Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Tao Qiyang
Student number	5260582

Studio	
Name / Theme	Graduation Studio Revitalising Heritage: Faro Convention Lab (AR3AH115)	
Main mentor	Ana Pereira Roders	UNESCO Chair in Heritage and Values: Heritage and the Reshaping of Urban Conservation for Sustainability
Second mentor	Bruno Amaral de Andrade	UNESCO Chair in Heritage and Values: Heritage and the Reshaping of Urban Conservation for Sustainability
Argumentation of choice of the studio	My personal interest in the field of architecture is pointing mainly towards heritage. Since I was once strongly influenced by the regionalism architecture, I have great interest about the cultural significance and place attachment, as well as the historic context and aesthetic values of the historic buildings. They are all valid topics in the field of heritage architecture. With this studio I desire to learn more about heritage redesign, to later on use this knowledge during my career as future architect.	

Graduation project	
Title of the graduation project	Play for change - Place attachment in urban renovation: A case study in Faro, Portugal.
Goal	
Location:	Companhia Industrial do Algarve, Faro, Portugal
The posed problem,	Nowadays, intense reflection on place attachment is aroused with the rapid urban renovation. On the one hand, many rapid urban renovations on the block 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) The neighborhood of Estação in Faro, Portugal is now facing the problem of traffic, abandoned buildings, and lacking nature and public spaces. The renovation of the former flour factory block might provide a great opportunity to solve these problems, but it will change the age group structure of the neighborhood and the appearance of the whole neighborhood at the same time, we architects must be very careful to avoid it from causing a negative influence on residents' place attachment.
research questions and	This graduation project is partly done as group work (title: Play for change: Using games to engage the community for healthier cities: A case study in Faro, Portugal) and partly as individual work. To clarify this, we will indicate on the end of each question who will work on this particular question. The research aims to understand the values on nature of the different stakeholders in the context of emotional attachment and how this knowledge can serve in the following redesign phase. The research question is formulated below, and the following sub-questions are meant to support answering the main question. How can the values on nature of different generations influence the emotional attachment to Estação, Faro and support the redesign of a vacant building? Sub-questions: 1. How can an intergenerational relation be created by using the values on nature of the local community of Estação? (Willem Elskamp) 2. **How could the tangible and intangible attributes affect different generations' place attachment to Estação? (Tao Qiyang)** 3. How does the younger generation feel emotionally attached to nature in Estação? (Marloes Drijver) 4. How can children's values on nature be applied to redesigning vacant buildings? (Sara Szulc) Individual sub-questions: 1) Which attributes in Estação related more to residents' place attachment? 2) What are the value differences and overlapping in different generations' emotional attachments to these attributes? 3) How could social and ecological values be used to enhance place attachment to the Estação neighborhood in heritage redesign?
design assignment in which these result.	Architectural redesign of Miguel Bombarda 53 with urban renovation of the northern block of Companhia Industrial do Algarve The redesign project will focus on two targets: 1. Protecting the realtion attributes for the elderly when the redesign project introduces new social attributes for younger residents. 2. Supporting the new and short-term residents to feel more attached to Estação and involved in social network

Process

Method description

The group research supports the development of new methods in participatory practices, and particular gaming will be used to explore stakeholders' values. Gaming is a participatory method that enables co-creation in redesigning the urban landscape. Both sides can learn by engaging the local community in research about values and the redesign process. Each sub-question of cultural significance survey will use a different gaming method: card games, Minecraft, cultural mapping, and photograph walking tour. Due to the topic of the individual question, this report will focus more on the method of cultural mapping board game.

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)

During the cultural mapping board game, 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, simultaneously marking them on the map. 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 and the values in explaination can be coded.
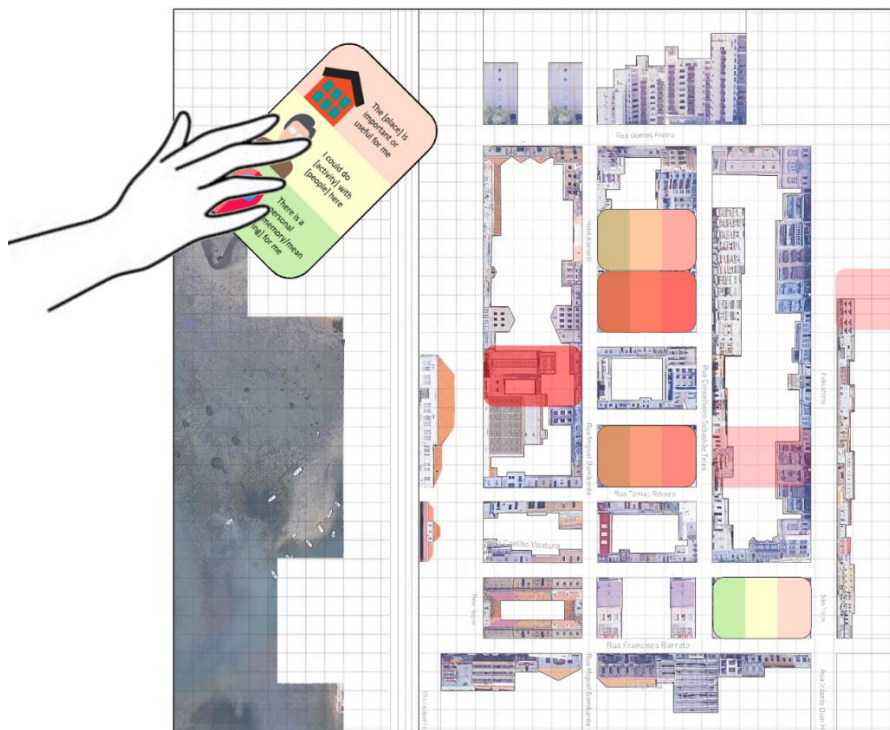

Fig. the design of cultural mapping board game for Estação

Literature and general practical preference

This research is organized around a values-based design approach developed by Pereira Roders and Tarrafa Silva (2012). (Tarrafa Silva, A., & Pereira Roders, A, 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)
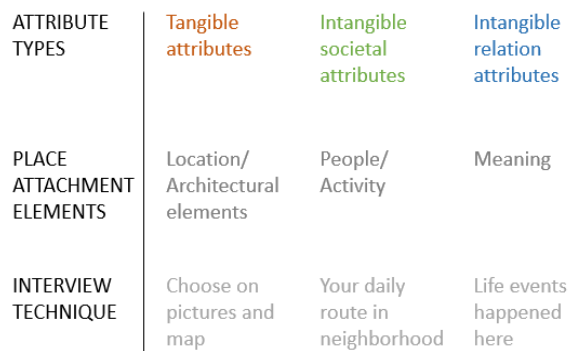

Fig1. Values framework by Pereira Roders.

Fig2. the relationship between place attachment and attribute (self-made)

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 psychological processes. (Leila Scannell & Robert Gifford, 2009) Through value coding, we find the broad concept of "place attachment" includes more than collective emotional value, but also other social and economic secondary values.

Then 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. As a combination between two theoretical Place attachment is relevant to social-emotional, social-spiritual, social-involvement (self-defined), social-dependency (self-defined), and economic-use values. 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. 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.
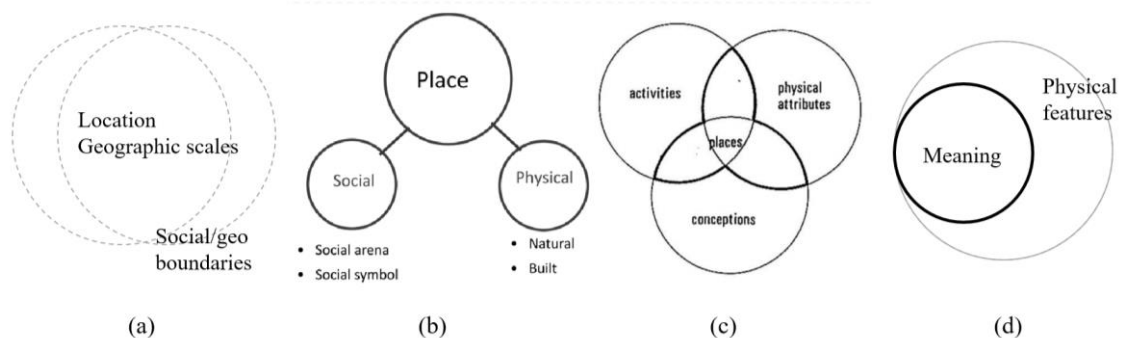

Fig-3 four typical models for the place dimension of place attachment (self-made)

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Design projects:
Andrea Oliva, Kai-Uwe Schulte-Bunert • Tecnopolo di Reggio Emilia. Italy.
James Corner Field Operations. Domino Park/ former Sugar Factory. New York city.
Assemble studio. Granby Winter Garden. Terraced houses at number 37 and 39 Cairns Street in Granby, Liverpool
KB Building / HofmanDujardin + Schipper Bosch. Campus Industriepark Kleefse Waard. Netherlands.
URBINAT. [Healthy Corridor] Healthy Corridor Concept. Porto, Portugal.

Reflection

1. ## What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

This studio is part of the master track Architecture which in MSc Architecture, Urbanism and Building Sciences. The studio is called Revitalising Heritage: Faro Convention Lab, and is part of the Heritage & Architecture Chair. The graduation topic is related to participation methods which can be used in research and design process to engage local communities in order to create more inclusive architecture. The group topic nature and individual topic about place attachment are both currently valid topics in the field about urban renovation and heritage redesign.

2. ## What is the relevance of your graduation work in the larger social, professional and scientific framework.

There is still a gap in using participation methods during the design process in architecture and heritage research. Avrami stated that it is generally agreed that bottom-up participation by the community will lead to better choices for values-based conservation, but the applications are still largely understudied. This values-based approach aims to reveal the interests and perspectives of different stakeholders in terms of the cultural significance of places by assessing the values held by different generations. (Avrami, E., Macdonald, S., Mason, R., & and Myers, D. 2019) This research will add to the development of new methods in participatory practices, and particular gaming will be used to explore stakeholders' values. Gaming is a participatory method that enables co-creation in redesigning the urban landscape. Both sides can learn by engaging the local community in research about values and the redesign process. We, as future architects, can learn to understand the needs of people better. Citizens can learn about the importance of the quality of their living environment and enable them to be part of the design process. (Ebrary. n.d.)

The municipality of Faro supports this research to underline the importance of the Faro Convention for cultural heritage for society. This framework aims to put people and human values at the center of cultural heritage management and underline the potential of cultural heritage as a source for sustainable development and the well-being of the community. (Council of Europe, 2005) The outcomes of this study will lead to inspiration for the community and raise attention for the Faro Convention.

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