



REBUILDING ALEPPO

ARCHITECTURE OF RECOVERY IN WAR-TORN CITIES

Introduction

The topic of the research is post-war reconstruction with preservation of the architectural identity. The chosen city is Aleppo, which is one of the oldest continuously inhabited cities in the world, and which has an architectural identity that is shaped by centuries of influences from different civilizations.

My personal link with Aleppo is the city being my family's home. Since the Syrian war, I have always wanted to work on something regarding the reconstruction of the country. Once, I found on social media a couple of architectural renders that were made by a UAE (architectural) firm for a redesign of a neighborhood in Damascus. I was a little bit disappointed as the renders were full of tall, glass buildings that do not represent the architecture of the city. Locals agreed with my position, and said about it: 'that's not Syrian', and they were not happy about how the renders did not look like a Damascene neighborhood at all. This made me realize how post-war reconstruction is not merely constructing new buildings on top of where the destroyed ones lay, but also restoring the cultural and historical identity of a place which is of importance to the local community. The disappointment of the architectural render of Damascus thus emphasizes how reconstruction should involve more than just modern urban planning, that it should also preserve and integrate the unique architectural characteristics that define the identity of the city.



Figure 01. Destroyed street alley in East Aleppo. Residents who have returned to the streets, by Christian Werner.

Problem Statement

The war in Syria has caused widespread damage to the city of Aleppo. Big parts of its architectural and urban fabric have been destroyed. The destruction of this historical city presents a major challenge in the post-war reconstruction: how to rebuild the city in a way that acknowledges its rich architectural identity while also meeting the demands of urban life after war.

The problem centers around how to rebuild the city in a way that balances the preservation of Aleppo's unique architectural and urban identity, and at the same time addresses the modern urban needs of such a post-war city. Aleppo's urban, architectural identity risks being overlooked if introduced to generic, globally influenced modern designs that do not reflect the city's unique character. Furthermore, previous examples of post-war urban reconstruction in other cities, have shown that the pressures of modernization, and such developments often lead to architectural/urban homogeneity which can result in the erasure of the city's historical identity. To the challenge is further added the need to involve the local community in the whole reconstruction process, to ensure that the rebuilt city does not only respect its historical significance but that it also reflects the direct needs and desires of its inhabitants.

Research Questions

The main research question posed is:

'How can Aleppo's architectural identity be preserved in post-war reconstruction while addressing modern urban needs?'

To answer the central research question, the following sub-questions have been formulated:

- *Which elements (such as materials, forms, or urban patterns) define Aleppo's architectural and urban identity?*
 - Relevance: Understanding Aleppo's main architectural features addresses the core of the research question by identifying what makes Aleppo's architecture unique.
- *Which elements of Aleppo's architectural and urban identity do locals consider essential to preserve during reconstruction?*
 - Relevance: Taking into account the local perspectives ensures the preservation of culturally significant elements that are actually valued by the community. See figure 03.
- *Which strategies can be used to preserve Aleppo's urban identity while accommodating new infrastructure needs during the reconstruction process?*
 - Relevance: This identifies practical approaches that can be implemented to ensure that both preservation of the urban fabric and the post-war requirements of infrastructure can be achieved in the reconstruction.

The questions are related to each other but also to the methods that will be used to answer them. See the schemes below.

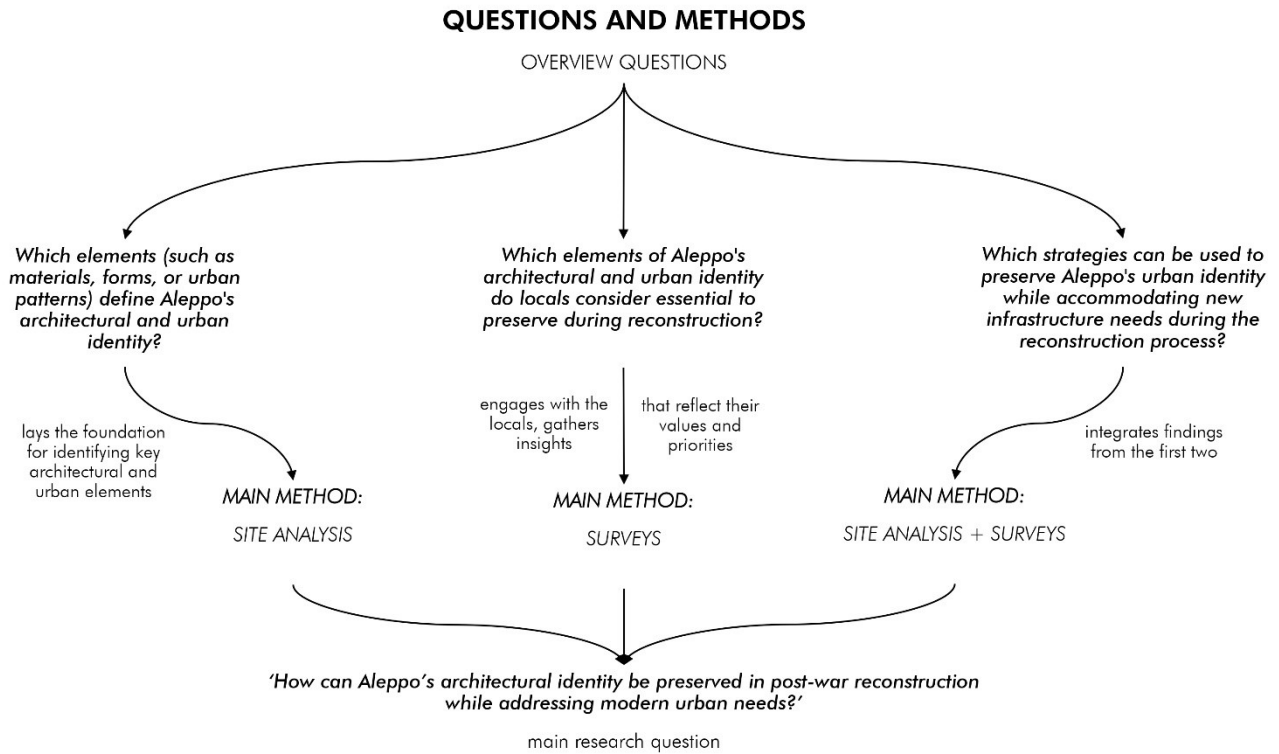


Figure 02. Scheme overview questions and methods, own work.

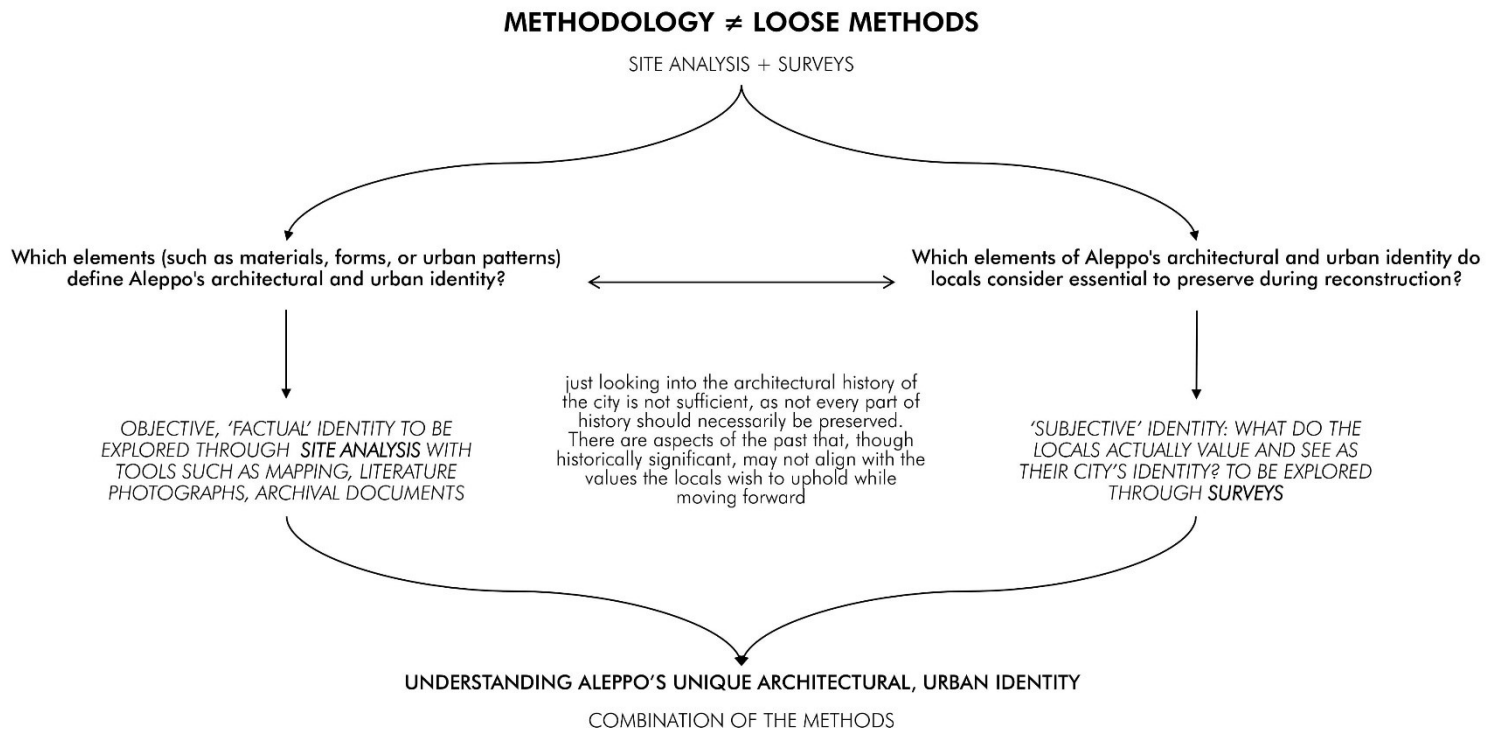


Figure 03. Scheme overview relation between the first two sub questions, own work.

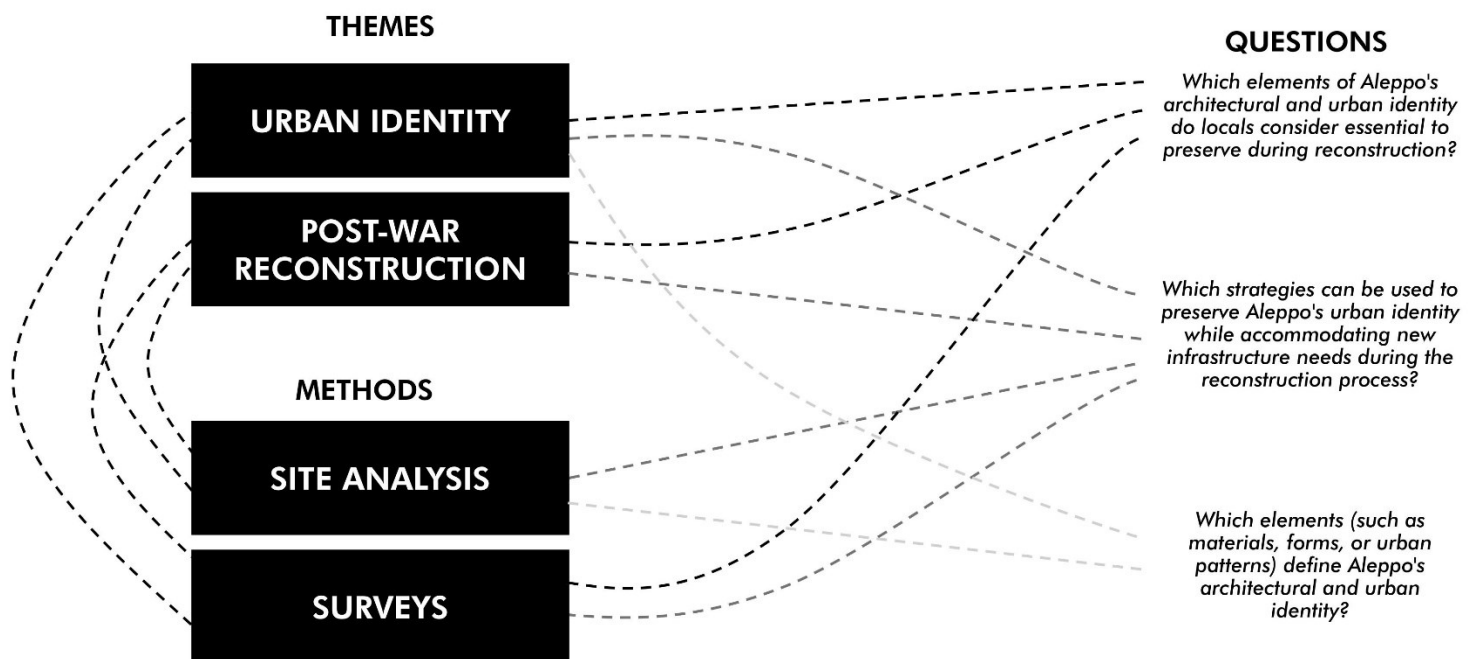


Figure 04. Scheme overview relation between the themes, methods and sub questions, own work.

Theoretical Framework

This research is framed by two main themes that are connected in this research: the urban identity of the city and its post-war reconstruction.

Urban identity focuses on Aleppo's unique architectural and urban features such as its historic urban grid, use of local materials, forms and how these can be preserved or adapted in the reconstruction of the city. Christian Norberg-Schulz, in *Genius Loci: Towards a Phenomenology of Architecture* (1979), introduces the concept of 'place identity,' in which he focuses on how architecture and urban form shape the city's spirit. He suggests that the physical and spatial qualities of a city or place contribute to its emotional and cultural significance. In this case of Aleppo, it could for example mean preserving its narrow alleyways, local building materials, courtyard type of houses and souks. This theory also counters approaches that do advocate for architectural homogeneity in post-war reconstruction. Jean-Louis Cohen, for example, in *Architecture in Uniform: Designing and Building for the Second World War* (2011), argues that post-war architecture often sets standardization as a practical necessity, which could be seen in post-war buildings in the Netherlands of the 60s.

Memory and Architecture, edited by Eleni Bastéa (2004), explores how architecture interacts with memory, identity, and cultural heritage with as main idea that urban fabric is not just a bunch of functional structures; it is basically a repository of social memory. The book discusses how buildings and urban layouts can help with fostering a community's identity, especially in the aftermath of conflict, where this is at risk of being lost. Further theories of urban resilience can be found in *Naked City: The Death and Life of Authentic Urban Places* (Sharon Zukin, 2010), which argues that reconstruction must also make cities more livable for current populations which would require integration of modern facilities like transportation networks or public services, while making sure they respect the city's historical layout.

In the context of post-war reconstruction, *Post-war Cities: Planning Recovery and Reconstruction* (Ludwig, Alvanides, & Laue, 2024) offers a framework for rebuilding cities devastated by war, and this book in particular includes the case of Aleppo. The text explores how local input and culturally sensitive practices are essential for a sustainable reconstruction, highlighting the need for community engagement to make sure that what is preserved aligns with the values of the locals. *Architecture, Power, and National Identity* (Lawrence Vale, 2008), emphasizes the importance of symbolic recovery in post-war cities. According to Vale, rebuilding iconic structures and spaces that reflect the city's (pre-war) identity can create a sense of continuity or renewal for the locals. In Aleppo, the restoration of the Citadel for example acts as symbol of collective resilience. So this plays a crucial role rather in the city's psychological recovery from the war. However, Vale also points out that resilience is not just about recreating/rebuilding the past but

that it also involves adaptation to the new conditions, so that reconstruction efforts must not only focus on restoring what was lost but also create space for the city to evolve and address the new urban needs, like modern infrastructure and housing, but while maintaining the cultural and historical links.

Architecture and Armed Conflict: The Politics of Destruction (JoAnne Mancini and Keith Bresnahan, 2014) explores the destruction of architecture during conflict and its political, cultural, and symbolic implications of rebuilding in such post-war contexts. The book critically examines how architecture serves in a way as a cultural artifact that gets targeted to erase the city's identity. It also looks into how rebuilding can reshape collective memory. Another theoretical approach relevant to this research is what is argued by Kenneth Frampton in his essay, *Towards a Critical Regionalism: Six Points for an Architecture of Resistance* (1983). He critiques the adoption of global modernism and he advocates for an architecture that responds to the local context. This is thus related to the 'spirit of the place' theory from the book of Norberg-Schulz. Frampton's statement of 'resisting the placelessness' of global architectural trends is in particular relevant here, as it encourages designs that respond to the city's climate, culture and history. In Aleppo's case, this approach could suggest the avoiding of generic, modern design solutions which disregard the city's specific character (for example the glass towers rendered in designs for other Syrian cities).

Lastly, adaptive reuse, which refers to taking existing (damaged) structures and repurposing these for modern uses but while keeping their historical significance, plays another important role in post-war reconstruction, especially in cities with rich cultural heritage like Aleppo. *Conservation and Sustainability in Historic Cities* (Dennis Rodwell, 2007) suggests that adaptive reuse allows for cities to maintain their historical layers but at the same time meet contemporary needs. In Aleppo this could be crucial as big parts of the city have been destroyed, but for example traditional houses, markets, or other public buildings could still be saved and integrated into new urban designs.



Figure 05. Genius Loci – collages of cities, by Anastasia Savinova.

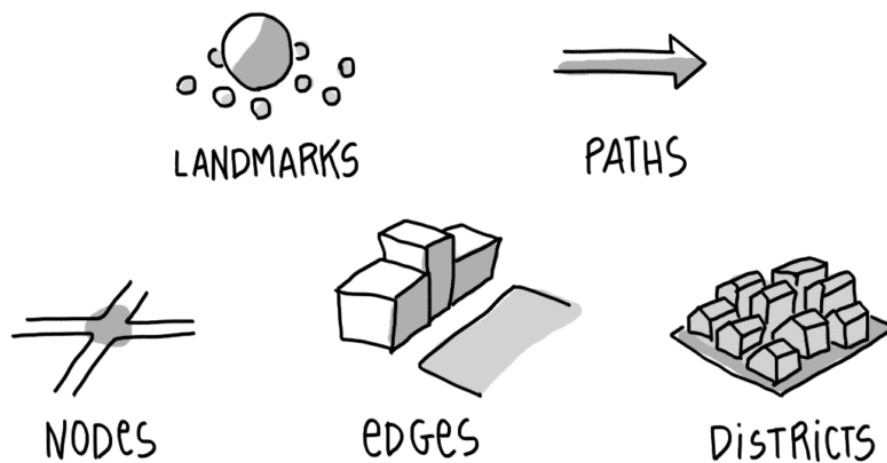
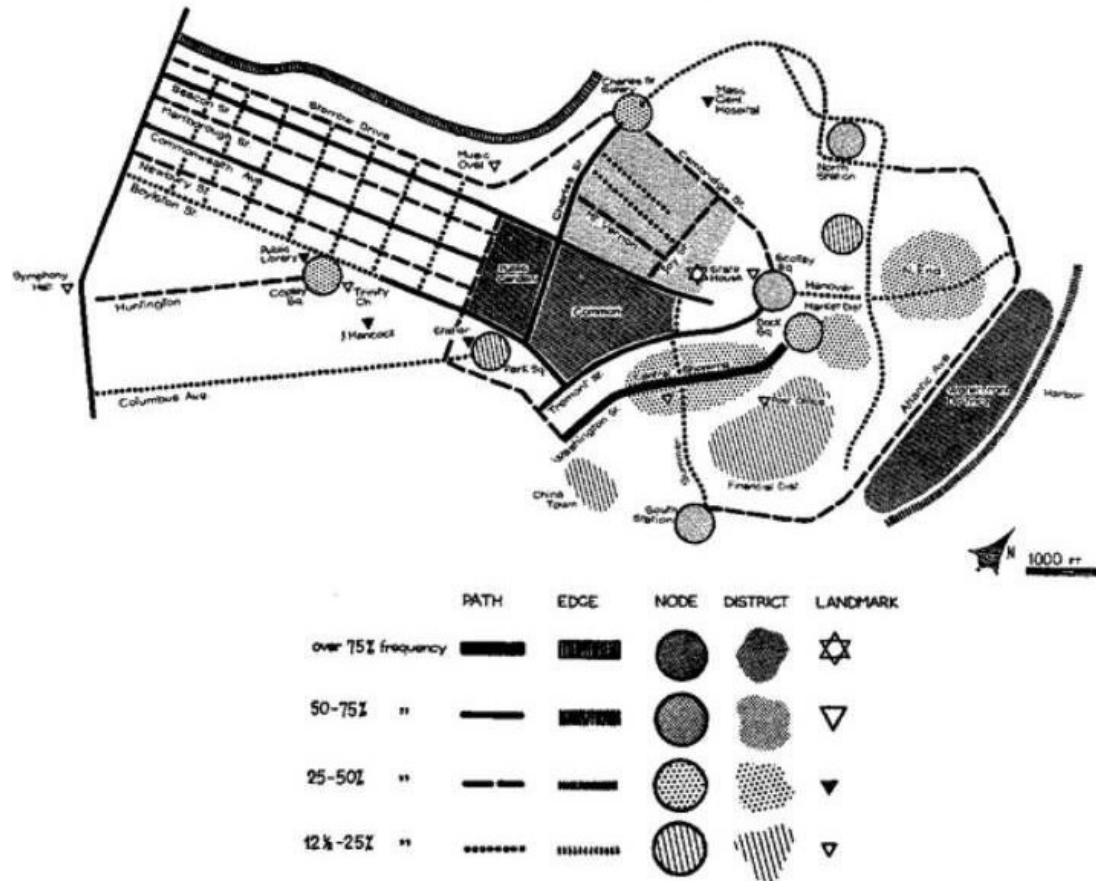


Figure 06. Kevin Lynch map and elements, from *the image of a city* (1960)

Methodological Framework

The research employs two main methods; site analysis and surveys, with the site analysis being the 'major' method that consists of multiple 'sub' methods or tools. The overall approach aims for a research that is open to change and shifts and that can be done without relying on physical fieldwork as taken into account should be that a site visit to Aleppo city will be very difficult.

1. Site Analysis

The research will include a site analysis of Aleppo using both primary and secondary data. The site analysis is rather a combination of tools/methods such, such as literature (Burns, 2018), maps, photographs, architectural drawings, and archival documents to help understand the city's history better. It also includes different methods of mapping such as the famous Lynch mapping method. Kevin Lynch's work in *The Image of the City* (1960) emphasizes how cities are perceived and structured through elements such as paths, edges, districts, nodes and landmarks. A method I discovered myself but perhaps is not an 'official' research method, is YouTube 'walkthrough videos'. There are YouTube channels with videos of the person literally just walking through a neighborhood or from point A to point B in Aleppo City with a camera strapped to themselves. These videos are not vlogs, they are really just walkthroughs, showing the viewers how one navigates through the city. As there is no Google Street View available for the city of Aleppo, these videos will be very useful as a bottom-up tool. I call this method the 'real-life Lynch method'. The overall focus of the site analysis will be to:

- **Examine pre-war urban fabric:** Using maps and satellite images to analyze for example the city's urban grid, infrastructure, street layouts and more.
- **Evaluate the state of destruction and current conditions:** By for example reviewing reports, photographs, and satellite imagery of post-war Aleppo.
- **Identify architectural elements to be preserved:** Focusing on materials, forms, and patterns that define the city's architectural identity, and how these can be used for future reconstruction.

2. Online Surveys with Locals

Online surveys will be conducted with the locals and other stakeholders (such as students or Syrians in the diaspora) to gather insights into their views on the reconstruction process and the preservation of the city's architectural identity. Pallasmaa's concept of multisensory architecture in *The Eyes of the Skin: Architecture and the Senses* (2005) aligns with the idea of survey questions that look into local perceptions of architectural identity. His ideas supports that preserving Aleppo's architecture is not just about visual elements but involves sensory aspects as well. This reinforces the survey's focus on gathering locals' 'subjective' insights into Aleppo's architecture and aligns with the Genius Loci theory discussed earlier. Laura Tate and Brettany Shannon's *Planning for*

AuthentiCITIES (2018) addresses the preservation of urban authenticity in modern planning, and advocates for community-centered approaches in its historic preservation. Their arguments emphasize the relevance of surveys which capture local views on identity and authenticity. The surveys will focus on:

- **Perceptions of Aleppo's architectural identity:** What do local residents consider the most important architectural elements that should be preserved during reconstruction?
- **Preferences for modern infrastructure:** What infrastructure needs should be considered the most in reconstruction according to the locals and what strategies would they support for the integration of modern infrastructure in the city?

Further (optional) research methods that could be relevant to use in this research and could be a part of the previous described methods, inspired from the book *Repository: 49 Methods and Assignments for Writing Urban Places* by Klaske Havik et al. (2024), are: **Characterizing Details** and **Revisiting Postcards**. In short, these methods could be described as the following:

- **Characterizing Details:** This method focuses on identifying and analyzing specific architectural details that give a place its unique character. It includes a close examination of for example materials, forms, and ornaments.
- **Revisiting Postcards:** This method involves analyzing historical postcards that give iconic views of the city. It is a method of examining how a place has been represented and perceived through the time (both by locals and outsiders), and how these visual representations contribute to the identity of the city.

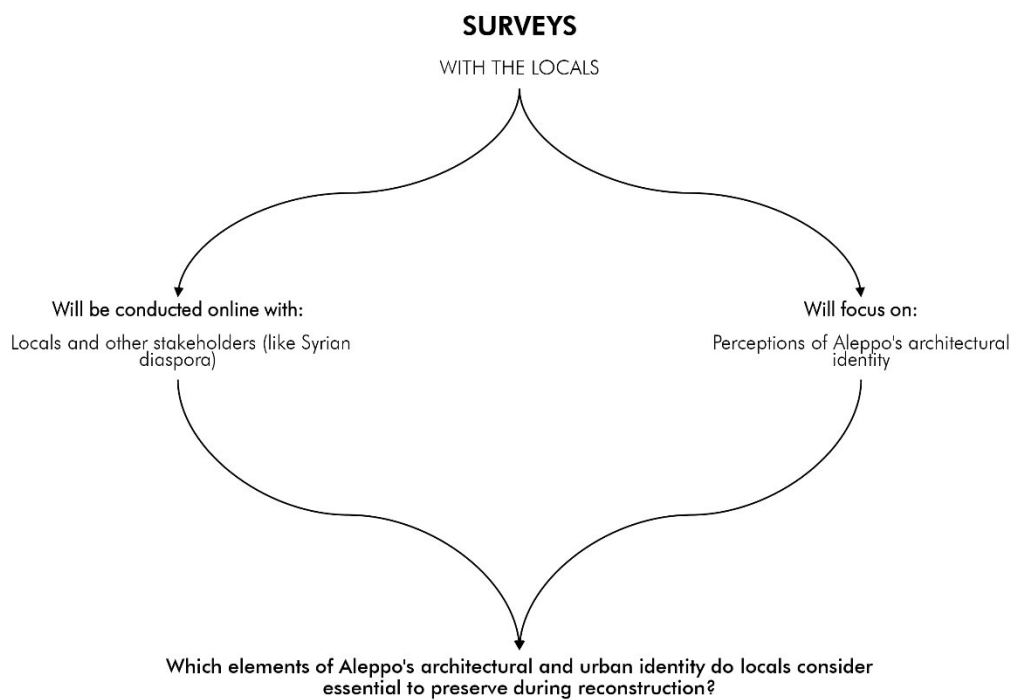
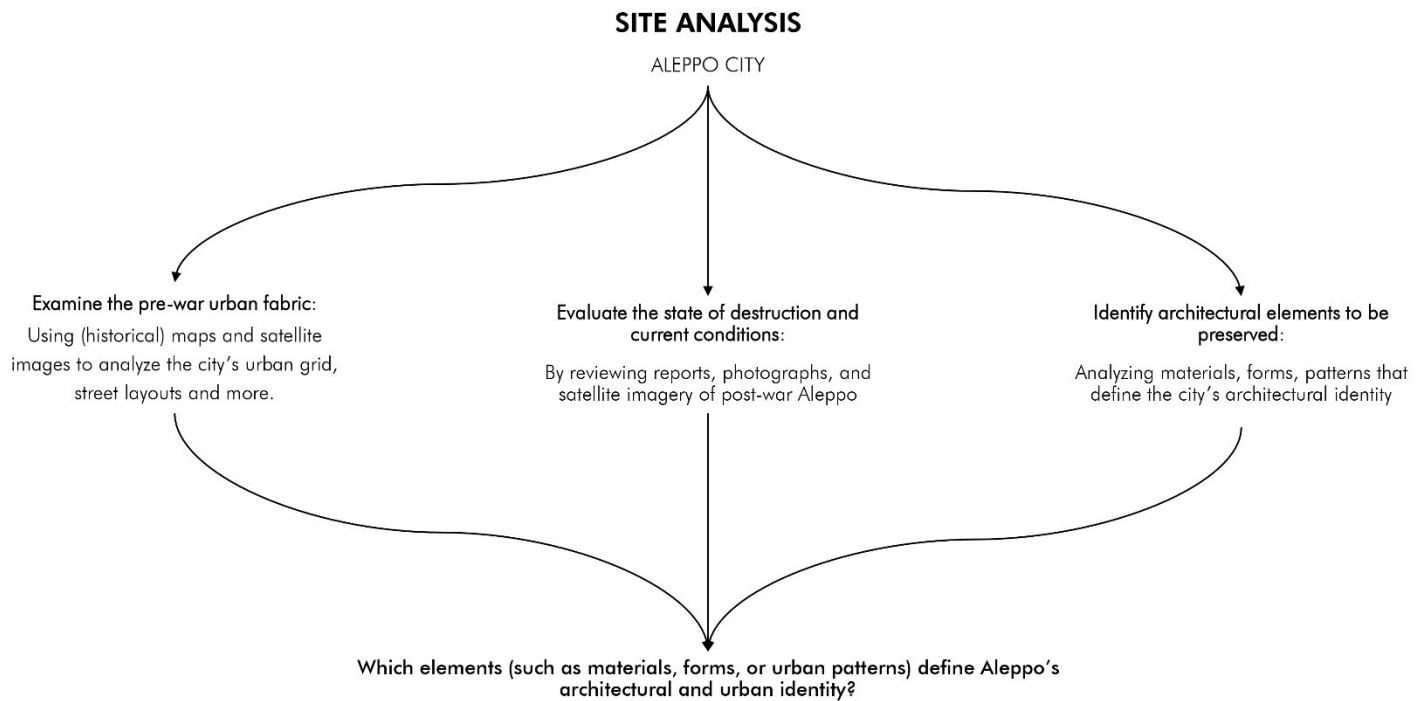
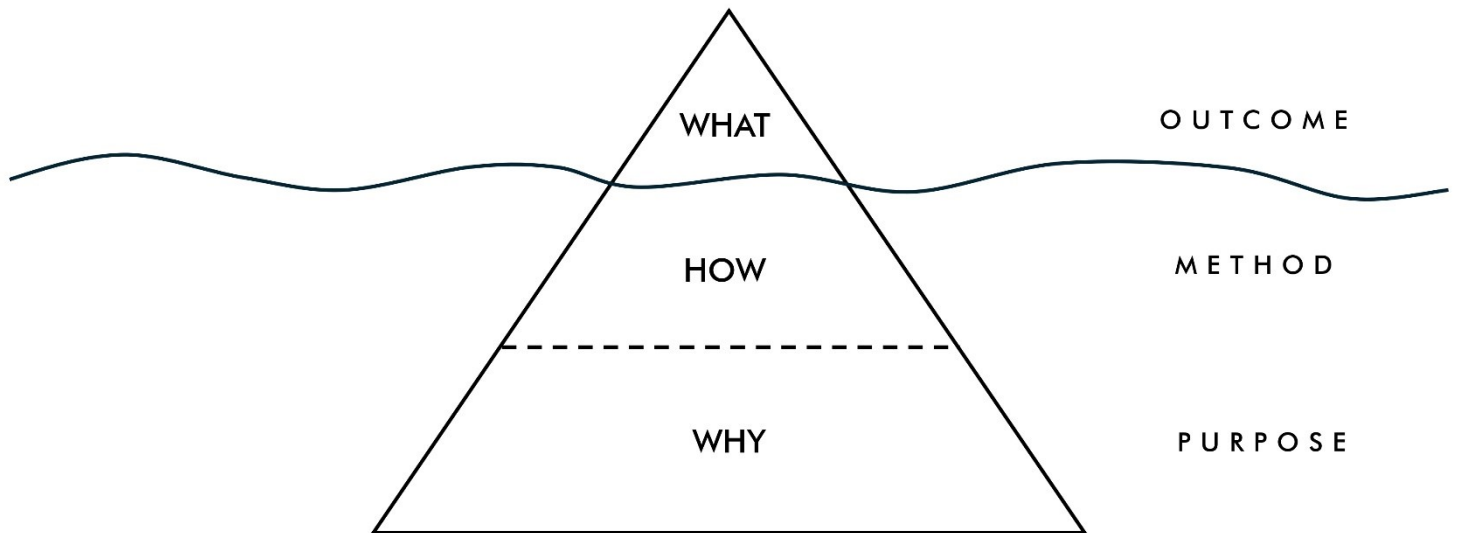


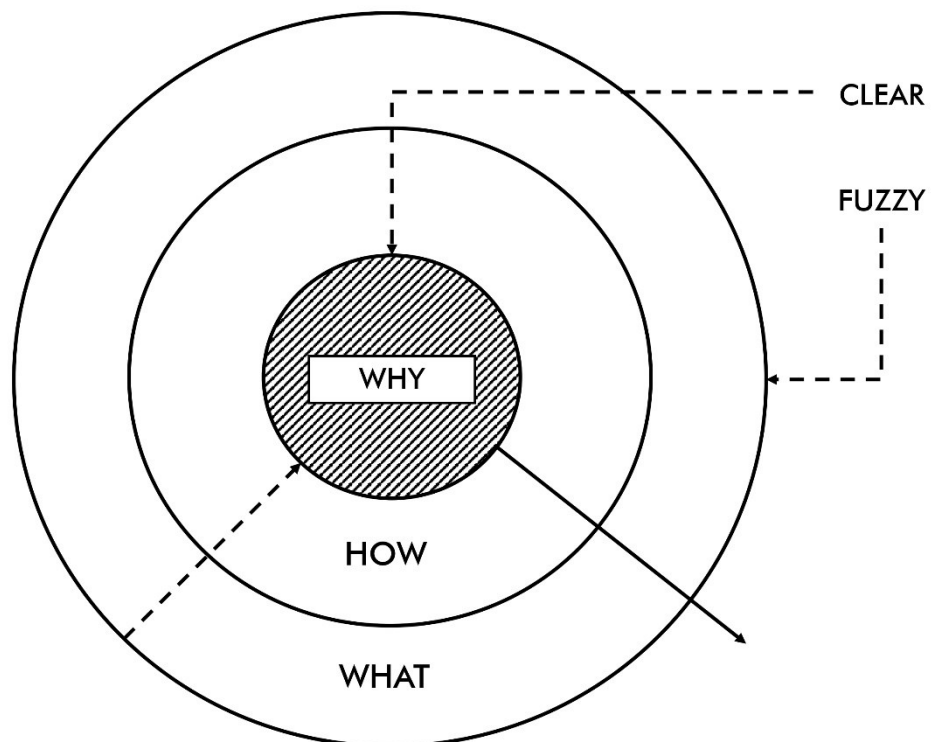
Figure 07. Method schemes, own work.

GOLDEN CIRCLE CONCEPT



RESEARCH DESIGN

START WITH WHY



UNDERSTAND WHY... (PURPOSE, CAUSE, BELIEF)

Often, the 'why' is fuzzy, while the 'what' is clear. In design it is common that we have in mind what we want to design and what we want it to look like, but in this research design, I **do not know** what the exact outcome will look like. I **do not yet know what I will be designing**. In this research, the 'why' needs to be clear and the 'what' is still open till research and design starts after P1.

Figure 08. Research Design – Golden Circle Concept Diagrams, own work

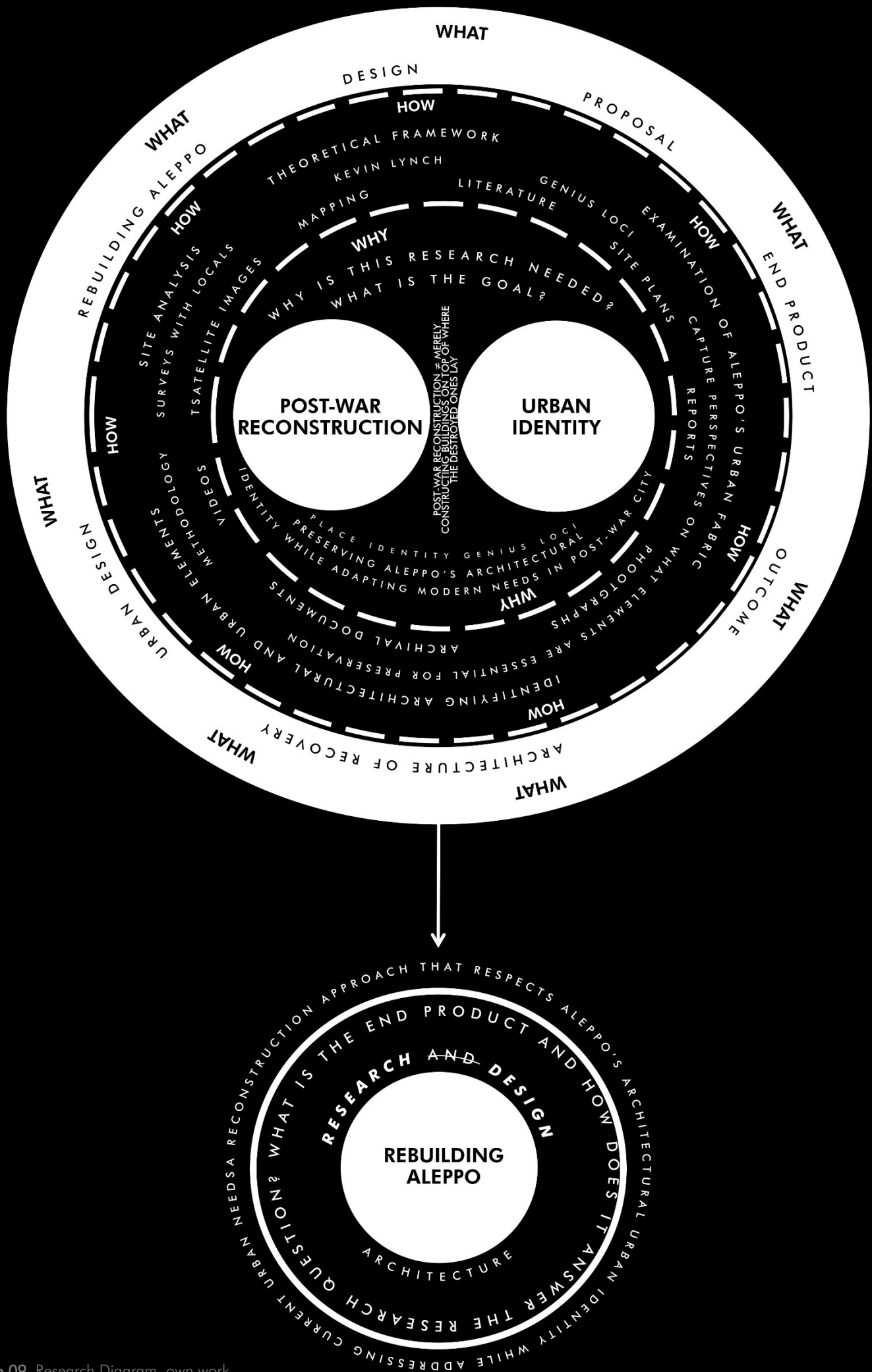


Figure 09. Research Diagram, own work

Relevance

The relevance of the research lies in addressing the challenge of post-war design in one of the oldest continuously inhabited cities in the world while preserving its unique architectural and urban identity. Preserving this identity is crucial for maintaining a sense of place. As Lawrence Vale (2008) states in his book *'Architecture, Power, and National Identity'*, the reconstruction of iconic spaces or buildings can help with having a sense of belonging and community resilience among the locals. However, just looking into the architectural history of the city is not sufficient, as not every part of history should necessarily be preserved. There are aspects of the past that, though historically significant, may not align with the values the locals wish to uphold while moving forward. An example given by Carola Hein (2024), in her lecture *Research Design: History*, is how cities are removing certain statues or criticizing their existence in the cities, recognizing that, though these figures are part of the country's history, they do not reflect the values or the identity that the locals seek to preserve. Similarly, in Aleppo's case, the reconstruction should not just replicate its past but critically look into which elements of its architectural history align with the values of the locals.

Lastly, this research is directly related to my graduation studio, in which I will be designing for the city of Aleppo in parallel with this research. As I do not yet have a plot, I plan to find a potential site within the city in the first weeks of my research. The outcomes from the site analysis (and perhaps) surveys will set a final plot in the first few weeks, which does not need to be a simple 'here is the most destruction, so here I want to my plot'. Further site analysis will be then done on the smaller scale neighborhood of the plot. Furthermore, this research will allow me to apply the insights gained from my research directly to the design. By integrating my findings into my design work, I aim for a more thoughtful and context-sensitive design approach to Aleppo's reconstruction.

GRADUATION

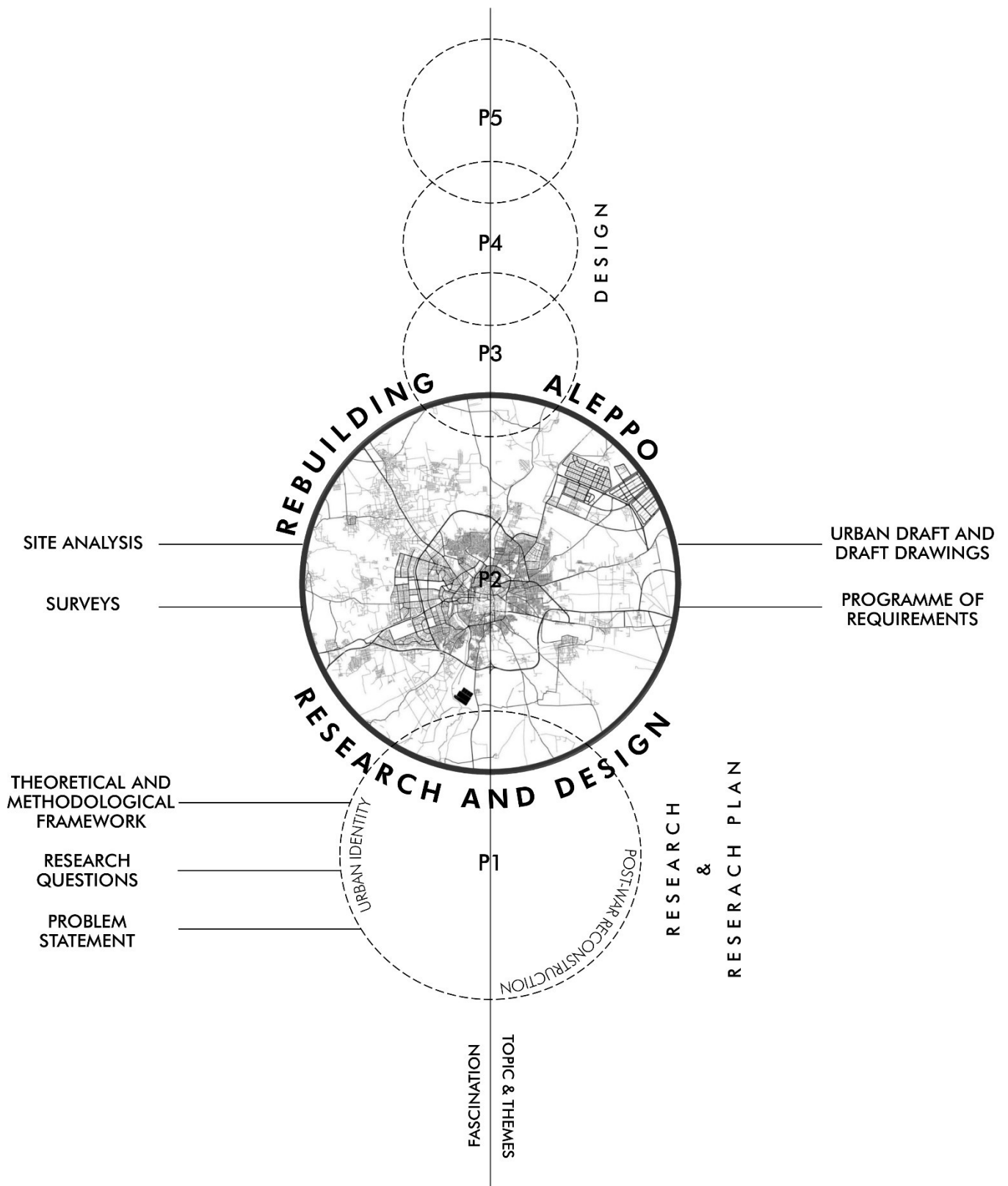


Figure 10. Research Diagram - General Timeline, own work.

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