

Integrated Approach for Heritage Conservation in Mekelle, Ethiopia through the Historic Urban Landscape Approach

エチオピア・メケレの遺産保存のための統合的手法の研究 —歴史的都市景観からのアプローチ

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1. Introduction

This research is an endeavor to save the urban heritage and maintain a city character in the Ethiopian context. Urban Heritage in Ethiopia (and other developing countries in general) is faced with immense pressure resulted from the current unprecedented urbanization rate and population boom. The researcher focuses on Mekelle city located in the Tigray state in Ethiopia in which he has a closer knowledge as a resident, researcher, and practitioner. In the meantime, of this research was conducted, many of the heritage sites are being redeveloped or bulldozed because there is a lack of research, registration, or any heritage management plan in place. It will be a haunting process to solve these issues as a challenge in developing countries like Ethiopia because of the multi-faced problem at hand. Obviously, heritage doesn't come as the utmost priority and burning issues in those places that are challenged from poverty other onerous burdens.

The strategy followed by this thesis is to find a way to put the heritage of Mekelle in the wider urban development process. Based on this idea, the author organized this thesis in a way that will be useful for the practitioners and stakeholders in Mekelle to make a conscious decision on any development works of the city that will affect the heritage. This will pave a way for the initiation of a historic city conservation system within the urban planning framework.

Cities like Mekelle are characterized by their actual relatively small size but undergoing rapid growth. With all the challenges in place,

their 'young' nature allows implementing urban plans that could lead to sustainable development. The focus of this research on attempting to integrate heritage in the urban development process derives from this premise.

2. Background

Mekelle is the second-largest city in Ethiopia with over 800,000 population estimated by the municipality in 2020. It is a dynamic city witnessing a wide range of overall spatial and populous expansion over the last three decades.

The wide range of heritage in Mekelle city comes from its long history as a settlement that dates back to the late Axumite era (6th-10th century CE). Mekelle was also at the center of Salt route that connects lowlands of Afar state with the rest of the empires. There are dozens of Orthodox Christian churches, mosques, and vernacular settlements in the city. Other remains of heritage in Mekelle result from its history as the capital of Ethiopia in the late 19th century and Tigray state afterward. Mekelle has the single most collection of large Hidmos (Tigrayan Vernacular masonry House) anywhere. These houses along with the churches create a unique masonry city, a tradition that persists to this day.

Recently, the heritage of Mekelle city in Ethiopia is at high risk from the pressure of rapid changes in urban development. The infrastructure development and constant change in the city have put great pressure on the urban heritage of the city, and surrounding rural settlements. There is a lack of a proper heritage

registration system in Ethiopia to facilitate conservation. Additionally, many of the potential heritage sites are not identified and researched so far. There is no city-wide heritage management plan as well. Without any legal protection, many heritages of the city are critically in danger and are being destroyed through new developments. This research of a doctoral thesis is an attempt to tackle these challenges of heritage conservation in Mekelle city. The author introduces a platform for the implementation of historic city conservation in developing countries through the collective experiences compiled in the Historic Urban Landscape approach. Mekelle was studied deeply as a case city for this research.

3. Research Method

This research had three objectives of (1) evaluating the heritage conservation system in Tigray; (2) identifying the urban heritage of Mekelle City; and (3) initiating urban heritage conservation in Mekelle city through the provision of basic tools for Historic Urban Landscape approach.

The collection of data was conducted through field and desktop studies. Field visits were important part this research. several site visits were done on conservation missions to the Gunda Gundo, Asira Metira, Cherkos Wukro, Yeha, Aksum and Sillasie Chekeqot in Tigray, Ethiopia between 2012–2017. A field visit to Mekelle city on two occasions on October 2018 and February 2020 during the doctoral study periods. Data were collected using observation, photography, and interviews with stakeholders.

Desktop study was conducted to look into (a) the collective global experiences that are compiled in the Historic Urban Landscape approach as recommended by UNESCO (2011); (b) previous studies on heritage policy including the UNESCO archive, Ethiopian and Tigray state's laws and regulations, and published and unpublished research outputs; (c) the historical documents and researches about the heritage elements and

urban development trend.

4. Analysis and Result

The Heritage elements were described properly in a way that facilitates the future registration of them by including basic information on introduction, historical documents; Heritage Value; Management status, and stakeholders.

All the elements were put on the map of Mekelle city using Arc GIS. The heritage was clustered into a meaningful cluster to simplify future management. Especially close elements were grouped to propose conservation areas in the city. The development of Mekelle is mainly guided by the structure plan. Therefore, the approach to implement historic city conservation within this system focus on structure plan system. The new type of implementation plan introduced in this research is called the local heritage development plan. This is a type plan that can be initiated by community, the local government or other institutions

The analysis of this research looked into Mekelle city from different angles. These studies include of heritage policy of Ethiopia, Mekelle's history of urban planning, nature of urban heritage, and important stakeholders. The development of Mekelle is currently guided by the structure plans that are revised over ten years period. This comprehensive study aimed at facilitating the development of a tailor-made heritage conservation system with the existing urban development framework of Mekelle. With that in mind, this research has filled three gaps of knowledge in the historic city conservation of Mekelle.

First, it identified the existing traditional heritage conservation system in Tigray state, Ethiopia. Tigray is the regional state where Mekelle is located and has a rich collection of heritage that was mainly safeguarded by the

traditional system. This system is discussed in detail by looking into the institutions, expertise, and financial resources that comprise it. The modern system, that was introduced by the modern Ethiopian state is also assessed to look into its compatibility with the traditional system.

Second, this research identified and justified new heritage sites in Mekelle for future research, registration, and protection. Mekelle has several layers of heritage resulted from its unique history and natural features. All possible sites are included based on the available resources. Several dozens of potential heritage sites are discussed for further development of the heritage elements. These heritage elements include natural and cultural as well as tangible and intangible heritage elements of Mekelle. Additionally, the stakeholders of each element are identified. This can be utilized for the engagement of the stakeholders in future activities of the urban planners and local administration.

Third, this research initiated a platform for a heritage conservation system in Mekelle following its historic urban landscape. The existing and potential (newly identified) heritage elements are grouped into meaningful clusters of heritage. There are twelve clusters of heritage provided for collective conservation and development of the elements within them. The clusters are connected in the map through the arc GIS mapping tool. The map outputs are intended to create conservation areas for further integration of heritage in the wider urban development of the city administration.

Conclusion

Finally, the ultimate motive of this research is to create a condition for the integration of heritage conservation system within the

existing urban planning process of Mekelle. Therefore, the author recommends a system for the integration of heritage within the existing structure plan of Mekelle. The thesis introduced tools for the integration of heritage in the existing urban planning system of Mekelle.

The long-term plan of Integrated regional development plan and integrated urban development plan majorly focus on the policy, strategy and vision of the development. Therefore, policy related issues need to be included at these plans through the responsible bodies mainly the culture branch of Tigray state and Mekelle city administration.

Structure plan of Mekelle is the most important plan that connect the spatial and socio-economic aspect of the city. The local development plans are the implementation tools of the structure plan.

Therefore, to incorporate heritage with in the urban plan it needs to be fitted in these plans. This thesis introduced a new type of local development plan for two areas of the city with high concentration of heritage. The local heritage development plan will enhance the development of heritage and feed the structure plan to continue in virtuous cycle.

The provision of schematic heritage map for inclusion with in the structure plan and introduction of new local heritage development plan in Mekelle facilitated the initiation of heritage conservation system in Mekelle. This thesis focused on facilitating this by providing missing tools and information. The next structure plan will be revised in 2025. This will pose a great opportunity to incorporate heritage within the system to maintain the character of Mekelle.

The author made his intention that most of the outcome of this thesis will be a direct input to the next structure plan of Mekelle city. The

process followed in this research can also be an example to other cities in developing countries to implement historic city conservation through the Historic Urban Landscape approach.

In conclusion, the following points are critical recommendation that resulted from this research.

- The development of traditional heritage system—the traditional heritage conservation system needs to be developed through empowering the professional, institutions and financial resources. This can be done by direct training traditional craftsmen etc.

- Registration of Heritage in Mekelle—It is necessary to setup a registration system and register the heritage sites for legal protection. Registration of them can also facilitate the conservation of them in the urban planning process. Research and investigation of each site is necessary.

- Integration of heritage at all layers of urban planning system—the heritage issues have to be included in the several layers of the urban planning level from policy and strategy to local codes and land uses.

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