modern, sustainable and healthy. In appendix 1 the definitions of the hashtags show why and how they are connected to these values. In total there were three sets which include the seventeen predefined words and some blank cards to offer the possibility for the questionee to write their own hashtags. Also, each set contained a different set of pictures. The idea behind the game was to make it as simple and engaging as possible but short in terms of time for it to be practical in the sense that the shorter it was, the broader the sample could be.

As the words that questionee's connected to the attributes showed opinions, the results of this game underline certain preferences when it comes to architectural attributes. Results were gathered in two formats. The attribute value matrix (figure 3) and the game-result graphs (figure 4) which are based on the data in the game-result table (appendix 3). The dictionary definitions of each one of the hashtags used in the analysis (appendix 1) provide a clearer understanding of the opinion of both tourists and locals. All results will be discussed in the rest of this chapter

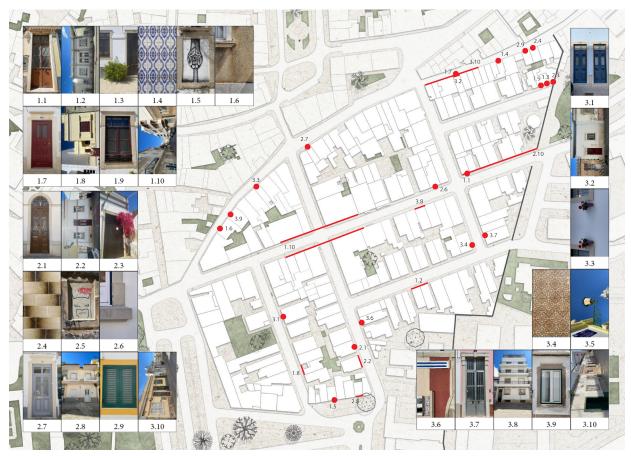
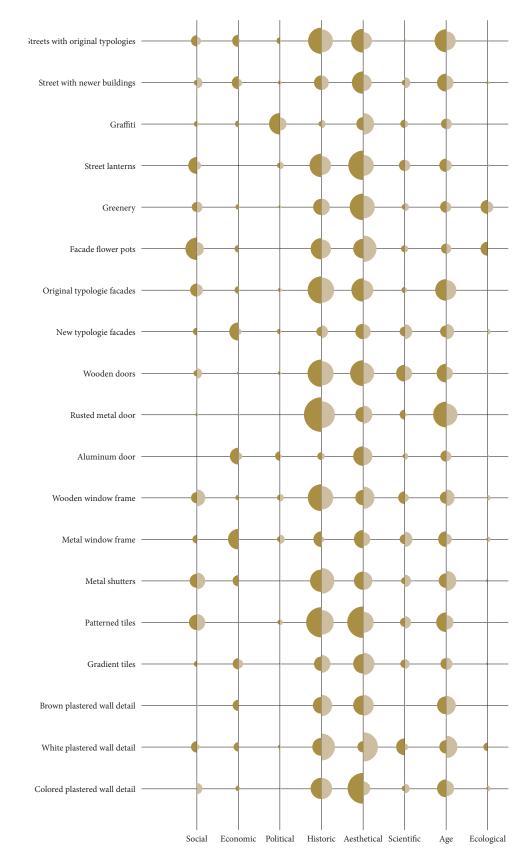


Figure 2. Picture location map,



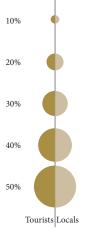


Figure 3. Attribute value matrix,

3.2.1 ATTRIBUTE-VALUE MATRIX

The matrix (figure 3) shows some relevant agreements and discrepancies. Shown in the lighter color is the way locals value and in dark the tourist. The agreements and disagreements show a different perspective on how heritage is valued and perceived from two very different points of view. Per value the information was extracted from the matrix and table which will be discussed in the following paragraphs.

Figure 3 shows that social values are seldom conveyed to the selected attributes by both locals and tourists. Figure 4 shows more or less the same amount of pride and memories was conveyed to the attributes by both locals and tourists.

In figure 3 there can be seen that the tourist group focused more on the economical values of the attributes than locals did. Also figure 4 shows that mainly the hashtags 'cheap' and 'affordable' have been chosen by locals and tourists showing the groups interest.

According to figure 3 there is a very low valuation on legality/ illegality of the attributes for tourists and locals. The political values only appear in the attribute graffiti.

The historic value is one of the two most conveyed values in this area as seen in Figure 3. Tourists focused on it slightly more than the locals. Building detail attributes are the exception to this, locals focused more on the historic value of these attributes than the tourists did, shown in figure 4

As shown in figure 3 the aesthetic value is the other one of the two most perceived values in São Francisco by both locals and tourists. Figure 4 shows that again building detail attributes are the exception to this, locals focused more on the historic value of these attributes than the tourists did.

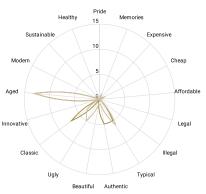
A low valuation on the scientific values can be found for both target groups, as seen in figure 3

Figure 3 shows that both groups agree that low maintained attributes are generally conveyed as aged. Figure 4 exhibits that the older typology facades are conveyed as more aged by both groups than the newer typology facades.

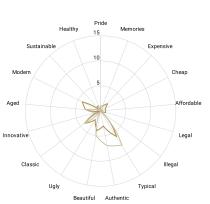
There is a very low valuation on the ecology of the attributes for tourists and locals as seen in figure 3. This value only appears in the attributes including facade greenery.

The low evaluation on values does not imply lack of a value on attributes, another explanation could be that the focus of the questionnee or the research was not on them. Figure 4. Game-result graphs,

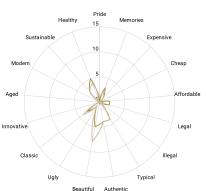










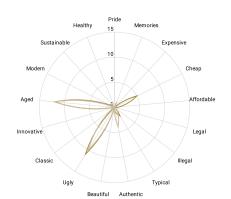












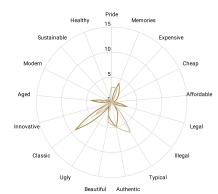


















Tourist Locals

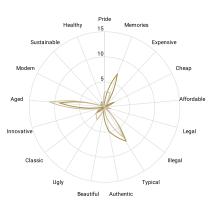
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Figure 4. Game-result graphs,



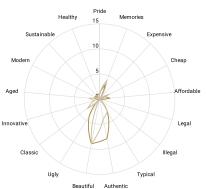




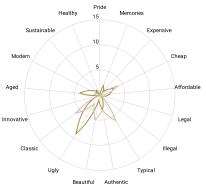




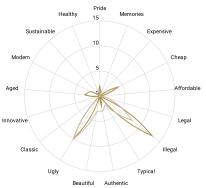




















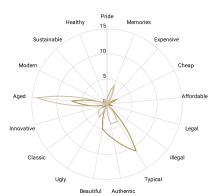




2.8







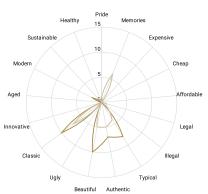


Tourist Locals

14

Figure 4. Game-result graphs,

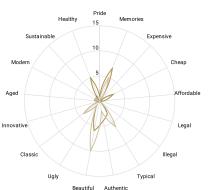




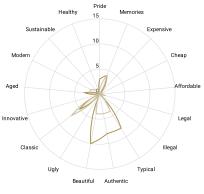










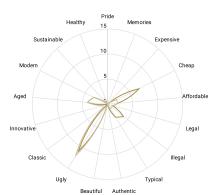






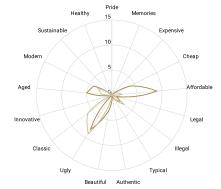
















Moderr

Aged

Innovative

Classic







Tourist

Locals 15

3.2.2 GAME-RESULT GRAPHS

As values in the game were connected to contradicting hashtags, it is also important to find results on the opinions conveyed by these hashtags. Therefore, the attributes have been grouped into categories and will be discussed in the following paragraphs which conclude information that is shown in figure 4.

Street (figure 4, picture 1.10, 2.10 and 3.10)

The streets with original typologies are generally seen as elements that have been there for many years and are unpleasant in appearance, except for the tourists who find the two door typology as beautiful. The picture of the street with newer buildings is generally perceived as unpleasant in appearance, relating it with new tendencies but yet is perceived as typical for Faro.

Street accessoires (figure 4, picture 1.5, 2.5 and 3.5)

The street art in this group has a very different result from the game. On one hand, the simple lined batman was perceived as an unpleasant element and not complying with the law. On the other hand, the decorated snake graffiti was seen as a modern element in the neighborhood and the opinion of its legality was divided.

The lantern that is hanging from facades throughout the entire neighborhood was in general perceived as an element that provides a pleasant and attractive look to its surroundings and has the expected characteristics for it.

Greenery (figure 4, picture 1.3, 2.3 and 3.3)

The unanimous opinion regarding the greenery in São Francisco pointed at two concepts: the attractive looks it provides and the encouragement of good health. Furthermore, the facade flower pots are seen as a classic element of the buildings in the neighborhood and are attached to memories.

Facades (figure 4, picture 1.2, 1.8, 2.2, 2.8, 3.2 and 3.8)

Divided into two categories the original typologies and the new typologies. Both groups are representative of the facades in São Francisco and are differently perceived by both study groups. From the original typologies with their plastered facades the general opinion points at a traditional and expected look in the neighborhood as well as an element that has been there for a long time. While the new typology is seen by both groups as unpleasant in the way it looks and recent in the way it has been built. Also, tourists see it as a more affordable option. Doors (figure 4, picture 1.1, 1.7, 2.1, 2.7, 3.1 and 3.7) The wooden doors are regarded as an authentic element for both groups. Typical and connected memories. Beautiful in some way with slight differences between locals and tourists.

Among the two metal doors reviewed by the game the differences are perceived from the point of view of the aged look. While the rusted metal door is seen as a classic element, the modern aluminium door is in general perceived as ugly.

Windows (figure 4, picture 1.9, 2.9 and 3.9)

The three window pictures are subdivided into the material they are made of: wood and aluminium. Regarding the wooden frame it gave the impression of an element that has been there for a long time, traditional but yet simple in style. In comparison, the aluminium shutter and the frame have divided opinions about them, only agreeing on the affordability it displays. The shutter is seen as an element that brings memories in general. For locals it's a traditional element of the neighborhood compared to the frame which is seen as unpleasant in the way it looks.

Tiles (figure 4, picture 1.4, 2.4 and 3.4)

In this category the difference is shown between the patterned tiles (blue and brown) and the gradient tile. The opinion about the patterned tiles stands out with the pleasant and attractive, along with this the perception was an element that has been there for a long time and belongs therefore in the neighborhood. In contrast with these opinions, the gradient tile is generally regarded as a cheap element but the opinion is divided regarding its looks. Tourists see it as an aged element unpleasant in appearance while locals see it as a typical feature of which they like the way it looks.

Building details (figure 4, picture 1.6, 2.6 and 3.6)

Regarding the details of buildings, the results of the game show results about the appearance of the walls. On one hand, both the brown wall and the colored one are seen as an aged element and seem to have an unpleasant appearance for both groups. Although for the tourists, the colored facade is also seen as a beautiful detail. On the other hand, the white wall was divided but points at a general opinion focused on the simple but traditional style. For locals it is very much seen as an element that is typical for this neighborhood.

3.2.3 Neighborhood facade analysis per plot

By having the common attributes in the neighborhood valued, all facades in the neighborhood can be analysed and categorised. Facades with similar appreciations are grouped according to their represented values. An example of this process will be shown using a specific plot and the pictures from the research attached to it (figure 5). Each attribute carries the result information which feeds this part of the analysis. By setting a parameter from which to measure each attribute the value from it can be measured and compared to other plots. The facade appreciation map summarising these results can be seen figure 6.





Figure 5. Analysis example



4. Conclusion

The comparison between two different communities that share the same space in different time frames adds another layer of value that this paper sought to research. The values, derived from Tarrafa and Pereira Roders (2012) attached to facade attributes in the neighborhood of São Francisco, used in the game 'o jogo de palavras', provide a deeper overview on how the neighborhood could develop forwards. By setting up a matrix (figure 3) that crosses information from attributes and values, which are the key for the next step, enabled the translation of the results into design guidelines. An example of the agreements between both groups is the lower aesthetical value given to more modern buildings. This seemingly irrelevant argument comes hand in hand with the authenticity regarded to older looking attributes.

These different dimensions of the city are more complex than an array of attributes with a scale of importance. Therefore a masterplan was set up to take all these criteria into account and make them more applicable

Different zones and criteria have been defined (table 3) following the results of the values conveyed by locals and tourists. These results combined with the insights that the facade appreciation map (figure 6) provide the base for the masterplan (figure 7).

As the result showed, the older facades were valued as representative for the neighborhood and generally valued more positively compared to the newer typologies. Therefore areas where the facades need to be conserved have been determined and are shown in red in the masterplan (figure 7, on the next page). These are mainly found in the old typology facades which are generally marked by both groups as traditional and aged buildings for São Francisco.

Areas with potential have been marked on the map in orange, these partially consist of the old typology buildings that have not been maintained in a representative state and perceived as aged and ugly, therefore having potential for redesign. The other part of the buildings marked with potential are the few old typology buildings remaining in the highrise area.

The newer typology buildings were all notably higher than the older typologies and concentrated in a specific area in the neighborhood. Since the results showed that these typologies were not liked by both target groups, a building height restriction area, in the dotted blue line, has been marked on the map dividing Sao Francisco in two parts with the goal to prevent these newer typologies to spread further through the neighborhood. As a result the outline of this area, where higher buildings are allowed, only outlines the buildings in the neighborhood that are already three stories or higher. Allowing for development of the buildings marked with potential, described in the previous recommendation, while not expanding this zone.

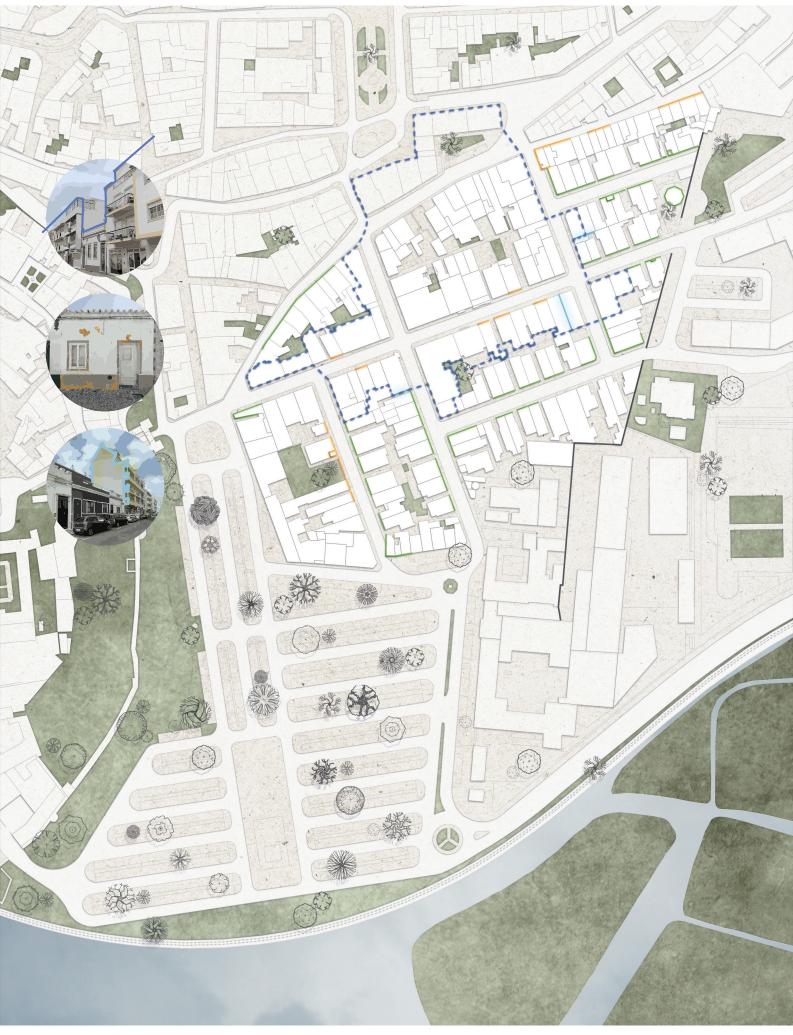
Street art with simple drawings is perceived as "ugly", but decorated graffiti is seen as a more positive and modern attribute. Decorated graffiti can therefore be encouraged but limited to specific areas, shown in light blue, to improve the outlook of some areas without messing with the image.

Concluding the opinions of locals and tourists, other guidelines for this neighborhood can also be set. These consist of:

- In general the wooden doors are regarded as beautiful and authentic and appreciated more by the locals and tourists than the metal doors which are perceived as aged and ugly. Therefore doors with a wood-look should be used in this area.
- Wooden windows are seen as a traditional style. The aluminium windows are seen as more affordable. Therefore wooden window frames would be recommended.
- The patterned tiles are seen more as pleasant and attractive, in contrast to the gradient tiles which are seen as a cheap element. Therefore, the patterned tiles are recommended to be used in Sao Francisco.
- Facade greenery is generally liked and conveyed as healthy. Therefore, this is an attribute that is encouraged.
- In general, lanterns are seen as pleasant elements throughout the neighborhood and should therefore be conserved and added if needed.

Avoid	Conserve	Potential
Spread of new typology facades through the neigborhood	One level facades from original typologies.	Original typology buildings that have not been maintained in a representative state.
Metal doors	The highrise area along and around Rua D. Teresa Ramalhão Ortigão.	Decorated graffiti can be encouraged but limited to specific areas.
Aluminium windows	Patterned Tiles	Facade greenery
	Original street lanterns	

Table 3: Recommendation overview for São Francisco



5. Discussion

To strengthen the methodology used in this paper, a broader sample of questionee's could be used along with different dates through the year since the scope of this research was determined by the fieldwork period established by third parties.

While this research mainly focuses on the facade attributes in the São Francisco neighborhood, the same method could be applied to other attributes such as nature, place attachment and urban equipment to have a more accurate overview to aid the development of a more inclusive and acceptable masterplan.

The same methods can be used in other neighborhoods in Faro where tourism is present in a notable amount. These neighborhoods could be Estacao, Sao Luis, Vila Adentro, Riberinho and Mouraria as they, just like Sao Francisco, experience the same situations regarding growth in tourism, housing pressure and heritage conservation laws. Furthermore this method does not only apply to Faro but to any city where tourism interacts with local heritage.

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References

Affordable. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/ es/diccionario/ingles/affordable

Aged. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/dictionary/ english/old

Alves, S. (2019). Planning for Affordable Housing: A comparative analysis of Portugal, England and Denmark. University of Cambridge. From: https://vbn.aau.dk/ws/ files/328956623/Planaffho_2019_SAlves_Final.pdf

Amir Hossein Askaria, Kamariah Binti Dolaa and Soha Soltanib (2014). An evaluation of the elements and characteristics of historical building façades in the context of Malaysia. Vol. 19, 2, 113–124. From: https://link-springer.com. tudelft.idm.oclc.org/content/pdf/10.1057/udi.2013.18.pdf

Authentic. (n.d.). In Oxford Advanced Learner's Dictionary. Retrieved May 5, 2022, from https://www. oxfordlearnersdictionaries.com/definition/english/ authentic?q=authentic

Beautiful. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/es/ diccionario/ingles/beautiful?q=Beautiful

Cheap. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/es/ diccionario/ingles/cheap

Classic. (n.d.). In Oxford Advanced Learner's Dictionary. Retrieved May 5, 2022, from https://www. oxfordlearnersdictionaries.com/definition/english/ classic_1?q=classic

Colomer, L. (2021). Exploring participatory heritage governance after the EU Faro Convention. Journal of Cultural Heritage Management and Sustainable Development. https:// doi.org/10.1108/jchmsd-03-2021-0041

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

EEA (European Environment Agency), 2006. The changing faces of Europe's coastal areas. Copenhagen, Denmark: European Environment Agency, Report No 6/2006, 107p. Expensive. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/es/ diccionario/ingles/expensive

FAIRCLOUGH, Graham et al. THE FARO CONVENTION, A NEW PARADIGM FOR SOCIALLY - AND CULTURALLY - SUSTAINABLE HERITAGE ACTION?. /Culture, [S.l.], n. 8, p. 9-19, mar. 2015. ISSN 1857-7725. From: https://journals.cultcenter.net/index.php/culture/article/view/111>.

Freire, S., Santos, T., & Tenedório, J. A. (2009). Recent urbanization and land use/land cover change in Portugal — the influence of coastline and coastal urban centers. Journal of Coastal Research, 1499–1503. From: http://www.jstor.org/ stable/25738039

Giaccardi, E. (2012). Heritage and Social Media: Understanding Heritage in a Participatory Culture. Routledge. From: https://www.taylorfrancis.com/books/ mono/10.4324/9780203112984/heritage-social-media-elisagiaccardi

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

Healthy. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/dictionary/ english/healthy

Illegal. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/es/ diccionario/ingles/illegal

Innovative. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/ dictionary/english/innovative

Legal. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/es/diccionario/ ingles/legal

Memories. (n.d.). In Oxford Advanced Learner's Dictionary. Retrieved May 5, 2022, from https://www. oxfordlearnersdictionaries.com/definition/english/ memory?q=Memories

Merry, H. (2017, 3 mei). Population increase and the smart city. IBM Business Operations Blog. From: https:// www.ibm.com/blogs/internet-of-things/increased-populationsmart-city/ Modern. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/dictionary/ english/modern?q=Modern

Pacescu, A; Thiery, V(2015). Building Place Identity through Heritage. Postmodern Openings 6(2):89-101. From: https://www.researchgate.net/publication/286643380_ Building_Place_Identity_through_Heritage#pf1.

Pride. (n.d.). In Oxford Advanced Learner's Dictionary. Retrieved May 5, 2022, from https://www. oxfordlearnersdictionaries.com/definition/english/ pride_1?q=pride

Sustainable. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/ dictionary/english/sustainable?q=Sustainable

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

Typical. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/es/ diccionario/ingles/typical

Ugly. (n.d.). In Cambridge Dictionary. Retrieved May 5, 2022, from https://dictionary.cambridge.org/es/diccionario/ ingles/ugly

Veldpaus, L. (2015) Historic Urban Landscapes: Framing the Integration of Urban and Heritage Planning in Multilevel Governance, Bouwstenen. Eindhoven. From: http:// www.tue.nl/en/publication/ep/p/d/ep-uid/482697

Appendix 1: Dictionary Definitions

Definitions

Every hashtag will be explained according to its dictionary definition. Afterwards the hashtag-value connection will be clarified, all these value explanations are referring to the paper of Tarrafa and Pereira Roders (2012)

Pride

A feeling of being pleased or satisfied that you get when you or people who are connected with you have done something well or own something that other people admire ("Pride," n.d.)

Value connection:

Social: one of the secondary values of the social value, emotional collective, gets described as cultural identity which includes pride. Political: symbolic is one of the secondary values of the political value containing emblematic and prosperous perceptions.

Memories

A thought of something that you remember from the past ("Memories," n.d.).

Value connection:

Social: related to secondary value described as "emotional individual" referring to personal life experiences.

Historic: In the historic value, some secondary values end with: "..., which are now part of history". This history is something people can convey memories to.

Expensive

Costing a lot of money ("Expensive," n.d.). Value connection: Economic: one of the secondary values connected to the economic value is allegorical which is focussed on publicizing financial property.

Cheap

Costing little money or less than is usual or expected ("Cheap," n.d.). Value connection: Economic: one of the secondary values connected to the economic value is allegorical which is focussed on publicizing financial property

Affordable

Able to be bought or rented by people who do not earn a lot of money ("Affordable," n.d.). Value connection: Economic: one of the secondary values connected to the economic value is allegorical which is focussed on publicizing financial property.

Legal

Allowed by the law ("Legal," n.d.). Value connection: Political: part of this value is explained as management which include strategies and policies.

Illegal

Not allowed by the law ("Illegal," n.d.). Value connection: Political: part of this value is explained as management which include strategies and policies.

Typical

Showing all the characteristics that you would usually expect from a particular group of things ("Typical," n.d.). Value connection:

Historic: related to the secondary value historic artistic which is a testimony of stylistic attributes that are now part of history. Aesthetical: connected to the secondary value evidential which relates to an authentic exemplar of a decade. Age: from the secondary value existential which refers to marks of the time passed on the attributes.

Authentic

Known to be real and what somebody claims it is and not a copy ("Authentic," n.d.). Value connection:

Historic: related to the secondary value historic artistic which is a testimony of stylistic attributes that are now part of history. Aesthetical: connected to the secondary value evidential which relates to an authentic exemplar of a decade. Age: from the secondary value existential which refers to marks of the time passed on the attributes.

Beautiful

Having an attractive quality that gives pleasure to those who experience it or think about it ("Beautiful," n.d.). Value connection: Aesthetical: secondary value artistic referring to an original product of creativity

Ugly

Unpleasant in appearance ("Ugly," n.d.). Value connection: Aesthetical: secondary value artistic referring to an original product of creativity

Classic

Attractive, but simple and traditional in style or design; not affected by changes in fashion ("Classic," n.d.).

Value connection:

Historic: related to the secondary value historic artistic which is a testimony of stylistic attributes that are now part of history. Scientific: secondary value conceptual, integral materialization of conceptual intentions.

Innovative

Using new methods or ideas ("Innovative," n.d.). Value connection: Scientific: workmanship, human labour leading to an original result

Age: from the secondary value existential which refers to marks of the time passed on the attributes.

Aged

Old: having lived or existed for many years ("Aged," n.d.).

Value connection:

Historic: related to the secondary value historic artistic which is a testimony of stylistic attributes that are now part of history. Age: from the secondary value existential which refers to marks of the time passed on the attributes.

Modern

Using or based on recently developed ideas, methods, or styles ("Modern," n.d.). Value connection: Scientific: secondary value conceptual, integral materialization of conceptual intentions. Age: from the secondary value existential which refers to marks of the time passed on the attributes.

Sustainable

causing, or made in a way that causes, little or no damage to the environment and therefore able to continue for a long time ("Sustainable," n.d.).

Value connection:

Scientific: secondary value conceptual, integral materialization of conceptual intentions. Ecological: the secondary value 'essential' is described as ecological ideologies shown on a design or construction.

Healthy

Having, showing, or encouraging good health ("Healthy," n.d.).

Value connection:

Ecological: Spiritual as a secondary value related to harmony between the building and its environment.

Appendix 2: Social media table

Appendix 3: Game-result table

																					*		
				1.	.1	2	2.1	3	.1	1	.2	2.	2	3.	2	1	.3	2	2.3	3	.3	1	.4
Hashtag	Value	Value	Value	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals
Pride	Social	Political				20,00%		6,67%		6,67%		_	20,00%	13,33%	_		6,67%	6,67%		6,67%		_	26,67%
Memories	Social	Historic		6,67%	6.67%	,,	26,67%		40,00%	6,67%			20,00%			20.00%		20,00%			33,33%		20,00%
Expensive	Economic									13,33%					6,67%	6,67%							6,67%
Cheap	Economic			6,67%	6,67%					6,67%		13,33%		6,67%				6,67%	13,33%	20,00%			
Affordable	Economic									6,67%				33,33%	6,67%	13,33%		13,33%		6,67%			
Legal	Political								6,67%	6,67%		6,67%	6,67%			13,33%	6,67%						
Illegal	Political								6,67%														
Typical	Historic	Aesthetical	Age	<mark>33,33%</mark>	40,00%	40,00%	53,33%	53,33%	26,67%	40,00%	53,33%	53,33%	46,67%	66,67%	26,67%	26,67%	26,67%	20,00%	20,00%	20,00%	40,00%	33,33%	60,00%
Authentic	Historic	Aesthetical	Age	<mark>33,33%</mark>	6,67%	80,00%	20,00%	46,67%	33,33%	20,00%	46,67%	33,33%	13,33%	33,33%	6,67%	26,67%	26,67%	53,33%	26,67%	26,67%	13,33%	46,67%	20,00%
Beautiful	Aesthetical			6,67%	6,67%	13,33%	40,00%	66,67%	33,33%	26,67%	33,33%	6,67%			6,67%	33,33%	53,33%	60,00%	60,00%	40,00%	66,67%	<mark>46,67%</mark>	33,33%
Ugly	Aesthetical				33,33%		6,67%			13,33%			20,00%	40,00%	33,33%	6,67%	6,67%	26,67%		6,67%	6,67%		6,67%
Classic	Historic	Scientific		<mark>46,67%</mark>	20,00%	86,67%	60,00%	66,67%	46,67%	26,67%	26,67%	13,33%	13,33%	20,00%	13,33%	20,00%	26,67%		20,00%	26,67%	26,67%	53,33%	46,67%
Innovative	Scientific	Age									6,67%		6,67%						6,67%				
Aged	Age	Historic		86,67%	86,67%	6,67%	13,33%			20,00%	20,00%	60,00%	73,33%	33,33%	60,00%			6,67%	13,33%	6,67%		26,67%	6,67%
Modern	Age	Scientific					6,67%	13,33%		26,67%								6,67%		6,67%	6,67%		6,67%
Sustainable	Ecological	Scientific									6,67%					_	20,00%	6,67%	6,67%				
Healthy	Ecological															<mark>33,33%</mark>	26,67%	6,67%		<mark>33,33%</mark>			
			Value	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals
			Social	1	1	3	5	1	7	2	2	8	6	4	5	3	3	4	5	8	5	4	7
			Economic	1	1					4		2		6	3	3	1	3	2	4			1
			Political			3	1	1	3	2	1	2	4	2	1	2	2	1	1	1		2	4
			Historic	31	24	32	26	25	22	17	23	31	25	25	20	14	14	15	16	19	17	26	23
			Aesthetical	11	13	20	18	25	14	15	20	14	12	21	11	14	17	24	16	14	19	19	18
			Scientific	7	3	13	10	12	7	8	6	2	3	3	2	6	7	2	5	5	5	8	8
			Age	23	20	19	14	17	9	16	19	22	21	20	14	8	8	13	10	9	9	16	14
			Ecological								1					8	7	2	1	5			

												5													
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Tourist Locals	Tourist Local	S	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist
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6 5	1		3	1	4				6		5		3	2	4	1	2		9	4	7	2	9	4	13
1 1	3 2		8	4	15	10	3	4			2	1		1	4	1			5	2	4	2	2		3
13 16	28 21		5	9	5	6	21	17	15	19	16	24	19	19	20	21	21	18	7	6	4	7	16	18	6
14 16	26 12		7	13	12	18	21	15	14	15	8	21	22	10	13	16	16	14	14	13	7	9	14	11	12
6 7	5 10		10	10	2		8	8	1	1	12	5	4	7	12	13	11	12	3	5	13	16	4	7	4
10 11	19 12		11	15	7	5	12	10	16	17	12	20	16	14	15	12	16	12	10	9	14	19	8	16	10
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8	1	9			3.	9	1	.10	2.	10	3.10		
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	20,00%	6,67%		6,67%	6,67%	13,33%	6,67%		6,67%				
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6,67%	33,33%	33,33%	33,33%	13,33%	13,33%		13,33%	20,00%	46,67%	26,67%	20,00%	6,67%	
6,67%	20,00%	26,67%	13,33%			20,00%	6,67%	13,33%	33,33%			13,33%	
60,00%	6,67%		26,67%	20,00%	46,67%	40,00%	40,00%	33,33%		20,00%	33,33%	53,33%	
40,00%	60,00%	26,67%	20,00%	26,67%	13,33%	13,33%		13,33%	6,67%	13,33%	6,67%	6,67%	
				20,00%	13,33%	20,00%		6,67%	6,67%			6,67%	
13,33%	26,67%	13,33%	33,33%	20,00%	26,67%	13,33%	20,00%	20,00%	<mark>46,67%</mark>	93,33%	60,00%	46,67%	
20,00%		6,67%	6,67%	13,33%	13,33%	26,67%	26,67%	26,67%					
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		6,67%					6,67%						
Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	Tourist	Locals	
	4	6	5	6	3	1	2	4	5	5	3	1	
4	3		6		11	1	7	4	2	1	11	3	
3	3	4		1	3	5	2	2	2	1	5	2	
10	24	21	20	23	14	5	13	13	30	28	17	13	
12	11	16	13	13	13	10	16	12	23	11	11	14	
9	9	6	5	9	7	11	4	8	2	3	1	2	
7	11	15	13	18	14	10	16	13	26	22	15	12	
		2	1		1	2	1	1		1			