The role of emotions in mental maps

by MARIAM GAMBASHIDZE

Mental mapping is "visual speaking through places what words alone cannot articulate"; it can be seen as a method of exploring subjective meanings of the space, conveying knowledge, and experiencing it in a different form [1]. Mental mapping, as a method, has been used to explore the perception of the environment [2]. Places and emotions are related to each other, and these relationships are complex [3]. Places can evoke various emotional responses, which can be translated into mental images. This thesis aims to enrich the understanding of the role of emotions in mental maps and explore the aspects which shape the mental image of the place as it is perceived and experienced by the individuals.
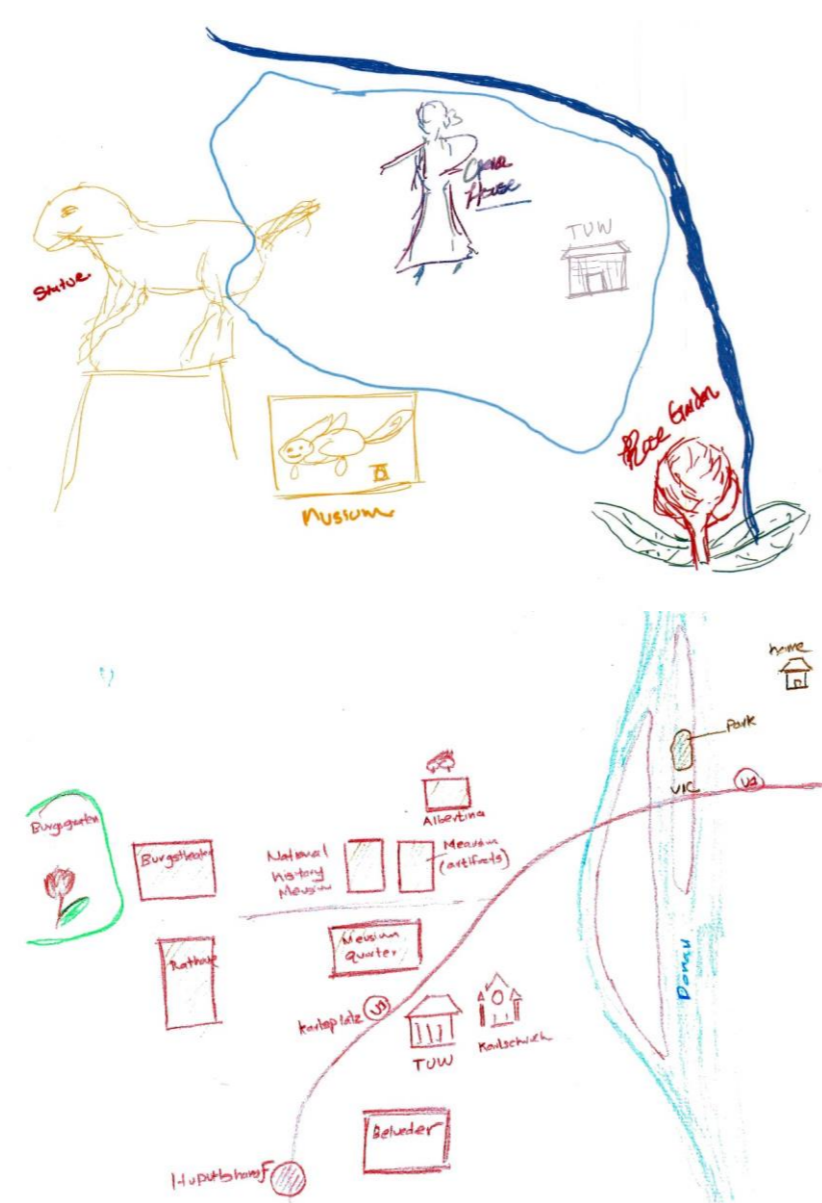

Fig. 1. Mental maps drawn before (top) and after visiting a place (bottom).
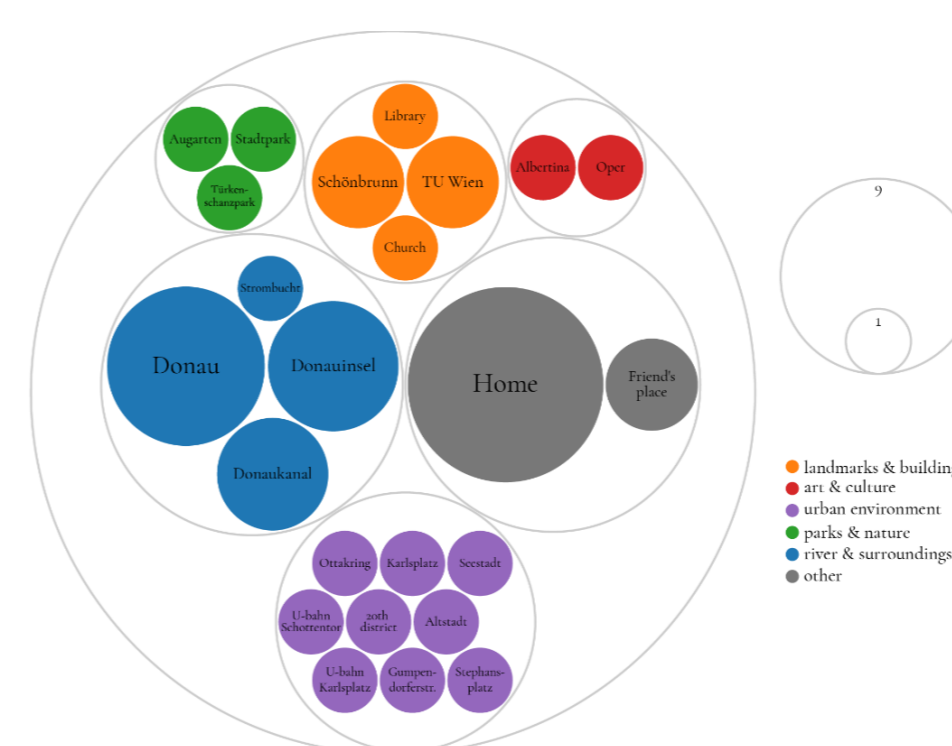

Fig. 2. Emotional landmarks and places in Vienna categorised by groups.

OBJECTIVE

The main objective of this research is to explore the connection between emotion and mental maps. Furthermore, the thesis intends to compare differences between the mental images drawn before getting well-familiar with and after living in a place. The focus lies on exploring personal understanding of the place, which is affected by cognitive memory, existing knowledge, emotions, associations, and experiences.

Fig. 3. Emotions which connect people to places (top); words describing emotions placed on the two-dimensional structure of emotions (bottom).

RESEARCH DESIGN

In this thesis, the synthesis of different methods was applied to collect, analyse, and interpret the data that were obtained in two user studies.

Vienna was chosen as a case study area within this thesis due to its highly imageable character, which has perceptual importance. It evokes a strong and easily identifiable image of the city enriched with remembered experiences of and emotional attachments to places. The participants of the user studies were a cohort of students of the International Master program in Cartography who had never lived in Vienna before.

The first user study was completed via video conference before the participants moved to Vienna; whereas the second user study took place on-site in Vienna after the participants had moved to and been living in Vienna for several months. Both user studies had similar settings combining the 'Vienna city walk' (a walk including selected landmarks and places in Vienna), mental mapping activities, questionnaires, and interviews.

The outcomes of both user studies were 48 hand-drawn mental maps as well as qualitative and quantitative data from questionnaires and interviews. The mental maps were analysed by turning them into a tabular format for a further

categorisation and analysis of the map elements. Likewise, other qualitative and quantitative data was structured, categorised, and quantified.

CONCLUSION

Analysing emotions related to the mental maps drawn before becoming well-acquainted with the place and after getting the living experiences reflects the image of the city. This image is defined by personal, recent, and cognitive experiences, associations, and emotional states at the time of mental mapping. Mental maps illustrate those elements that have personal relevance for a map-maker, i.e. they mainly show associated, favourite, important, and emotional landmarks and places. The participants' emotional attachment to places grows as they become acquainted with the city; accordingly mental maps become more accurate and entail more elements. However, having similar recent experiences (such as the 'Vienna city walk') does not ensure a similar visual outcome; mental maps may differ from time to time and person to person. The user studies have shown that certain landmarks and places have perceptual importance and evoke a strong and easily identifiable image of the city enriched with remembered experiences and emotional attachments to places.

REFERENCES

[1] Gieseking, J. J. (2013). Where We Go From Here: The Mental Sketch Mapping Method and Its Analytic Components. *Qualitative Inquiry*, 19(9), 712–724.

[2] Lynch, K. (1960). The image of the city (Vol. 11). *MIT press*.

[3] Caquard, S., & Griffin, A. (2018). Mapping Emotional Cartography. *Cartographic Perspectives*, 91, 4-16.