



Adaptive Reuse of Urban Heritage in Contested Urban Contexts

The Case of Acre in Israel

Ana Jayone Yarza Pérez

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Adaptive Reuse of Urban Heritage in Contested Urban Contexts

The Case of Acre in Israel

Dissertation

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by

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Preface

When a controversial subject is addressed, such as heritage planning in a contested society like the one found in Israel, it must be approached with caution. Emotions run high over the history of this geographic location and there seems to be no sign of the contention letting up, at least not any time soon. When identities become violated, tempers flare to the point of despair, rage, and hatred, ultimately leading to acts of violence and destruction that fail to see beyond momentary pain.

However, when cool heads prevail, the concerned parties can establish a common ground to work out their differences. It's in the interest of reaching that understanding and giving voice to the actors that continuously remain unheard that this thesis is written. And in the hope of reaching that goal, we may find that there is a way towards consensus and inclusiveness in the heritage planning sector.

“Adaptive Reuse of Urban Heritage in Contested Urban Contexts, The Case of Acre in Israel” is a PhD thesis that addresses socio-spatial conflicts that result from contested identities through a specific tool, the adaptive reuse of urban heritage. The need to narrow the topic of conflict down was born from the inscrutability and vastness of the very concept of conflict, and the humility to address conflict mitigation from a very specific entry point, with the intention of contributing a drop in the ocean.

During the production of this thesis, it became clear in various moments how rapidly the value of cultural heritage could freefall compared to the escalation of brutal violence and destruction. For example, when the Israel-Palestine crisis occurred between the 10th and 21st May 2021, some conservation buildings in Acre from the Ottoman period were burnt to ashes in a matter of days, regardless of them belonging to a UNESCO World Heritage site, and being collectively considered, by Palestinian and Israelis, valuable from a cultural heritage point of view. Yet, during that dark period of time, these heritage values were moved aside and replaced by narratives of vengeance. So, the previously agreed symbol, an Ottoman conservation building with historic, aesthetic, and cultural values (to name some), is reduced to a business owned by the enemy, a target to be attacked.

In the same way, for the sake of progress, economic development, or security, similar barbarisms were carried out. For instance, in Acre, as a result of the Six-Day war in 1967, various households from the British Mandate period, which were inhabited by Palestinian at that time, were demolished and their inhabitants evicted. Again, using the turbulent times to devalue a heritage element (with historic, aesthetic and functional values), and resignify it as an element that hinders, an obstacle to progress and the economic development of the city.

In both examples, the common factor is a severe disruption in terms of conflict, which radically alters the status quo of heritage elements, and irresponsibly re-symbolizes them to be a target to destroy. In these circumstances, even mentioning the word consensus seems useless. Fortunately, these conditions are not prevalent, so, in the periods in between outbursts of violence it is vital to keep working along the values of heritage. As the Nara Document of 1994 states:

“In a world that is increasingly subject to the forces of globalization and homogenization, and in a world in which the search for cultural identity is sometimes pursued through aggressive nationalism and the suppression of the cultures of minorities, the essential contribution made by the consideration of authenticity in conservation practice is to clarify and illuminate the collective memory of humanity.”

Therefore, it is with this premise that the work carried out in the city of Acre advocates first and foremost, for the wellbeing and human rights of all the citizens of Acre; second, for the adequate conservation and management of the cultural heritage in the city; and third, for the collaboration between all the stakeholders and decision-makers, so that communication between all the parties remains open to dialogue, inclusiveness, and consensus.

Peace

سلام
שלום

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Samenvatting

De wereld staat voor wereldwijde uitdagingen die de sociale en fysieke omgeving ingrijpend veranderen, wat resulteert in culturele confrontaties en conflicten. Snelle stedelijke groei, ontheemding en gentrificatie vergroten de stedelijke druk en brengen tegelijkertijd de sociale cohesie, multiculturele waarden en lokale economieën in gevaar. Bovendien vormen omgevingsfactoren die verband houden met klimaatverandering een uitdaging voor de manier waarop steden reageren en zich aanpassen, aangezien hun activa opnieuw moeten worden ontworpen om te voldoen aan de behoeften en eisen van de huidige en toekomstige generatie.

Een antwoord op deze uitdagingen is adaptief hergebruik, de transformatie van de functie van een onderbenutte structuur naar een nieuw gebruik. Dit proces verandert elementen van de stad in verval in ontwikkelingskatalysatoren (Pereira Roders en van Oers 2011). De aanpassing aan deze veranderingen is vaak een bron van conflicten, aangezien het stedelijk beleid de betrokkenheid van burgers bij de herdefiniëring van de openbare ruimte ontbeert, wat resulteert in meer onenigheid en inefficiënt gebruik van middelen. Dit probleem is met name acuut wanneer het gaat om betwiste gemeenschappen, aangezien hun voortdurende evolutie en opkomst rechtstreeks van invloed zijn op de aanpassing van cultureel erfgoed, omdat ze voortdurend worden bedreigd en hersteld moeten worden (Berlin en Hardy 2000).

Met het oog op deze aspecten stelt dit proefschrift de volgende onderzoeksvraag: 'Hoe kunnen sociaal-ruimtelijke conflicten die het gevolg zijn van betwiste identiteiten worden verzacht door het adaptieve hergebruik van stedelijk erfgoed?' proces), stedelijk erfgoed (de plaats) en betwiste identiteiten (de gemeenschappen) worden op verschillende manieren onderzocht:

- Literatuuronderzoek, historische analyse en multimedia-analyse
- Culturele mapping
- Burgerenquête en semi-gestructureerde interviews met de gemeenschappen en belanghebbenden
- Ontwerpend onderzoek (scenariovorming en evaluatie door belanghebbenden)

De combinatie van deze methoden resulteert in het doel van het onderzoek: het ontwikkelen van een integratieve methodologie om adaptieve hergebruikalternatieven voor stedelijk erfgoed in betwiste samenlevingen te evalueren. Dit uiteindelijke resultaat wordt voorgesteld als een hulpmiddel voor besluitvormers en stedenbouwkundigen dat op informatie gebaseerde resultaten levert die kunnen worden toegepast in de stedenbouwkundige praktijk, met als doel de theorie in de praktijk te vertalen en de kloof tussen globale doelen en lokale problemen te overbruggen.

Deze tool is gebaseerd op de casestudy van Acre (Israël), een meerlagige historische stad, waar verschillende gemeenschappen en gelaagde elementen van stedelijk erfgoed naast elkaar bestaan. De resultaten van het onderzoek naar de hoofdvraag van het proefschrift zijn onder meer:

- Een historisch overzicht van Acre (analyse van vroegere en huidige verhalen)
- In kaart brengen van het stedelijk erfgoed van Akko (lagen: natuurlijk, stedelijk, wettelijk, historisch, sociaal...)
- Evolutie van het stedelijk erfgoed van Acre in de loop van de tijd
- Profileren van het staatsburgerschap van Acre en gebruikers
- Profileren van de stakeholders van Acre
- Methode scenariobouw (algemeen en voor specifieke thema's)

Al deze gecombineerd leiden tot het uiteindelijke doel: **een hulpmiddel om voorstellen voor adaptief hergebruik te evalueren en om meer consensuele alternatieven te bieden.** Deze tool is ontwikkeld met de bedoeling om te worden gerepliceerd in andere steden met omstreden samenlevingen.

Summary

The world is facing global challenges that are dramatically changing the social and physical environments, resulting in cultural confrontation and conflict. Rapid urban growth, displacement, and gentrification increase urban pressure while jeopardizing social cohesion, multicultural values and local economies. In addition, environmental factors associated with climate change challenge the way cities respond and adapt, as their assets have to be re-designed to meet the current and future generation needs and demands.

One response to these challenges is adaptive reuse, which is the transformation of the function of an underused structure into a new use. This process turns the cities' elements in decline into development catalysers (Pereira Roders and van Oers 2011). The adaptation to these changes is often a source of conflict, as urban policies lack citizen engagement in the redefinition of public space, resulting in more disagreement and inefficient use of resources. This issue is particularly acute when addressing contested communities, as their continuous evolution and emergence directly influence the adaptation of cultural heritage, being under constant threat and need for repair (Berlin and Hardy 2000).

Considering these aspects, this thesis poses the following research question: *'How can socio-spatial conflicts that result from contested identities be mitigated through the adaptive reuse of urban heritage?'* To respond to it, the relations between the concepts of Adaptive Reuse (the process), Urban Heritage (the place) and Contested Identities (the communities) are explored through diverse methods:

- Literature review, historic analysis, and multi-media analysis
- Cultural mapping
- Citizen survey and semi-structured interviews to the communities and stakeholders
- Research by design (scenario building and evaluation by stakeholders)

The combination of these methods results in the objective of the research: to develop an integrative methodology to evaluate urban heritage adaptive reuse alternatives in contested urban contexts. This final outcome, is proposed as a tool for decision-makers and urban planners that provides information-based results to be applied in urban design practice, aiming to translate the theory into practice, and to bridge the gap between global goals and local issues.

This tool is based in the case study of Acre (Israel), a multi-layered historic city, where various communities and layered elements of urban heritage co-exist. The results obtained from researching the thesis main question include:

- A historical overview of Acre (analysis of past and present narratives)
- Mapping of Acre's urban heritage (layers: natural, urban, legal, historic, social...)
- Evolution of Acre's urban heritage over time
- Profiling of Acre's citizenship, and users
- Profiling of Acre's stakeholders
- Scenario building method (general and for specific themes)

All of these combined lead to the final aim: **a tool to evaluate adaptive reuse proposals, and provide more consensual alternatives**. This tool is developed with the intention to be replicated in other cities with contested societies.

SECTION 1

Background

This first section offers the background information to understand and delve into the research topics. First, an introduction to the study, the research aim, scope and methods; and its outline are provided. Second, the theoretical framework emphasises the main topics: Adaptive Reuse of Urban Heritage, Citizen Engagement in Adaptive Reuse Processes, Conflict and Identity, and Cultural resilience. Finally, the case study, the city of Acre in Israel, is presented, highlighting why it was selected and the existing problems.

1 Introduction

1.1 Motivation

This research was born from the HERILAND programme framework, a pan-European research and training network on cultural heritage in relation to Spatial Planning and Design. It is funded by the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 813883. The programme proposed a series of research topics, intending to frame heritage and urban planning as critical elements of sustainable development. The one I applied for, and the central issue of this topic, is: 'Adaptive Reuse of Urban Heritage in Contested Urban Contexts, the case of Acre (Israel)'. It should be highlighted how one of the programme's main objectives was to bridge the gap between theory and practice. To do so, the research project was rooted in the study of an empirical case, the city of Acre in Israel, which implied working conjointly with the local stakeholders as a secondment. Therefore, committing to this research project meant balancing research and academic skills with more social and hands-on work.

My interest in this topic comes from afar, as in the last years, I have worked and studied various and diverse contexts from an architectural and urban point of view (See 13.1 Curriculum Vitae). I was especially interested in addressing heritage in contested areas, as it is a challenging task that not only requires an open mind to understand the multiplicity of voices but also provides the opportunity to work hand in hand with local stakeholders and communities. This meant getting acquainted with the Israeli-Palestinian context, its political situation, the socio-cultural heterogeneity, and the fascinating and rich history of this land. Not to mention the beauty of the main spoken languages, Hebrew and Arabic, which have been both a blessing and a challenge to work with.

Altogether, deciding to carry out PhD research on such a relevant topic in a stimulating environment and with direct contact with the local people and institutions seemed highly attractive. The addressed topic is highly relevant both in the heritage and urban planning fields, as well as having direct impact in the city and citizens of Acre, highlighting the societal urgency of the topic.

1.2 Aims, Scope and Outcomes

1.2.1 Aim

The research aims to develop an integrative methodology to evaluate urban heritage adaptive reuse alternatives in contested societies while meeting Sustainable Development Goal 11: 'Make cities and human settlements inclusive, safe, resilient and sustainable'. The research focuses on the critical role of resilience in the evaluation of change, as well as on the key role of unveiling the multiplicity of voices present in the city, currently and over time.

These sustainability goals are general, so adjusting them to the local context is fundamental for their achievement. The 'cultural' component in 'cultural resilience' provides this extra filter, highlighting the role of culture as a brace to the economic, social and environmental spheres of sustainable development; and the importance of citizen engagement and dialogue in urban planning and urban design decision-making processes.

The outcome, the integrative evaluation methodology, is proposed as a tool for decision-makers and urban planners that provides evidence-based results to be applied in urban design practice, aiming to translate the theory into practice and bridge the gap between global goals and local issues. This tool is based on the case study of Acre with the intention to be replicated in other cities with contested societies.

1.2.2 Scope

The research mainly focuses on the case of Acre. A city in north-western Israel with a long and complex history, whose old city was nominated as a World Heritage city in 2001. Acre is considered a mixed city as 30% of its inhabitants are Arab / Palestinian. Most of them reside in the Old City, making up 90% of its inhabitants. This, along with historical, socio-economic and political aspects, provides an environment prone to societal tensions and conflict. The latter is a

constant in the country's history, specifically in Acre; these have augmented in the last decades since the establishment of the state of Israel, which triggered drastic demographic shifts.

Social dissonance impacts various aspects of life, where heritage plays a key role, as it is intrinsically linked to people, identities, and history. This research possesses a spatial component, the materialization of cultural expression into the urban realm. This means heritage can be negatively affected by conflicting interests, and when it is common or shared by contested communities, it can become the source of divergence. Yet, adequate management of heritage assets can result in conflict mitigation and mark the road towards peace.

Both themes, contested identities and heritage, are extensively wide-ranging. Therefore, this study focuses on the adaptive reuse of urban heritage. On the one hand, adaptive reuse is one of the many processes to manage heritage; on the other, urban heritage comprises four categories:

- 1 the architectural elements,
- 2 the urban elements,
- 3 the wider context, and
- 4 the intangible heritage.

We will only focus on the first three, and we will give special attention to the public areas and components. These decisions are based on several factors; being timely-efficient and realistic is the most important (as the research funding covered three years). Also, adaptive reuse has many advantages at the economic, environmental and social levels, providing an adequate solution for heritage assets and cities facing 21st-century challenges (urban pressure, mass tourism, or the climate emergency, for example). With the same time-efficient criteria, only the three categories mentioned above of urban heritage were selected, leaving the intangible cultural heritage aside. Due to its wide range of scope, this theme on its own could serve for an entire PhD thesis.

Finally, the focus on public elements is linked to one of the main topics of the research: contested identities, understanding that the public realm is where people gather and elements are shared (or not). Also, to make the study more socially relevant, I decided to focus on the public elements as this environment directly affects society as a whole, whereas the private refers to the individual.

1.2.3 Outcomes

The research follows a phased approach. It is divided in various steps, which lead to different outcomes. Each step is needed to tackle the next one. Through the combination of all of these, the final outcome is attained: **a tool to evaluate adaptive reuse proposals, and provide more consensual alternatives.**

STEP 1 | For the initial phase, **a literature review** was carried out focusing on the following topics:

- history of the Mediterranean, Palestine/Israel, and Acre;
- conflict, adaptive reuse, urban heritage, cultural resilience, urban planning, urban fragmentation, and identities;
- archaeology of Acre,
- buffer zones and interstices,
- material and heritage conservation theory, and
- public engagement and participation.

This resulted in a historical overview of Acre, including the analysis of past and present narratives.

I want to highlight that parallelly, the global frameworks proposed by the UN, the European institutions, and other relevant agencies were considered as they build up the umbrella under which this research is set. This global agenda includes highly relevant documents like the Historic Urban Landscape recommendation (HUL), the 2030 Agenda and the Sustainable Development Goals (SDG), the Faro Convention, the New Urban Agenda (NUA), and many more.

STEP 2 | Furthermore, a compilation and analysis of various socio-economic databases were carried out. These included data from the Israeli Bureau of Statistics, other datasets like the World Heritage Cities (UNESCO), data from Instagram, and Madlan. To visualize the analysed data, I used cultural mapping as my main tool. This way, I mapped a wide range of attributes in Acre, including the following: diversities of people, heritage assets, natural elements, urban features, visual and geolocated data from the socio-economic databases, and urban heritage.

The main outcomes derived from this step are:

- A set of maps identifying Acre's urban heritage, including the following layers: natural, urban, socio-economic, historic, legal , and cultural.
- The evolution of Acre's urban heritage over time, emphasizing how the urban heritage elements continued, were erased or adapted through history.

STEP 3 | The resulting maps, along with the conclusions extracted from the literature review, informed the following step, the core of this research, as it tackles the qualitative data extracted from semi-structured interviews to the main stakeholders, a citizen survey, and an evaluation exercise with the stakeholders. Different techniques were applied to analyse the collected data and obtain results in all of these cases. As a result, we acquired the following:

- Profiling of Acre's citizenship, and users, disaggregated by various themes, such as age, sex, religion, or job. This is highly useful to avoid generalizing and breaking down the needs and issues.
- Profiling of Acre's stakeholders, visualized as radar plots that show the level of interest by the actors regarding identified themes.
- A scenario building method, a general approach to the tackled issue and focused on specific themes, like world heritage sites, or resilience.

FINAL OUTCOME | The final outcome, was proposed as a tool for decision-makers and urban planners that provides information-based results to be applied in urban design practice, aiming to translate the theory into practice, and to bridge the gap between global goals and local issues. This tool is based in the case study of Acre (Israel) with the intention to be replicated in other cities with contested societies.

1.3 Research Outline

1.3.1 Research Background

The present research project is part of HERILAND – Cultural Heritage and the Planning of European Landscapes, a pan-European research and training network on cultural heritage in relation to Spatial Planning and Design. The initial working title of the study was *Adaptation of Urban Heritage in a Multicultural Society*, included in Work Package 4: Shifting Demographies and Contested Identities.

The research addresses the current global challenges related to unprecedented mass tourism, urban growth, displacement, and conflicting identities and their impact on the social, cultural, environmental and economic spheres. These are becoming the source of economic and political shifts globally, increasing the urge to redevelop and regenerate urban centres to be prepared to face the current urban century challenges (Bandarin and van Oers, 2012; Sassen, 2011). In this context, heritage becomes relevant for cities to develop their identity, uniqueness, and attractiveness, as well as foster their potential for investment and economic growth. Culture can be vital in making cities more resilient against crises and more inclusive, as it can help build bridges between local and migrant communities (UN-Habitat, 2020).

The global agenda sets goals and guidelines to promote sustainable urban development and focuses explicitly on preserving the quality of the human environment through tools such as The Historic Urban Landscape approach (UNESCO, 2011).

‘15. [...] The historic urban landscape approach supports communities in their quest for development and adaptation, while retaining the characteristics and values linked to their history and collective memory, and to the environment.’ (UNESCO, 2011)

‘The HUL is an additional tool to integrate policies and practices of conservation of the built environment into the wider goals of urban development in respect of the inherited values and traditions of different cultural contexts.’ (UNESCO World Heritage Centre, 2020b)

One of the interventions that can enhance the urban heritage goals is adaptive reuse, questioning the building values and addressing the needs of the living cities, where the process of making is always present, as noted by Saskia Sassen (UN-Habitat, 2020). The transformation of the function of an underused building or structure to a new use turns the cities' elements in decline into development catalysers (Pereira Roders & van Oers, 2011). This process serves multiple functions: it has a positive environmental impact; it encourages social and participatory processes and promotes economic dynamism using culture as an enabler for sustainable development. The result of the adaptive reuse process reflects the concerns of the society that adapted it, serving as the custodians of heritage for the community and, subsequently, all ('The Nara Document of Authenticity', 1994).

The continuous evolution and emergence of heterogeneous communities directly influence the adaptation of cultural heritage. Its materialisation into the urban space and multiple forms of intangible expressions keeps changing. These are under constant threat and need for repair (Berlin and Hardy, 2000), implying a continuous reassessment of the values to be maintained, adapted or diminished. More often than not, policies and local actions are disconnected, creating social exclusion mechanisms, particularly for those already disadvantaged. An inclusive society needs to give all people, including migrants, and refugees, the possibility to shape urban development and to be part of the city (UN-Habitat, 2020).

The current trend urges for well-managed and informed urban policies and regulations which contain population trends over time and can help mitigate the impact of rapid urban growth on cultural heritage (United Nations, 2018). The current decision-making processes in place lack an integrative approach to adequately respond to the multiplicity of dissonant voices and tackle society's needs and demands while adjusting to the change in values and safeguarding the cultural heritage.

1.3.2 Research Questions

This study has a main research question (MQ), broken down into sub-questions (SQ) to respond to the larger question by understanding smaller and more focused questions.

The MQ is the following:

- **How can socio-spatial conflicts over heritage use and preservation that result from contested identities be mitigated through the adaptive reuse of urban heritage?**

The socio-spatial conflicts mentioned are linked to the values maintained, lost or changed in adaptive reuse processes. These values are connected to contested identities present in the city, which are usually neglected when the processes lack an inclusive approach, resulting in social unrest, exclusion, and deterioration of the social fabric.

The following diagram shows the relationships of the components included in the question: Urban Heritage, Adaptive Reuse, and Contested Identities. Also, the concept of Cultural Resilience is incorporated as the underlying capability of societies to manage adversity, an approach that embraces disruption, transforming it into an opportunity for development (Gilbert & Bower, 2002).

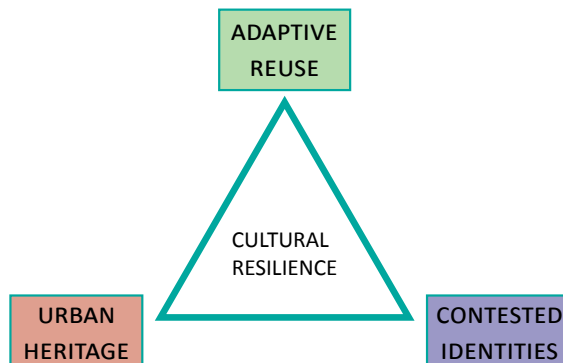


FIG. 1.1 Diagram_Relation between research question components

Each component is linked to a sphere of sustainable development, and they vary in essence. Urban Heritage is the ‘what’, the tangible or intangible element serving as a catalyser for economic development. How it is used, transformed or created is directly linked with Adaptive Reuse, a process, the ‘how’. How different societies create, use, alter or erase cultural heritage depends on the dominant values and, consequently, on the existing identities. The latter refers to existing socio-cultural conditions that differ from one city to another and from time to time.

The research will study their interrelationships within the following sub-questions:

- **SQ1** | *How can we arrive at a shared or common understanding of Urban Heritage by different stakeholders in and out of Acre?*

In a context where the definition of heritage is multiple, in Hebrew, heritage refers mainly to Jewish legacy¹, while in English² or Arabic³, it has different connotations. Understanding the multiplicity of narratives and perceptions about Acre’s Urban Heritage by various stakeholders is fundamental to finding points of consensus and identifying the urban elements with potential for change and conflict mitigation.

- **SQ2** | *How can conflicting values be included in the processes of the Adaptive Reuse of Urban Heritage?*

Understanding inclusion and exclusion trends in adaptive reuse processes is vital to addressing the problem from its root. Therefore, the analysis of change in values separates the adaptation process from its identity components and brings perspective to the conversation. Informed decisions, shifting the focus from sentiment (specific identity, individual interest) towards pragmatism or societal values (based on hope and a better future, collective interest), supports the work towards conflict mitigation, even though dissonant voices will always be there.

¹ Definition of heritage in Hebrew (International Standard Bible Encyclopedia, 2010): her'-i-taj (nachalah, from nachal, “to give”; kleroo): That which is allotted, possession, property, portion, share, peculiar right, inheritance; applied to land transferred from the Canaanites to Israel (Psalm 11:6; Psalm 136:22); to Israel, as the heritage of Yahweh (Joel 3:2, etc.). In the New Testament (Ephesians 1:11) applied to believers, the spiritual Israel, as God’s peculiar possession (Ellicott, Eadie).

² Definition of heritage in English (Online Etymology Dictionary, 2022b): c. 1200, “that which may be inherited,” from Old French iritage, eritage, heritage “heir; inheritance, ancestral estate, heirloom,” from heriter “inherit,” from Late Latin hereditare, ultimately from Latin heres (genitive heredis) “heir”. Meaning “condition or state transmitted from ancestors” is from 1620s.

³ Definition of heritage in Arabic (Al-Ma’ani Al-Jami’ dictionary - Arabic-Arabic dictionary, 2023): Folklore (Traditional): (Terminology) The impact left by civilizations or left by previous generations and has national or global value. (legal).

- **SQ3** | *How can a ‘cultural resilience’ approach be integrated into processes of Adaptive Reuse of Urban Heritage?*

To answer the previous sub-question, I mentioned the importance of common values aiming for a vision of society and a better future. With the Global Frameworks as a reference, cultural resilience is set as a goal for reducing conflict. Therefore, integrating cultural resilience as part of the overall strategy aims to answer the third sub-question (SQ3), and the main research question (MQ).

- **SQ4** | *How can processes of Adaptive Reuse support Urban Heritage values?*

The last SQ addresses adaptive reuse processes from a different perspective. The focus is on the urban heritage values, capacities, and vulnerabilities. These processes can support achieving these elements’ aims and serve as mechanisms to activate their potential.

The combination of responses to these sub-questions answers the main question. The series of steps and methods followed to answer these results into the integrative evaluation tool to support decision-making processes.

1.3.3 Research Methodology

The research is derived from the hypothesis that the adaptive reuse of urban heritage can attain socio-spatial conflict mitigation. And for this reason, the main goal of the research is to develop an integrated tool to evaluate adaptive reuse alternatives for urban heritage in contested societies. The study applies several methods to understand how this can be achieved, which result in the proposed evaluation tool.

To design the research methodology, the main three research topics are studied:

- Adaptive Reuse
- Urban Heritage
- Contested Societies

Urban Heritage materialises in the place, the Contested Societies are the communities with different narratives, and Adaptive reuse is the selected underlying approach to tackle dissonance.

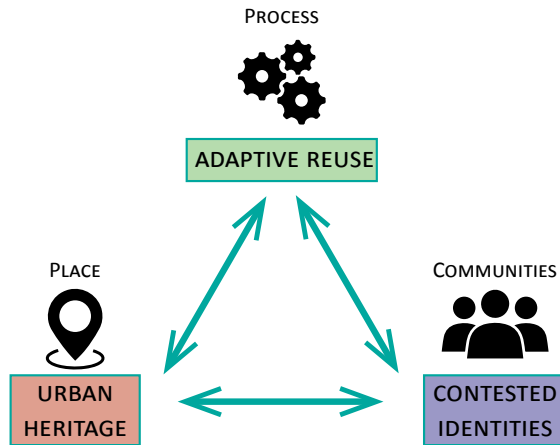


FIG. 1.2 Diagram_Relations between Place - Communities – Process

The study of its interrelations is the guiding principle to create a coherent dissertation, resulting in the following tasks:

- A** Understanding the place from the perspective of communities: Identification of the urban heritage in Acre through analysing past and present narratives about the city of Acre.
- B** Understanding the place over time: Analysis of the evolution of the urban heritage in Acre: continuity, adaptation, or erasure.
- C** Understanding how various communities use the place: Survey and interview the people on their habits, use, and vision of the city; and social media analysis.
- D** Unravelling the city through three urban dimensions (Historic center, Buffer Zone, and the City as a whole: Cultural mapping of the city of Acre
- E** Stress-testing the three urban dimensions (Historic center, Buffer Zone, and the City as a whole) through specific scenarios: research by design through scenario building and evaluation by stakeholders

1.3.4 Methodological Steps: chapter by chapter outline

The document is divided into 3 sections:

- **SECTION 1** | Background
- **SECTION 2** | Interrelations Between Place, Communities and Process
- **SECTION 3** | Final Outcomes

See the sections' breakdown below:

SECTION 1 | Background

- **Chapter 1** | Introduction
- **Chapter 2** | Theoretical framework
- **Chapter 3** | Case of Acre

Section One includes three chapters: the introduction, the theoretical framework, and the case of Acre. These chapters contextualise the research in terms of the logic behind it, as well as the planning and structure of the dissertation itself.

Chapter One, the Introduction, establishes the research motivation, defines the key research questions, and outlines the main research tasks. It then provides an overview of how the dissertation is structured and how each research component contributes to addressing the critical research tasks.

Chapter Two, the Theoretical Framework, is part of the background research in which I include the literature review and look at different theories and theoretical approaches. These provide the umbrella under which the research is framed, focusing on the main research topics: adaptive reuse, urban heritage, conflict, and cultural resilience.

Chapter Three, the Case of Acre, also part of the background research, aims to illustrate the city of Acre through the provision of an overview of its history, its relevance regarding cultural heritage and heterogeneity, statistical data, historical and present maps, as well as the inclusion of visual material to understand urban, cultural, socio-economic, political and environmental trends.

SECTION 2 | Interrelations between place, communities and process

Section Two includes chapters Four, Five, Six, Seven, and Eight. This part aims to provide an overview of the place through the lens of time and the people.

Chapter 4

Understanding the place from the perspective of communities: Identification of the urban heritage in Acre through analysing past and present narratives about the city of Acre.

Chapter Four focuses on the narratives, past and present. The past, on the one hand, are analysed through the study of the historical evolution of Acre, the identification of port city attributes and urban heritage throughout history. The new, on the other hand, focuses on the understanding the city of Acre and its urban heritage through the lens of its inhabitants.

CHAPTER 4	
Aims	Provide a chronological overview of the urban heritage in the port city of Acre and its evolution over time by analysing past and present narratives.
Research Tasks	Methodological Steps
A	Literature review Multi-media analysis (interviews, survey, social media)

A Identification of the urban heritage in Acre through analysing past and present narratives about the city of Acre.

The understanding of past and present narratives implies different approaches. The first: a literature review on the history of Acre is essential, embracing that the dominant narratives are the ones that have reached us and observing how these have shaped the city, its inhabitants, and the current management and perception of its urban heritage.

Whereas, for the present narratives, a mix of multi-media analysis is needed: interviews with relevant stakeholders, focusing on their perceptions about Acre's urban heritage and its relation to their institutional visions; surveying laypeople on their habits regarding the public space and use of the city; and on a more digital scale, analysis of social media platforms, to understand how different digital communities perceive Acre.

Chapter 5

Understanding the place over time: Analysis of the evolution of the urban heritage in Acre: continuity, adaptation, or erasure

Chapter Five explores the changes these elements underwent over time. Focusing on how they were adapted, erased or if they continued unchanged. In order to identify trends and patterns in these changes, and this way understand the changeable and non-changeable parts of the urban heritage elements.

CHAPTER 5	
Aims	Provide adaptive reuse alternatives to neglected, potential or ongoing urban heritage processes/elements.
Research Tasks	Methodological Steps
B	Analysis of city attributes over time Literature review Analysis of archaeology and conservation documents

B Analysis of the evolution of the urban heritage in Acre: continuity, adaptation, or erasure.

Through the past and present narrative analysis, the identified urban heritage showcases how the complexity and multiplicity of historic periods influenced Acre's urban heritage. Each period's values materialize into elements that continue, are adapted, or erased, supporting the narratives of the city in each period. An analysis of these changes over time is carried out, focusing on the port city attributes of Acre. The study of the interrelations between the city attributes is carried out on a given period or between the same feature over time, and it specifically focuses on the change in its function:

- Did the use continue unchanged?
- Did it change (to which use)?
- Was the element erased?

For this matter, an in-depth literature review was carried out about the history of the Mediterranean and the land of Israel⁴, complementing the previous one on Acre. Moreover, diverse archaeology and conservation documents are analysed. Most of these can be found in the Israeli Antiquities Authority (IAA) repository.

Chapter 6

Understanding how various communities use the place: Survey and interview the people on their habits, use, and vision of the city; and social media analysis.

Chapter Six delves into the perceptions local stakeholders have regarding the urban heritage in Acre, by carrying out interviews with local stakeholders and a survey. These interviews and survey support profiling the local stakeholders, as a critical step to design alternatives of adaptive reuse that will be more accepted and mitigate conflict.

CHAPTER 6	
Aim	Identify the commonalities and differences between stakeholders in Acre to highlight the existing conflicts of interest, value prioritization and the level of acceptance towards the proposed scenarios.
Research Tasks	Methodological Steps
C	Semi-structured interviews Survey

C Survey and interview the people on their habits, how they use them, and their vision of the city.

As participatory processes are not generally included in Israeli Urban planning and design, semi-structured interviews are carried out to understand the views of the representatives of different communities and institutions. These have common questions used as guidance to promote a conversation on the topic and facilitate a comparative analysis between the interviews.

⁴ Definition of the Land of Israel: (Hebrew: אֶרֶץ יִשְׂרָאֵל, Modern: 'Eres Yisra'el, Tiberian: 'Eres Yisrā'ēl) is the traditional Jewish name for an area of the Southern Levant. The definition of the limits of the territory named as the Land of Israel vary between passages in the Hebrew Bible, with specific mentions in Genesis 15, Exodus 23, Numbers 34 and Ezekiel 47. These biblical limits range from those of the established historical Israelite and later Jewish kingdoms, including the United Kingdom of Israel, the two kingdoms of Israel (Samaria) and Judah, the Hasmonean Kingdom, and the Herodian kingdom (Berean Standard Bible, 2021, 2022; Havrelock, 2011, p. 210).

Also, a survey is carried out in the Marina of Acre and the Port of Jaffa to understand the citizens' perceptions, current uses, and future visions of these areas. The survey includes a questionnaire created for and administered at the two sites. This survey is divided into four parts to grasp the disaggregated data (sex, age, religion), the perceptions about the areas, and the future visions for these. The last question proposes a hypothetical disaster in the area, sea level rise, to obtain the citizens' reactions.

Chapter 7

Uncovering the layers of the place: Cultural mapping of the city of Acre, including natural features, urban elements, and socio-economic data.

Chapter Seven uses the baseline data from the previous chapters (past and present narratives study, urban heritage evolution analysis, interviews, and survey) and the analysis of several databases and documents to carry out cultural mapping of the city. The layering and visualization of a wide-range of layers aims to diagnose the city of Acre.

CHAPTER 7	
Aim	Map various layers of the city to better understand and visualize the challenges, needs and assets in the city, in order to assess them. This process supports the unveiling of hidden dynamics and imperceptible relations.
Research Tasks	Methodological Steps
D	Cultural mapping

D Cultural mapping of the city of Acre, including natural features, urban elements, and socio-economic data.

To unravel the layers of the city, mapping is carried out to visualize the socio-economic, environmental, and cultural elements of the entire city of Acre. The HUL recommendation proposed criteria are followed so that the layers of, for example, hydrology or social practices, are mapped.

Based on this mapping, the city's challenges, needs and assets are assessed. This process of putting together and showing layers that are rarely combined helps in the understanding of new inter-relations and unveiling concealed dynamics. This layer compilation is crucial in identifying sensitive areas for intervention, where scenarios of adaptive reuse could be proposed.

Chapter 8

Alternative adaptive reuse proposals towards a consensus: Research by design through scenario building and evaluation by stakeholders.

Chapter 8 uses the collected and mapped data as the baseline to build scenarios of adaptive reuse and test their acceptability among the local stakeholders through an evaluation process. These responses and the previous profiling (Chapter Six) finish shaping the integrative evaluation tool.

The collected and mapped data serves as the baseline to project for the future and make evidence-based urban decisions.

CHAPTER 8	
Aim	Explore the potential of adaptive reuse of urban heritage as a planning tool to support inclusiveness and heterogeneity.
Research Tasks	Methodological Steps
E	Research by design (scenario building and evaluation by stakeholders)

E Research by design through scenario building and evaluation by stakeholders.

Several scenarios are built based on the issues identified through the cultural mapping process and the survey results. They aim is to undertake one or more of these pre-identified issues, as well as to tackle the thematic areas comprised in the spheres of sustainable development (social, economic, environmental and cultural) and urban design principles (connectivity, inclusiveness, and land use). Altogether, the exercise attains to address real problems with an integrated approach.

These scenarios show, in some cases, extreme options to test the limits of urban planning and address the most urgent and current matters at the city, regional and national levels. These proposals are designed, described, visualised and measured according to sustainability parameters (economic, social, environmental, cultural, and urban), and they are designed to intentionally provoke a reaction and explore the possibility of middle-ground options.

The second part of this is an evaluation exercise, where stakeholders rate the proposed scenarios following the same criteria. The resulting outcome is to profile the diversity of institutional/organizational/personal visions so that finding acceptable alternatives is more manageable and consequently smoothenes the tensions in the area.

SECTION 3 | Final Outcomes

- **Chapter 9** | Tool to evaluate adaptive reuse alternatives of urban heritage in contested societies
- **Chapter 10** | Conclusions

Section Three, includes chapters Nine and Ten, and it aims to provide the results and final reflections.

Chapter Nine is a summary of the integrated evaluation tool, the main objective of this research. This chapter provides the tool's steps, presents its main contributions to Acre's urban heritage, and critically explores its replicability in other contested port cities.

Chapter Ten provides the Conclusion of the PhD with closing remarks and a research summary. It includes commentary on the relevance of the research outcomes as well as directions for future work.

1.3.5 Notes on Reading the Dissertation

This dissertation is prepared as a manuscript, although it derives from four publications the author did during the Ph.D. process. The way the articles have been re-structured follows a similar logic to the traditional paper structure (1) Introduction, (2) Methodology, (3) Results and (4) Conclusions and Discussion:

- Section 1, Background, is equivalent to the (1) Introduction, divided into three chapters: Introduction, Theoretical Framework and Case study, for a better understanding.
- Section 2 is mostly the (2) Methodology. This methodology builds the evaluation tool, which has been structured in steps. In this sense, each chapter of Section 2 addresses one of these steps, which consist in various methods. As some of the used methods depend on the results extracted from previous ones, each chapter includes the method or methods required to answer the research questions, as well as the results specific to these (these are not the thesis results, just the specific method or step results).
- The overall (3) Results are, therefore, presented in Chapter 9, in the form of the evaluation tool, which summarizes the tool steps, and provides the main contributions and its replicability.

- The (4) Conclusions and Discussion are offered in Chapter 10, as the final chapter. These address the thesis as a whole, and delve into the research questions, limitations and so on; whereas, the chapters in Section 2 include a Final remarks part that should not be read as the conclusions.

It also must be noted that the original four papers submitted and published to different journals vary in writing styles from the more technical to the more philosophical. Despite this stylistic variation, the submissions thread together to form a cohesive whole. These papers include distinct research components in and of itself that have been rearranged to form the core chapters of the thesis (Section 2). Together they comprise the series of steps that make the integrative evaluation tool up and conform to the overall PhD.

To orient the reader between sections, each major part of the manuscript begins with an introduction. These bridges are intended to provide a road map to the logic of the PhD but are not written as scholarly articles. Similarly, the original papers have been modified and extended to better respond to the research questions and create a more coherent manuscript.

1.3.6 Research Limits

The practical nature of this study entails a wide range of limitations, as it is based on an empirical case, depending on numerous changing variables. Logistic limitations have been a reality since the beginning of the PhD for several reasons. For instance, the limitation on time (PhD research takes up to 4 years) made it almost impossible to implement and test actual adaptive reuse processes; therefore, the study is based on scenarios. Moreover, as Hebrew and Arabic are not my mother languages, working in Acre had language limitations. Also, English is not fluently spoken among the citizens, and acquiring an adequate and fluent level in any or both of these Semitic languages in less than 2 or 3 years was technically impossible. To compensate for this point, a Hebrew-speaking research assistant supported the study, and Arabic speakers helped with translations.

Other logistic issues are worth mentioning, such as the limited public data availability linked to the national and local policies in Israel, which prioritise privacy and only provide general data (not disaggregated). The latter entailed relying on qualitative data from my fieldwork and using alternative primary data sources from the digital media to get a clear and more specific picture of Acre's dynamics. These relate to the limitations provoked by political unrest, as moments of tension and conflict

directly impacted people's attitude towards my research. After May 2021, when the Israeli-Palestinian war reactivated for 11 days^{5/6}, there was an evident change in people's openness towards responding to questions, and the institutions' priorities shifted too, which made data acquisition more challenging. Similarly, the continuous changes in the Israeli political sphere during the years 2019, 2020, 2021 and 2022⁷ implied several changes in the institution's staff. These changes meant I had to explain my project several times, slow advancement, and reluctance to support the study when it had previously been granted.

Last but not least, the COVID-19 pandemic severely impacted this study, as it was initially drafted for a pre-pandemic situation. The shift to a more virtual and less in-person approach to fieldwork implied learning new skills and substituting analogue and group methods with online and individual ones. Altogether, the contextual, logistic, personal, and pandemic limitations have strengthened the research and forced me to be creative and adapt to new and unexpected situations, building up an up-to-date set of skills for my following professional stages.

⁵ <https://www.jpost.com/arab-israeli-conflict/acre-a-model-of-israeli-coexistence-struggles-after-racial-riots-668697>

⁶ <https://www.bbc.com/news/world-middle-east-57205968>

⁷ <https://edition.cnn.com/2022/10/30/middleeast/israel-elections-explainer-intl/index.html>, <https://www.reuters.com/world/middle-east/israels-election-cycle-2022-10-30/>, <https://www.nytimes.com/2021/03/17/world/middleeast/israeli-election.html>

2 Adaptive reuse of urban heritage as a strategy to mitigate socio-spatial conflicts of interest

2.1 Introduction

This chapter addresses the need to develop an integrative methodology to evaluate urban heritage development alternatives, focusing specifically on adaptive reuse as the primary strategy to tackle conflicts in societies with contested identities. This tool includes developing an underlying theoretical approach for cultural resilience, which can provide an adequate solution for better urban heritage management that simultaneously addresses conflict mitigation.

Cultural heritage can be a source of conflict or consensus, depending on the context (Turner, 2021), place and time:

‘Throughout the world, historic districts, archaeological sites, religious monuments, ethnic traditions, and traditional customs – once cherished as timeless symbols of collective memory and continuity – have increasingly become the targets of violence and a source of discord.’(Chilton & Silberman, 2010).

Examples of conflicts connected to material heritage abound. For instance, the destruction of the Buddhas of Bamiyan in Afghanistan or the disagreements over the Temple Mount Haram esh-Sharif in Jerusalem, Israel (Chilton & Silberman, 2010; Holtorf, 2013) reveals that heritage has a simultaneously functional and symbolic role in the conflict. Therefore, in case of dispute, heritage is perceived as vulnerable and, in many cases, threatened (Holtorf, 2013), becoming an easy target. Consequently, it is likely to be utilised as a political or identity tool and contested by different parties.

All of these matters raise several questions. In this thesis, we address the following: ‘Does heritage reuse have the potential as an instrument to negotiate and/or mitigate conflict?’ and ‘How can socio-spatial conflicts be mitigated through the adaptive reuse of urban heritage?’

To answer this question, this chapter-section explores the theoretical debate around **urban heritage**, embracing the recently coined term by UNESCO, which expands the notion of heritage beyond the historic centre (and the isolated monument) towards urban landscapes understood in their complexity (UNESCO, 2011); **adaptive reuse**, an strategic process to address the deteriorated elements and areas in the city, with a solid understanding of the economic, environmental and economic benefits associated to it; **conflict**, omnipresent in human history, and therefore, an inseparable element in the development of cities and heritage; and finally **cultural resilience**, understood as the capacity of a cultural system to deal with adversity and change, while continuing to develop (Holtorf, 2013). This framework again emphasizes the need to embrace disruption as an opportunity for development, where adaptation (Gilbert & Bower, 2002) and the role of culture as pillars for sustainable development are keys (Bandarin et al., 2011; Bandarin & van Oers, 2012).

The primary sources that support the research also revolve around the theories of sustainable development. International frameworks published by the United Nations system, like the Agenda 2030, the New Urban Agenda (NUA) and the UNESCO Recommendation on the Historic Urban Landscape (HUL), serve as the conceptual baseline, which has a three-pronged approach addressing the economic, social and environmental dimensions of heritage.

Regarding **cultural resilience**, the studies of the last decades show how we have moved into the Anthropocene (*Anthropocene*, 2021), a new Earth stage characterised by the human impact as the catalyser of changes to our planet (Crutzen, 2002; Zalasiewicz et al., 2008). The resulting disruptive changes provoke economic crises, social instability, and ecosystem deterioration, resulting in other disasters such as the current COVID-19 pandemic, following a “snowball effect” (Roy Britt, 2005). To confront these matters governments and institutions such as the United Nations (UN) have proposed a series of frameworks, like the **Agenda 2030** that includes climate change and disaster risk reduction and mitigation (DRRM) as part of its Sustainable Development Goals (SDG). Yet, these measures have proven to be insufficient as they are being implemented too slowly to meet their aims (IOM, 2020). Therefore, alternative frameworks have been proposed by academics and other researchers. This is the case of Jem Bendell, who proposes the **Deep Adaptation Agenda** in response to the current situation, taking a more radical approach (Bendell, 2018). In my research, the Deep Adaptation Agenda is used to address **adaptive reuse**⁸ of **urban heritage**⁹, as a strategy to turn cities’ elements in decline into development catalysts (Pereira Roders & van Oers, 2011).

With regards to the other research topics, the following sources provide guidelines to address them. Amartya Sen, for instance, offers a social perspective and a profound and solid perspective around multiculturalism and justice (Sen, 2006). Isaiah Berlin, in turn, neatly structures the principles of conflict and dissonance, highlighting their inherent connection to human nature and, thus, the impossibility of permanent peace (Berlin & Hardy, 2000). The latter aligns with the agonistic nature of urban development, which highlights the positive opportunities of certain forms of conflict, as conflict destabilizes authoritative identities and fixed universal principles leading

⁸ **Adaptive Reuse** is the transformation of the function of an underused system into a new use (Apserou, 2013; Plevoets & Van Cleempoel, 2019, 2020; Stone, 2020; Wong, 2017). It can tackle urban issues holistically, as this process can enhance positive environmental impacts, encourage social and participatory processes, and promote economic dynamism through culture (Apserou, 2013; Mathey & Steinberg, 2018). However, the success of such an intervention will depend on the underlying approach.

⁹ As a concept, **urban heritage** is global. Usually, it is defined as the historical and physical layers constituting the contemporary urban area. These include the built heritage, with architectural and historical value, the urban plan, and land utilization. However, the current views on heritage, like “The Historic Urban Landscape” approach, published by UNESCO in 2011 (UNESCO, 2011) go beyond the notion of historical centres and traditional layering to include the broader urban context and its geographical setting (UNESCO, 2011). This approach includes a wider range of elements, comprising not only tangible but also intangible components. The framework developed during the “Heritage in Urban Contexts” meeting held in Fukuoka in 2020 (UNESCO World Heritage Centre, 2020), classifies urban heritage into four categories: the wider context, the urban elements, the architectural elements, and the intangible cultural elements. All of these capture their local and regional identity. Therefore, this framework needs to be adapted to the context accordingly (Ibid.).

to possible renegotiations of power, agency, authority and meaning (Howarth, 2008). The agonistic theorists argue that the total elimination of conflict in the political is impossible and that instead of maintaining a bipolar system of we versus they, democratic institutions should embrace contestation and aim for conflict mitigation (Kapoor, 2002).

While these theories challenge ideas of equality and consensus, the substantial weight of sustainability principles, equality and human rights remains central to this research, being these principles the baseline for conflict mitigation. Embracing conflict and searching for strategies to tackle it opens the possibilities to move beyond mainstream theories and challenge the authority discourse. The ideas of Berlin, more anchored in the acceptance of conflict, force us to accept the imperfections of the political sphere and highlight the obstacles and challenges to bridging global frameworks (the SDGs, for example) and local realities where conflicts take place. However, a sustainability approach embedded in cultural resilience brings the role of community, diversity, and participation as enablers of conflict mitigation processes to the centre of this debate. This sustainability approach establishes a vision for heritage preservation and reuse based on the values of justice and peace, and sees heritage as an important tool in conflict resolution, which is critical in shaping adequate regulations and plans that preserve that heritage.

Therefore, this research is based on the combination of these concepts: conflict embracement, and the values of sustainability, to address the issues of social conflict and urban tension, through responding to the research questions:

- **MQ** | *How can socio-spatial conflicts that result from contested identities be mitigated through the adaptive reuse of urban heritage?*
- **SQ1** | *How can we arrive at a shared or common understanding of Urban Heritage by different stakeholders in and out of Acre?*
- **SQ2** | *How can conflicting values be included in the processes of the Adaptive Reuse of Urban Heritage?*
- **SQ3** | *How can a 'cultural resilience' approach be integrated into processes of Adaptive Reuse of Urban Heritage?*
- **SQ4** | *How can processes of Adaptive Reuse support Urban Heritage values?*

The proposed research questions originate from the observation that many cities worldwide face conflicts that dramatically affect their social landscapes and physical environments, leading to increased urban segregation and polarization of communities. Diverse approaches can be taken to address conflict from a planning perspective. The mainstream communicative planning focuses on consensus, while the comprehensive-rationalistic view tries to avoid conflict as it disrupts a supposedly well-ordered system; the agonistic planning theories accept conflict and provide an adequate response to increasing conflicts, compared to the other two approaches (Kühn, 2021).

Communicative planning is criticised by agonistic theorists, as they believe these responses maintain a climate of hostility and worsen the rivalries (Mouffe, 2005), and argue that acceptance of conflict is vital to move away from the authoritative discourse and fixed universal principles, to include other realities and traditionally silenced voices (Wenman, 2013). Most importantly, agonist planning theorists affirm that conflict can become a positive asset and a productive force (Pløger, 2004, p. 87), an idea whose implications in planning are highly fit when addressing heterogeneous societies because these communities are usually confronted by challenges typical to any society, such as cultural segregation, social dissonance, and polarized views. Therefore, an approach that accepts conflict enables debate about alternative solutions in and by planning, transforming the urban planners' role into a 'debate facilitator' (Beck, 1992; Mouffe, 2005). This approach not only creates opportunities for public discussion and citizen engagement but also facilitates citizen movements in planning processes (Bond, 2011; Kühn, 2021). Moreover, the apparent lack of alternatives in 'post-democracy'¹⁰ (Crouch, 2004), which is characterized by self-contained decision-making processes, can be defeated by opening up spaces for agonistic interaction, resulting in alternative solutions in planning (Roskamm, 2015).

The continuous evolution and emergence of heterogeneous communities directly influence the adaptation of cultural heritage. Its materialization into the urban space and multiple forms of intangible expressions are dynamic and temporal. Material and immaterial heritage is under constant need of supervision, maintenance, regulation and need for repair (Berlin & Hardy, 2000), implying a constant reassessment of the values to be maintained, adapted or let go. More often than not, top-down policies and local actions are disconnected and may produce social exclusion mechanisms,

¹⁰ "A post-democratic society is one that continues to have and to use all the institutions of democracy, but in which they increasingly become a formal shell. The energy and innovative drive pass away from the democratic arena and into small circles of a politico-economic elite." (London School of Economics, 2013)

particularly for those already disadvantaged. An integrated view of sustainable urban development must include social, economic and environmental concerns. In the social dimension, socio-spatial justice may play a significant role, as justice is integral to social sustainability. In this line, it is possible to conclude that an inclusive society needs to give all people, including migrants and refugees, the possibility to shape urban development and to be part of the city (Lefebvre et al., 1996; UN-Habitat, 2020). In the case of societies with contested identities and accentuated conflicts of interest, this matter becomes essential as it directly influences the local authorities' attitudes towards the provision of public goods, the preservation of common resources and how they intervene in the urban fabric, determining how citizens' needs are met or neglected.

Cultural heritage is continuously modified to meet the needs of different stakeholders, and their management may reveal the values of a society. In early times, this process of adaptive reuse was based on the conquests and victories of war: sometimes, structures were erased to highlight the supremacy of the winners; and in other cases, the buildings were subtly modified to welcome the new customs of the new society (Wong, 2017), as was the case of the mosques of Southern Spain or Christian churches in conquered Istanbul. Nowadays, the aim of adaptive reuse is more related to the enhancement of underutilized spaces and structures by transforming their use, in principle very far from the past strategies of erasure and overwriting. However, even though this adaptation process can serve as a development catalyser for urban elements in decline (Pereira Roders & van Oers, 2011), the lack of citizen participation in these processes jeopardizes the memory and values of the place, as some voices are systematically neglected and unheard. This means that heritage may lose its role of identity and meaning-giver for a portion of the community.

In many examples of urban heritage management, the decision-making processes in place lacks an integrative approach to adequately respond to the multiplicity of dissonant voices, and to tackle the society's needs and demands. This fact widens the gap between citizens' and institutional views, and consequently economic and political interests are usually prioritized. There are many examples of such processes: the Liverpool docklands redevelopment, which cost the area its inclusion in the UNESCO's world heritage sites, is a prime example of disconnection between the local authorities' economic strategy, investors' needs, citizens' values and UNESCO's vision (Halliday, 2021; Hein & Tianchen, 2021; Saifi & Chávez, 2019; United Nations, 2018).

The present trends urge for well-managed and informed urban policies and regulations which integrate societal and cultural changes over time and can help mitigate the impact of rapid urban growth on culture. This holistic approach is critical to guarantee that adaptive reuse processes adequately respond to the entire

society and that new forms of more subtle erasure and overwriting of heritage are prevented. In the next section, we will define adaptive reuse and study its evolution from its inception to the present. Moreover, we will explore how this process is applied to cultural heritage and how it materializes in the case of urban heritage.

2.2 Adaptive reuse of Urban Heritage: a strategy to redefine urban values going beyond architectural elements

This chapter-section reconceptualizes the design and decision-making processes that influence the way cities are shaped to include participatory processes as a means to give voice to those neglected narratives. Thus, a reassessment of the current urban values is needed to promote heterogeneous and inclusive values, and to include the narratives of 'the other' in the city. These values build the urban heritage, highlighting the importance of reconstructing, reframing, and readapting the city for future generations. Adaptive reuse could be the answer to this challenge, as an intervention that questions these urban values and can address the needs of the living cities.

2.2.1 Defining Adaptive Reuse

A widely accepted definition of 'adaptive reuse' seems to be lacking (Plevoets & Van Cleempoel, 2011, 2014), it implies changing the function and programme of a building or a space, as well as physically adapting them to new needs and requirements. The term was first coined in 1973 during the global oil crisis, which raised awareness about the exhaustion of natural resources. This concept evolved, currently shifting the focus towards the climate crisis and the acknowledgement that the construction sector is one of the major sources of energy and material demand (Wong, 2017), as well as accounting for half of the solid waste generated yearly worldwide. The term nowadays is redefined as transforming an unused or underused building into one that serves a new use. This not only includes the reuse of existing structures, but exponentially expands the definition to include other tangible and intangible elements such as materials, transformative interventions, continuation

of cultural phenomena through built infrastructure, connections across the fabric of time and space and the preservation of memory (Conejos, 2012; Transparency Market Research, 2016; Wong, 2017).

Even though the term may refer to altering any kind of building or space (Kent, 2020), the process of adaptive reuse is intrinsically linked to heritage conservation and historic centre regeneration (Kent, 2020). This encompasses heritage restoration, rehabilitation, reconstruction, or partial-reconstruction. It can also include projects where reuse is not visible, or barely noticeable, such as temporary reuse through activism that doesn't change the building but shows its potential for new uses, protests demolition, or provides a glimpse of alternative futures (Council of Europe, 2005).

This adaptation of heritage not only serves as a way to manage heritage assets, but it is also a tool for sustainable development (English Heritage, 2013). On the one hand, adaptive reuse has environmental advantages, contributing to lessening energy, materials and resources needed on a new development. On the other hand, this has a positive impact on the economy, attracting investment and serving as a catalyst for local economies (English Heritage, 2013). The latter has a direct social impact, as it highlights local identities and values, placing cultural heritage at the centre of the intervention and providing a link to our cultural and collective memory (Brooker & Stone, 2008). Therefore, there is a clear and direct link between adaptive reuse and heritage conservation.

2.2.2 Evolution of the term Heritage and the recent introduction of Urban Heritage

The term 'urban heritage' is quite recent, relating the continuously evolving concept of heritage with the broadest understanding of the city. This creates an ongoing debate about how to conceptualize heritage and opens the dialogue for new perspectives and approaches to heritage and the urban realm.

The traditional definitions of heritage include general categories such as monument, area, garden, landscape and archaeological sites. In some cases, more specific categories are considered (e.g., architectural, military use, architectural interest). In the last decades, the debate has moved away from a simplistic conservation approach, and now focuses on emerging issues, like the interaction between the movable and immovable, and tangible and intangible heritage (Tosics, 2019), that highly influences our cities and can promote or worsen issues of inclusion,

safety and resilience. The provided criteria relate to the types of values relevant to heritage, including the following (Council of Europe, 2005): historic; aesthetic, artistic, architectural, and compositional; research, scientific, and technical; cultural, cultural-historic, and craft; environmental, natural, and landscape; urban, morphological, setting and surroundings; use and socio-economic value; innovation value; and ethnographic, civil, social, and public value.

These conditions widen the general concept, but they still need to encompass more subtle and impalpable attributes of heritage, that affect all of it, and not those categories only. In the past decade, the notion of heritage has been expanded to include other intangible aspects. The Council of Europe understands heritage as human legacy, being witnessed or having been created by human expression or interaction with its environment (Council of Europe, 2005); Rana Singh states that it is what we inherit from our past and pass on to next generations, a cultural identity, reflected in the scope of multiple layers of pluralism, especially with respect to religion in old cultures where traditions and continuity are maintained (Singh, 2011). This concept, regarding the continuity of a structure or tradition in time (existence-maintenance-continuance), can also be perceived as heritage, depending on the levels of sensibility and common acceptability, extending the limits of the definition of heritage to embrace intangible attributes and processes.

With a similar vision, other authors refer to heritage as the symbolic mechanism possessing inherent meanings, as well as the production and exchange of these and their real practical effects (Hall & Open University, 1997). This idea of heritage as a process explains how these meanings are transformed in time by cultural specificities, even though the meanings and settings are given, changed, produced and re-produced in different spaces and different times, emphasizing how continuity is always maintained amid these changes.

Moreover, heritage is also understood as a resource. There is a tendency towards capitalising on cultural-historical values, shifting from viewing it as cultural assets due to identity or history significance, towards seeing heritage as a resource for sustainable development (Hall & Open University, 1997). This can be linked with the promotion of tourism, improvement or restoration of infrastructure, it can also be used as a branding tool creating opportunities for citizen engagement in regeneration processes and alternative financing mechanisms (Council of Europe, 2005). Understanding heritage as a resource could be a crucial aspect to transform and update planning and heritage policies so that they foster sustainable cities and communities.

As it can be observed, heritage covers a wide range of elements, and it can be interpreted in many ways. Even though the term has evolved from the idea of monument to include other intangible and broader categories, it was not until the last decade that the views on heritage were enlarged with the publication of The Historic Urban Landscape approach (HUL), by UNESCO (UNESCO, 2011). It is in this context when urban heritage became key to address the urban setting, and, through the implementation of this new tool, guarantee the preservation of the human environment, including the specificities of diverse communities, and their participation in local, regional and national planning tools:

‘15. [...] The historic urban landscape approach supports communities in their quest for development and adaptation, while retaining the characteristics and values linked to their history and collective memory, and to the environment.’(UNESCO, 2011, paragraph 15)

‘The HUL is an additional tool to integrate policies and practices of conservation of the built environment into the wider goals of urban development in respect of the inherited values and traditions of different cultural contexts.’ (UNESCO World Heritage Centre, 2020)

The term urban heritage was previously defined as the historic and physical layers constituting the contemporary urban area. These include the built heritage with architectural and historical value, the urban plan and the land use. Yet, the HUL goes beyond the notion of historical centre and traditional layering to include the broader urban context and its geographical setting (UNESCO, 2011). This approach includes a wider range of elements, comprising not only the tangible but also the intangible components of heritage.

The framework developed during the ‘Heritage in Urban Contexts’ meeting held in Fukuoka in 2020, aimed to extend the notion of urban heritage even more. It classifies it into four categories: the wider context, the urban elements, the architectural elements, and the intangible cultural elements (UNESCO World Heritage Centre, 2020a). All of these capture their local and regional identity, and therefore, this framework emphasizes the importance of adapting to every context accordingly. In any case, there is a consensus by UNESCO on the need to establish a common mechanism to identify urban attributes and manage the development in and around heritage in urban contexts (UNESCO, 2011; UNESCO World Heritage Centre, 2020a). Special attention needs to be paid to the management of the city, considering these urban processes instead of urban projects, setting clear limits of change on what

is acceptable and what is not acceptable change, and promoting real stakeholder engagement to guarantee the integration of the multiplicity of voices, cultural heritage continuity, bridging the gaps between heritage conservation and local needs and aspirations (UNESCO World Heritage Centre, 2020a).

In the case that concerns us, the research focuses on adaptive reuse of urban heritage as a strategy to address two challenges: on the one hand, to mitigate the socio-spatial conflicts of interest among the multiplicity of voices present in Acre; on the other, the focus on specifically urban heritage tackles another gap, the fact that adaptive reuse interventions are mainly architectural and rarely address the urban component.

2.2.3 Adaptive Reuse beyond the architectural elements

The bibliography related to adaptive reuse has exponentially grown in the last two decades due to the growing interest in sustainability, and the direct link between construction, climate change and efficient use of resources (Conejos, 2012; Plevoets & Van Cleempoel, 2011; Wong, 2017). The strategy of reuse as a beneficial approach to developing the built environment is not new. Still, it has gained a new role in the construction industry thanks to the opportunities it opens to face the current challenges of climate change and urbanization (Stone, 2020).

Also, it was not until the 1980s, when the redevelopment of brownfields, industrial sites, historic urban cores and reuse of individual monuments became tools for urban development in Europe and North America (Tangle et al., 1984), shifting the planning approach from urban sprawl towards the redevelopment of areas and buildings in decay within the city. This process of adaptation is getting stronger, especially in the field of heritage conservation, with historic centres witnessing numerous adaptive reuse interventions. Yet, these are usually centred on the adaptation of buildings, interior design, and architecture (Plevoets & Van Cleempoel, 2019; Wong, 2017).

Although the Venice Charter raises awareness about how heritage values are captured in the urban core as a whole, and not only from individual monuments (ICOMOS, 1964), some authors argue that there is a lack of field experience regarding the adaptation of larger urban areas, leading to intervention in individual buildings only, failing to address urban regeneration as such (Houbart, 2016). In order to bridge this gap, the Declaration of Amsterdam of 1975 proposed a more integrated vision on urban conservation, including the intangible elements of the city as part of the economic, social and cultural life (ICOMOS, 1975). In the same

line, during the last years in the European context, the approach to adaptive reuse has shifted to a policy aim and heritage investment tool, expanding its objectives to include economic viability and environmental sustainability as pillars for regeneration and conservation (Veldpaus et al., 2019). For example, the Leeuwarden Declaration [citation] recommends the development of smart and quality-based processes for adaptive reuse, promoting those which ensure ‘...*flexibility, participatory approaches, innovation, quality-based procurement, multidisciplinary teams, financial viability and good story-telling can contribute to successful projects in the long term*’. In the Burra Charter, we can also observe the emphasis on processes over projects, in this case linked to conservation, which is described as ‘*the processes of looking after a place so as to retain its cultural significance*’ (Australia ICOMOS, 2000, article 1). And similarly, the shift towards the inclusion of intangible aspects such as narratives, rituals, and uses when considering the attributes of a place:

‘... retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and [the practice of conservation] will commonly include a combination of more than one of these. Conservation may also include retention of the contribution that related places and related objects make to the cultural significance of a place’ (Australia ICOMOS, 2000, article 14).

This change of perspective showcases the growing interest in the urban dimension. It expands the previous focus on mainly the monument and the architecture, to include other areas linked to the economic, social, environmental and cultural role of the urban fabric. The predecessor approach to heritage primarily tackled the materiality of buildings, and left intangible aspects, such as sense of place, spiritual values or the rituals aside. Therefore, the latest approach, which includes a wider range of attributes and dimensions, such as the intangible, enhances the role of the urban fabric as a catalyser for developing culture, building social cohesion, ensuring environmental sustainability, and contributing to health and well-being.

For these reasons, it is fundamental to understand how adaptive reuse of urban heritage is a complex matter as the speed in which its different dimensions evolve and change is dramatically different from one another. For instance, the use of the building or the festivals carried out in it (intangible) may change continuously, in the same way as people change their clothes every day. Yet, the materiality of the building or its structure (tangible) is more static, and it can take decades or centuries for it to be changed, like the sporadic changes to the structure

and distribution of a dwelling. Therefore, the action of adaptive reuse requires a re-evaluation, as the adaptation of urban heritage is a process that contrasts conventional architectural refit, which is project oriented. One of the possible strategies for adaptive reuse could be a thoughtful process in anticipation to the possible challenges, instead of a passive or reactive response to new situations (Stone, 2020). This new approach needs to be inter and multi-disciplinary, and it should include the multiplicity of actors to ensure its continuity to the future generations (Turner, 2021).

Thus, adaptive reuse is a continuous and changing process that involves the transformation of the function of an underused building, structure or space to a new use, turning the cities' elements in decline into development catalysers (Pereira Roders & van Oers, 2011). The result of the adaptive reuse process reflects the concerns of the society that adapted it, serving as a small-scale epitome of the local or regional culture (Stone, 2020). This community acts as the custodian of heritage for that particular society and, subsequently, for all (ICOMOS, 1994). At the same time, it contains the traces of the history and narratives of the past, serving as a past-present-future continuum.

In the next chapter-section(2.3), the importance of citizen engagement is highlighted as the way to guarantee that the process is inclusive, and that the society adapting the element, the aforementioned custodians, is not marginalizing anyone along the process.

2.3 Citizen Engagement in Adaptive Reuse of Urban Heritage

In the previous chapter-section, the description of the advantages and aims of adaptive reuse show how this process can become key to activate the full potential of urban heritage. While this may be true, the way in which adaptive reuse is planned differs from one context to another, and during this adaptive reuse process, underlying issues, conflicts, and disagreements are unveiled. This risk is especially acute in diverse and heterogeneous environments, because when elements valued by certain members of the community are jeopardized or become adaptation targets, reluctance by these communities to these changes may emerge. In a similar way, leaving the controversies regarding the elements to be adapted aside, the decision-making processes can also be a source of conflict, mainly when these processes are unilateral, biased, or exclusive. A clear example of these is top-down processes where a project is imposed to the citizenship without prior consultation. However, there are numerous ways in which these processes are carried out, as well as a wide range of levels of citizen participation. In order to better understand how adaptive reuse processes can promote diversity and also become catalysts for sustainable development (or the opposite, sources of conflict), it is essential to understand the conditions for diversity, the mechanisms of inclusion and exclusion, and the level of citizen engagement during decision-making processes.

2.3.1 Urban diversity and social complexities: Assemblage Theory, exclusion, and participation

Cities are natural generators of urban diversity when certain conditions are met (Jacobs, 2015). Jane Jacobs in 'The Death and Life of Great American Cities' explains how 'a mixture of uses, if it is to be sufficiently complex to sustain city safety, public contact and cross-use, needs an enormous diversity of ingredients.' (Jacobs, 2016, p. 144). She presents four necessary conditions to generate this diversity:

- 1 the urban elements must serve more than one use, and preferably more than two; and they should ensure that spatial resources in common are being used by different people and at different times
- 2 the city must include opportunities to turn corners frequently,

- 3 there must be buildings of different ages; and the presence of old buildings is highly important, a fundamental condition not only for heritage conservation, but also for ensuring the past-present-future continuity of cities' histories;
- 4 there must be a high density of people for different purposes, highlighting the importance of having residents (Jacobs, 2016).

The latter, reinforces the need for multiple identities, communities and uses in the urban space; and it illustrates the social complexities generated. In order to understand these social complexities, the Assemblage Theory proposed by Deleuze and Guattari provides a solid bottom-up framework (Deleuze & Guattari, 1987). In their theory, assemblages are made up of imaginative contingent articulations among myriad heterogeneous elements (De Landa, 2016). They are formed through the processes of coding, stratification, and territorialization; this means that first the matter is ordered, then a hierarchy is created, which includes and excludes elements depending on the gathering and angle of view; and after these two steps, territorialization provides a meta order to the coded and stratified bodies, resulting in a constellation of assemblages. For instance, cities are made up of millions of elements coded as neighbourhoods, streets, buildings, etc. There is a hierarchy of scale between these elements. In fact, different bodies manage these elements: the neighbours manage the building, the municipality manages the city, and so on. Finally, we can observe relations between these elements: a group (assemblage) of neighbourhoods creates a city, and this one is interconnected with other cities, that are also made from neighbourhoods, made up of buildings and streets. Thus, urban assemblages often comprise heterogeneous populations (De Landa, 2016).

Moreover, Assemblage Theory states that within a body, the relationships of component parts are not stable and fixed; rather, they can be displaced and replaced within and among other bodies, thus approaching systems through relation of exteriority (De Landa, 2016). Relations of exteriority are those in which assemblage components are self-subsistent and retain autonomy outside of the assemblage in which they exist (De Landa, 2016). This condition of autonomy is fundamental when addressing identities, as these must not be lost when assemblages are displaced or replaced. During these processes, identities evolve and change, yet, they must change in a consistent manner to ensure continuity. This fact emphasizes the idea of flow, similar to the aforementioned resource units¹¹. In other words, identities thrive when there is room for change, re-assemblage, and an adequate management

¹¹ Resource units (a flow which is continuously generated when sustainably managed) (Ostrom, 1990).

of the common-pool resources. One of the conditions to attain an adequate management of these is 'collective-choice arrangements that allow most resource appropriators to participate in the decision-making process' (author? page?), bringing citizen participation to the frontline. The need for participation appears when the management of common resources, usually debated by scholars from the political realm, fails. The usual recommendations insist on the state controlling these resources, while others advocate for their privatization. In any case, these solutions provide a partial response to the problem and the likelihood of success may decrease, as the voices of a significant number of stakeholders are not involved in the management of that resource. It is at this point when participation becomes relevant to guarantee 'reasonable degrees of success over long periods of time' (Ostrom, 1990, p. 1).

2.3.2 Citizen Participation: levels, approach and vision

The term citizen participation raises a number of questions as it can be practised as an empty ritual where citizens have voice but no agency or influence, with no binding agreements or real effects on the outcomes. In any case, Sherry R. Arnstein (Arnstein, 1969) argues how the issue of citizen participation revolves around the redistribution of power. Sherry illustrates the grades of citizen participation through the eight-rung ladder of participation, which are location, culture, and government dependant. This schematization shows different degrees of participation and 'non-participation', ranging from manipulation at the bottom of the ladder to citizen control at the top. The scheme does not contemplate the societal complexities regarding the reasons why certain instances have one or another. For instance, prejudices by the powerholders, such as racism, paternalism or resistance to distributing power; and the obstacles found by the powerless citizens, like inadequacies of the socioeconomic infrastructure and access to knowledge (Arnstein, 1969). These barriers must be understood and considered when dealing with citizen participation processes, so that the limitations to the process are foreseen and correctly managed in order to make participatory processes inclusive, fair and efficient. Naturally, there is discussion about how to define efficiency in participatory processes, but most criticism focuses on inclusion of a wide scope of stakeholders (as opposed to participation of certain groups only), time management, and final outputs. A badly managed participation process might frustrate participants and erode their trust in the authorities or in participation as a valid method. This can be understood as part of the cultural system, consisting of the cultural processes present in a particular community (Holtorf, 2013, p. 1).

Similarly, the way in which we run the participative processes will fully impact the outcomes and consequently, the final decisions and projects. We can find extensive literature presenting numerous methodologies to carry out participatory processes, yet, I would like to highlight a specific issue regarding these approaches. 'Business as usual' methods usually ask people what they want, and are based on citizens' preferences, but some scholars argue this approach is not adequate and that our studies must be based on citizens' actions (Marohn, 2018). Steve Jobs followed this approach and stated: *'It's really hard to design products by focus groups. A lot of times, people don't know what they want until you show it to them.'* (Marohn, 2018) Therefore, when addressing urban heritage issues, a more humble approach to observing people's experiences as input for a realistic vision for urban futures is necessary, rather than focusing on citizen participation as a panacea to 'solve all problems' concerning the distribution of power and citizen agency.

These aspects are highly relevant in adaptive reuse processes, specifically when dealing with urban heritage. On the one hand, urban heritage conforms community identity. Therefore, any change to this heritage affects the narratives of the place and its people, so participation is key to guarantee continuity with the past in the way people conceive their own narratives. The new and complex narratives resulting from the adaptation processes, which may or may not work in a given context (Wong, 2017), when combined with identity, tradition, history and culture, can retain a sense of continuity with the past as a way of creating more socially sustainable futures (Stone, 2020). On the other hand, the value to this exercise of collective memory is indefinable and ethereal, while the meaning of the adapted element relates to its new function and the perceptions imprinted by the users during the participatory process (Scott, 2008), being this an essential part of the cultural system. Yet, when these processes happen in contested societies, the level of participation, commitment, and debate is dependent on how the distribution of power is perceived in that particular society, which normally means members of the oppressed group are discouraged to participate. Therefore, in the next chapter-section, we will break down how the characteristics of conflicts affect the way in which adaptation processes happen, and how a paradigm change is needed to guarantee inclusiveness and avoid being stranded in the authorized prevalent narrative.

2.4 Theory of conflict & Agonistic planning

As previously mentioned, understanding the nature of conflict over time is essential, as dissonance has been a constant in human history. Actually, it was not until the 20th century, with the Declaration of Human Rights in 1948, that peace was pursued as a key asset for human life and societies (Ait Kaci & United Nations, 2016):

'Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world,'

Declaration of Human Rights, 1948, by the United Nations General Assembly

2.4.1 The inexorability of conflict

Documents over time showcase how conflict was and still is inherent to human nature (Berlin & Hardy, 2000; Büllsbach & Cowper, 2009), and embracing it is crucial to understand nowadays societies, and their societal and cultural challenges. Yet, there has also been a continuous attempt to promote peace and concord, as a way to promote co-habitation and understanding among communities. Within this dichotomy, conflict embracement and peace promotion, we find the research's challenges and purpose.

First, the ideal of harmony aligns with natural evolution's statement that the ones more genetically related behave more selflessly (Dawkins, 1976). This peaceful coexistence, supported by Noam Chomsky's deep structure thesis, claims that cultural systems everywhere share common cultural bases, which tend to be universal (deep structure). By contrast, the social systems linked to these common cultural systems are diverse (surface structure) (Kordić, 1991; Talcott, 1982), and regardless of the common base, these differences often result in conflict. That is why human history is filled with war, contestation, and violence among human beings, for uncountable reasons ranging from the territory, race, religion to the competition for resources. As Walter Benjamin asserted, civilizations were created from conflict,

as there is no documentation of any civilization, which is not at the same time a documentation of barbarism. Proof of this is the battlescapes of Europe (Büllesbach & Cowper, 2009). Therefore, accepting conflict as an inherent characteristic of human behaviour could be vital in addressing it.

Second, Rana P. B. Singh states that embracing dissonance, composed of multiple perceptions and identities (Jones, 2017), seems critical for understanding cultural complexity. This approach shifts the ‘tolerance into appreciation’ utopia (Herrmann, 2010) towards a competitive chessboard. This means that the traditional approach regarding acceptance, which tries to transform societal prejudices about the other into valuable characteristics to be celebrated, should be shifted into a more realistic approach. This new vision embraces the differences and advocates for healthy competition between diverse groups, where an environment where culture and politics-based narratives are promoted, stimulating the constant potential conflict discourse (Talcott, 1947).

In this setting, identity is forged from opposition, from the positive or negative relation of *us* with *the other* – ‘*confirming itself as an I who identifies himself through all differences*’ (Lévinas & Lévinas, 1999) – (Currie, 2004; Irigaray, 2013; Lévinas & Lévinas, 1999). These relationships result in positive and negative outcomes. On the one hand, opposition works to produce identity, giving voice to unrepresented points of views and identities normally excluded from representation. Opponents work to produce identity, giving voice to unrepresented points of view and identities typically excluded from representation. On the other, due to this definition of identity as opposing *the other*, the *otherness* becomes the cultural reality (Currie 2004). This dichotomy serves as the breeding ground for national and local claims for differentiation.

Altogether, a balanced intertwining between these two opposite concepts is intended:

- to avoid falling into the negative discourses regarding conflict that maintain the notion of it being inevitable and necessary to progress; and also
- to maintain a clear direction towards the idealistic narratives about peace, which mark a clear direction and offer frameworks like the Agenda 2030.

2.4.2 Cultural selection and the survival of the ‘fittest’

Understanding conflict could benefit from von Bertalanffy’s General System Theory (Bertalanffy, 2003) and its applications to cultural selection processes. Darwin identified three phases in the natural selection process, which can be translated into the cultural selection process: variation, reproduction, and selection (Crozier, 2010). For example, we could take a snapshot of a community where the inhabitants speak a language. The political agenda and the community advocate for continuity by using their own language and not another one, being this decision made ‘un/sub-consciously’ through tradition or imitation. This is the **selection process**. The survival of their cultural heritage depends on the **reproduction** of this unit of culture (cultural meme (Dawkins, 1976)). This means teaching the next generations and communicating within the community in their ‘own language’. The latter promotes participatory sense-making, where the community lives and shares their memes collectively, ensuring continuity. This can be jeopardized at an individual level, as each person subtly alters their memes the personal views. These modifications provoke fragmentation in the long term; this is the **variation phase** and leads to conflict (Mehaffy, 2019).

Variations in cultural heritage happen daily. Returning to our hypothetical community, the younger generation starts using words shared from another more global language related to new technologies. Most probably, the older will reject these words and the communication between generations will be maintained in ‘their own language, so that the variation will not affect the cultural meme. Nevertheless, if this new language and words get more relevant and affect the older generation, the principle of competition would be applied. Following the natural selection premise: ‘the less suited species are forced to adapt or die’ (Hardin, 1960). There are two options; on the one hand, we will find individuals opposed to the new words who will continue as usual. If these new words are needed for the digital world, they take the risk of being left behind. When this situation extends for a long, we could find an individual using outdated vocabulary who may have difficulties communicating. We could then say that the cultural meme is dead because it did not adapt, and the ‘old language’ is extinct. On the other hand, after an initial rejection, some individuals will understand the benefit of including these words in their vocabulary, which means adaptation. The overall language will not change because of the new terms. However, we could say that the language has undergone an adaptation process for survival, being adaptation a natural and effective response to the conflict created by individual variations, and at the same time, necessary for cultural heritage survival.

When translating this survival strategy into reality, issues arise, as the way humans identify and experience cultural heritage is inherently related to their own identities. Therefore, when one of these collectives is marginalized or neglected, the values

of this collective dissolve and the prominent values prevail, defining our societies and heritage through the dominant lens. This means that the marginalized groups' cultural heritage has been mostly erased and hidden.

2.4.3 Agonistic Planning

This idea of cultural adaptation and its inherent conflicts offer an opportunity for heritage planners, as conflicts can be seen as springboards for collective action. However, these conflictual contexts usually suffer from a solid one-sided discourse, where the prevailing narratives overcome that of the minorities or rivals. Therefore, acknowledging this power imbalance is essential to make urban processes more inclusive. This way, the bias of this authorised discourse, a significant challenge in planning processes, can be decreased or eliminated.

Anyhow, there is no standardized way of addressing conflict, and various approaches are possible: (a) avoidance of conflict that is understood as disruptive, (b) conflict as an occasion for participation and consensus building, and (c) acceptance of conflict. These passive, reactive, and proactive manners of dealing with conflict relate to the comprehensive-rationalistic, communicative, and agonistic planning theories (Wenman, 2013). In the case of this study, we have taken an agonistic approach, as it is a theory that emphasizes the potentially positive aspects of certain forms of conflict. Agonism derives from the Greek word *ἀγών* *agon*, 'struggle' (Online Etymology Dictionary, 2022a). Agonists insist that communicative planning is not adequate enough to address societal challenges, as it utilizes shallow participatory approaches to maintain a sense of calmness. However, avoiding topics of general interest sometimes results in the opposite of what it aims for, the polarisation of societies and an increased climate of violence (Wenman, 2013). For these reasons, agonists highlight the need to encourage social debate to address real concerns. A healthy use of dissonance to delve into the citizens' needs and interests. This way of embracing dissonance through democratic practices that destabilise the ruling discourses creates spaces for debate, arguments and participation in pluralistic and diverse environments (Connolly, 2002), facilitating access to all the voices (Bäcklund & Mäntysalo, 2010) and a healthy competition towards solving common issues:

'To put it in another way, what is important is that conflict does not take the form of an 'antagonism' (struggle between enemies), but the form of an 'agonism' (struggle between adversaries)' (Mouffe et al., 2013, p. 7).

The main advantage of agonistic planning is that it embraces the qualities of communicative planning, such as inclusiveness and participation. At the same time, it emphasizes the importance of multiplicity, debate and working around alternatives (Gualini, 2015). This contrasts with other approaches, such as technocratic planning, where decisions are taken based on pretendedly neutral technical criteria. Altogether, agonistic planning aims to confront and overcome the limitations posed by 'post-democratic' practices, which are led by an elite and leave no room for alternative options (Roskamm, 2015). Mouffe brings political theory to the field of "real politics." In planning theory, the concept of agonism has recently been used as an alternative to the consensual communicative deliberative approach: The notion of agonism seems to be fit for replacing communicative theory as the theoretical framework of planning theory. My point is that Mouffe's proposed "agonistic pluralism" has an internal and fundamental flaw and that the advocated "taming of antagonism into agonism" is neither possible nor necessary. To clarify my hypothesis, I consider in a first step the roots of Mouffe's theory: Carl Schmitt's notion of the political and his (in, as well as to accept conflict as both inevitable and an asset (a productive force))(Pløger, 2004, p. 87) that keeps society active and participative, transforming confrontation into more constructive modes of rivalry.

'While consensus is no doubt necessary, it must be accompanied by dissent. (...) This consensus will therefore always be a conflicting consensus' (Mouffe et al., 2013, p. 8).

Following the premises set by agonistic planning, the following chapter-section explores the underlying approach necessary to address adaptive reuse processes of urban heritage in contexts of conflict. The way these communities adapt, to guarantee the continuity of their cultural heritage, is intrinsically related to the capacity they have to absorb and overcome disruption. This emphasizes the significance of cultural resilience as the primary vector to guarantee adequate heritage management in dissonant communities.

2.5 Cultural resilience approach: from disruption to opportunity

In the same way as agonism embraces conflict as a positive force and catalyst of social and institutional change (Dahrendorf, 1972), resilience theories also focus on the positive impact crises can generate on a system if this system is prepared to withstand and deal with disruption. In the case of cultural resilience, the capacity of a cultural system to manage and overcome disturbance will determine the chances of survival. Not being able to withstand shocks may imply the loss of a language, destruction of tangible heritage, or disappearance of a tradition. Hence, the direct relationship between culture, sustainability and resilience are crucial.

Sustainability in the context of this study is specifically related to the sustainable development agenda, which includes, among others, the Agenda 2030 (United Nations, 2015a), and the 17 Sustainable Development Goals (SDG), emphasizing the relevance of Development Goal 11: *'Make cities and human settlements inclusive, safe, resilient and sustainable'*, in which a mutually supporting relationship between urbanization and development is recognized. SDG 11 is the only one mentioning culture and heritage. These are considered the umbrella frameworks of the research, providing an integrative framework to address social, economic, environmental, and cultural issues. Moreover, special attention is given to the New Urban Agenda, a document by UN-Habitat representing a shared vision by developing and developed countries for a better and more sustainable urban future if cities are well-planned and well-managed (*New Urban Agenda*, 2017). Other UN documents also serve as a foundation for the research, namely the Sendai Framework for Disaster Risk Reduction (*New Urban Agenda*, 2017), and the Paris Climate Accords at the COP20 (UNDRR, 2015). These emphasize the critical role of resilience in evaluating change, advocating for the substantial reduction of disaster risk and its socioeconomic and environmental consequences, and calling for urgent climate action (UNISDR, 2015).

Actually, in the last three decades, at least 76 per cent of all disaster events have been related to the climate, accounting for 45% of casualties and 79% of economic losses caused by natural hazards worldwide (UNISDR, 2008). To make matters worse, the Intergovernmental Panel on Climate Change (IPCC) special report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (Field & Intergovernmental Panel on Climate Change, 2012) confirms the likelihood of increased weather extremes in the future. Altogether, increasing the

risk factors that affect heritage (Jigyasu et al., 2013), which is already threatened by conflict. In many cases, heritage is set between two confronted groups, and due to societal unrest, it suffers from looting and pillage. More severe cases exist where heritage is deliberately a target of destruction intended to, as Jigyasu (2013) highlights, 'obliterate the very identity of individuals and groups, severing their links to the land and breaking the bonds that unite them as a community' (Jigyasu et al., 2013, p. 20). These acts not only cause the loss of heritage and its advantages for communities and visitors, but also hinder reconciliation processes, as they become an obstacle for peace.

2.5.1 History and definition of resilience

The concept of resilience was first explored in the realm of ecology in 1973 by Holling (Holling, 1973) as a concept to help understand the capacity of ecosystems with diverse baseline characteristics to persist in the original state subject to perturbations, as explained by, e.g., (Gunderson, 2000), (Folke, 2006) and (Scheffer et al., 2009). In other fields, resilience has acquired a more limited meaning, as it refers to a mere return rate to equilibrium upon a perturbation, termed 'engineering resilience' by Holling in 1996. The issue with the latter is that complex systems have multiple baseline characteristics; therefore, under specific disruptions, the system will not go back to the initial state, but if pushed to its limits of attraction or stability, it will be attracted to a contrasting state, which marks a qualitative difference with regards to Holling's ecological resilience. In any case, these definitions do not consider the changing nature of systems over time (Scheffer et al., 2009). Therefore, other concepts and processes are needed, like resilience thinking.

Resilience thinking addresses the dynamics and development of complex social-ecological systems (SES) through three central aspects: resilience, adaptability and transformability. *Resilience* in this context is defined as 'the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks' (Walker et al., 2004, p. 4). Adaptability is therefore, a part of resilience. Adaptability is the capacity of an SES to adjust its responses to changing external drivers and internal processes and thereby allow for development within the current stability domain along the current trajectory. Transformability is the capacity to create new stability domains for development, a new stability landscape, and cross thresholds into a new development trajectory (Folke et al., 2010, p. 20).

This comprehensive understanding of resilience, including larger systems, mainly the socio-ecological, enables dealing with renewal processes at a multi-layer and multi-disciplinary nature (Gunderson & Holling, 2002). This aspect is highly relevant to our study, as it opens up the scope of system adaptation, paying particular attention to the social dimension as responsible for 'creating barriers or barriers for ecosystem stewardship of dynamic landscapes and seascapes in times of change' (Gunderson et al., 1995). This premise questions whether other factors, such as identity, core values, and worldviews, limit adaptation processes.

Similarly, the recent Special Report of the Intergovernmental Panel on Climate Change, 'Managing Extreme Events and Disasters to Advance Climate Change Adaptation' underlines resilience's intrinsic connection to people and the built and natural environment. The document defines *resilience* as: 'the ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions' (Field & Intergovernmental Panel on Climate Change, 2012, p. 5). Again, this report implies that both physical and social factors shape resilience.

This point is reinforced when tackling urban resilience. The latest studies show that it is a complex and contested concept full of ambiguities (Meerow et al., 2016). Depending on the discipline looking at it, urban resilience is more or less bounded to a state of equilibrium, the capacity to absorb or not disturbances, and special attention is given to the need to return to the previous state, as this is not always desirable (Gunderson & Holling, 2002; Scheffer et al., 2001). The latter is directly connected to how different stakeholders benefit from resilience-based actions, as these can promote different political agendas that are not necessarily connected to the citizens' needs. For these reasons, it is vital to approach urban resilience with an integrated perspective so that these aspects are considered. Meerow et al. propose the following:

'Urban resilience refers to the ability of an urban system-and all its constituent socio-ecological and socio-technical networks across temporal and spatial scales-to maintain or rapidly return to desired functions in the face of a disturbance, to adapt to change, and to quickly transform systems that limit current or future adaptive capacity.' (Meerow et al., 2016, p. 45)

Another branch of resilience is the idea of adaptive resilience (or robustness). Its definition, similar to the one provided by Meerow on urban resilience, is also extensive, *'since it allows a system - such as a regional economy - to absorb and rebound from a shock, that is, recover or even improve its 'core performance' - such as its rate of economic growth, or the full employment of its workforce - by undergoing structural, functional and organizational change.'* (Martin & Sunley, 2015, p. 8). This structural and functional adaptation aims to be integral, embracing the different levels affected by a major shock (Martin & Sunley, 2015).

A more radical approach to resilience is taken by Jem Bendell, who proposes the **Deep Adaptation Agenda** in response to the current situation, as the measures taken by governments and institutions are insufficient to confront the consequences derived from climate change and disasters (IOM, 2020). The **Agenda 2030** includes climate change and disaster risk reduction and mitigation (DRRM) as part of its Sustainable Development Goals (SDG). Goal number 13 specifically addresses climate action, and the other goals include three themes transversally (United Nations, 2015a). The UN Agency for Disaster Risk Reduction (UNDRR, formerly known as UNISDR) published **The Sendai Framework for Disaster Risk Reduction 2015-2030** in 2015, outlining targets and priorities for action to prevent and reduce existing disaster risks (UNDRR, 2015). Moreover, in December of 2015, during the COP21 Intergovernmental climate summit, leaders from 180 countries signed **The Paris Climate Accord**, agreeing to reduce greenhouse gas emissions and limit the global temperature increase to below 2 degrees Celsius (3.6 F) above pre-industrial levels by the year 2100 (United Nations, 2015b).

In response to these measures being limited and not enough, Prof. Jem Bendell offers an alternative framework: the Deep Adaptation Agenda. In his article "Deep Adaptation: A Map for Navigating Climate Tragedy", Prof. Bendell advocates radical measures to address climate change and disasters as an ongoing emergency to be tackled now. Furthermore, he expresses great concern about the soft measures and the long timespan to be implemented due to systematic denial of the problem by governments, academics, and in public debate. In contrast to this superficial attitude, he proposes a four-pronged approach, the Deep Adaptation Agenda, as a mechanism to deal with profound disruption, accepting the hypotheses that *"climate-induced near-term societal collapse should now be a central concern for everyone"*.

The key aspects covered by the Deep Adaptation Agenda are resilience, relinquishment, restoration, and reconciliation. Each concept responds to the following questions, aiming to find viable, sustainable, and effective solutions to be implemented in the nearest future:

- **Resilience** (R1) asks us, “how do we keep what we really want to keep?”
- **Relinquishment** (R2) asks us, “what do we need to let go of in order not to make matters worse?”
- **Restoration** (R3) asks us, “what can we bring back to help us with the coming difficulties and tragedies?”
- **Reconciliation** (R4) asks, “with what and whom can we make peace as we face our mutual mortality?”

These actions cover a wide spectrum of topics, and are proposed as an umbrella approach to more specific themes. The Deep Adaptation Agenda is used to address **adaptive reuse of urban heritage**, as this strategy can positively influence the socio-economic, environmental, and cultural spheres of sustainable development (United Nations, 2015a).

The latter, culture, is a focal point of this paper, with the role of culture as a brace for sustainable development (Bandarin et al., 2011; Bandarin & van Oers, 2012) being acknowledged by bringing urban heritage to the forefront. It is additionally addressed by the incorporation of **cultural resilience**¹² as a cross-cutting element (Holtorf, 2013). It is a branch of resilience dealing not only with adaptation but also with continuity and change, both points aligned with the Deep Adaptation Agenda.

¹² Cornelius Holtorf defines **cultural resilience** as “the capability of a cultural system (consisting of cultural processes in relevant communities) to absorb adversity, deal with change and continue to develop” (Holtorf, 2013). Moreover, he adds that “Cultural resilience thus implies both continuity and change: disturbances that can be absorbed are not an enemy to be avoided but a partner in the dance of cultural sustainability (adapted from Thiele [2016, 36]).” This perspective embraces disruption, transforming it into an opportunity for development, in which adaptation is key to prosperous societies (Gilbert & Bower, 2002).

2.5.2 Culture as a brace for the sustainable development spheres

This research acknowledges the role of culture as a pillar for sustainable development (Bandarin et al., 2011; Bandarin & van Oers, 2012) by putting urban heritage in the centre. The initial texts that presented sustainable development broke it down into three pillars: economic, social, and environmental. It was not until 2010 that a fourth pillar, culture, was included (Executive Bureau of United Cities and Local Governments, 2010). This approach understands these pillars as separate dimensions that nurture sustainable development. However, in the last decade, this view of sustainability has transformed, as these pillars are viewed as working together integratively. They are not separated but interconnected. Therefore, some now understand sustainable development as the intersection between the social, economic, and environmental spheres. In this revised framework, culture is included as a pillar of these spheres, being cross-cutting to all of the sustainable development dimensions and a necessary and underlying condition for all of them to exist (Executive Bureau of United Cities and Local Governments, 2010).

In this sense, cultural heritage is a key asset for inclusive economic development. It becomes a pole of attraction for investors, as it promotes a wide range of green and local jobs, including tourism, conservation, construction, food production, traditional healing and the production of crafts of all kinds and the arts in general (Jigyasu et al., 2013).

Moreover, cultural heritage is intrinsically linked to inclusive social development. It can facilitate the expression of values and identity, fundamental in the creation and organization of communities, and also address the intangible dimensions related to symbolism, spirituality or aesthetics. The acknowledgement and conservation of the diversity of cultural heritage and its adequate management (access and fair use) promote social cohesion and can support reducing inequality. Similarly, traditional knowledge systems embedded in cultural heritage can become crucial players in disaster risk mitigation and reduction. When these traditional practices are passed from one generation to the next, and maintained, they can help build resilient communities prepared to face and respond to disasters, also using culture as one of their assets. On the one hand, the local skills serve to rebuild the communities with local human and material resources, reducing their dependency on external support and activating local economies and livelihoods. On the other hand, the intangible values associated with cultural heritage, linked to identity and a sense of belonging, may serve the communities as a way to recover from the psychological impacts of disasters, bringing communities together and strengthening social networks (Jigyasu, 2010).

2.5.3 Culture as and for resilience

As explored in the previous chapter-section, culture and resilience are mutually related and may be mutually reinforcing. Culture may be essential not only to making cities more resilient against shocks but also plays a vital role in reconciliation and healing processes, and in building connections between heterogeneous communities, for example, by bridging local and migrant communities (UN-Habitat 2020). The incorporation of Cultural Resilience addresses this point as a cross-cutting element in this study (Bandarin et al., 2011; Bandarin & van Oers, 2012). Cultural resilience is a branch of resilience dealing not only with adaptation, but also continuity and change. Cornelius Holtorf defines *Cultural Resilience* as 'the capability of a cultural system (consisting of cultural processes in relevant communities) to absorb adversity, deal with change and continue to develop' (Holtorf, 2013). Moreover, he adds that 'Cultural resilience thus implies both continuity and change: disturbances that can be absorbed are not an enemy to be avoided but a partner in the dance of cultural sustainability (adapted from Thiele [(Holtorf, 2013, p. 36)])'. This perspective embraces disruption, transforming it into an opportunity for development, in which adaptation is key to adaptive, resilient and prosperous societies (Gilbert & Bower, 2002).

Similar to biological diversity, cultural diversity increases the capacity of a social system to face disruption (Jigyasu et al., 2013). Actually, the maintenance of traditional knowledge over time provides communities with tools to be more prepared in the event of a disaster, and cultural heritage is crucial in building resilient communities (Boccardi & Duvelle, 2013). However, heritage is usually not considered in global studies concerning disaster risks. At the same time, it is highly affected by floods, mudslides, fire, earthquakes, civil unrest and other hazards, which result in the loss of heritage sites and landscapes and also affect traditional knowledge, practices, skills and crafts. Actually, more cultural heritage is lost in disasters than is ever fully accounted for, jeopardizing the continuity of cultural heritage, as well as its maintenance and conservation, and affecting community resilience at large (Jigyasu et al., 2013).

In summary, protecting heritage promotes resilience and is essential to attain sustainable development and thriving communities. This aspect was stated in the outcome document of the United Nations Conference on Sustainable Development (Rio+20), *The Future We Want*. The document highlights how 'many people, especially the poor, depend directly on ecosystems for their livelihoods, their economic, social and physical well-being, and their cultural heritage', and it also advocates for the 'conservation, as appropriate, of the natural and cultural heritage of human settlements, the revitalization of historic districts and the rehabilitation of city centres' (United Nations General Assembly, 2012, p. 26).

2.6 Concluding remarks

The continuous change and the challenges cities face impact our societies in many ways. This continuous evolution and adaptation of the urban elements, specifically urban heritage, is directly influenced by communities and local institutions responsible for their management, adaptation, and continuity. These cultural systems can be an asset, as they provide urban diversity, but can also become a source of conflict and encourage disagreement. In order to address this dissonance, guaranteeing citizen engagement in decision-making is critical because true citizen participation in urban development fosters transparency, inclusivity, and accountability, reducing the likelihood of conflicts. It serves as a conflict resolution mechanism by providing platforms for dialogue and negotiation. Also, empowered and informed citizens make decisions collaboratively, building consensus and preventing conflicts. Early warning systems detect grievances before they escalate. Legitimate decisions emerge from participatory processes, diminishing the potential for opposition. Ultimately, citizen engagement strengthens communities, promoting peaceful conflict resolution through shared values and dialogue, making urban development more equitable and sustainable.

Nevertheless, this is not always possible due to the different levels of citizen participation, showcased by Arnstein's ladder of participation and the many challenges policymakers face trying to implement participatory processes. Urban heritage management is challenging in conflicted societies, where divergent values and priorities erode consensus about heritage preservation. As we have tried to argue, conflict may be a springboard to new agreements and pathways for change, simultaneously increasing community resilience and acting as an asset to help communities push forward.

This study aims to respond to this issue by developing a tool to evaluate alternatives for the adaptive reuse of urban heritage. This tool is designed with the premise that conflict is unavoidable and should be embraced, as it can be a positive driving force for positive change. For instance, conflict can uncover diverse perspectives, stimulating creativity and innovation in planning solutions. It can also become a catalyst for refining plans, integrating diverse interests, and ensuring that sustainable development initiatives are robust, equitable, and capable of withstanding future uncertainties.

This tool also views conflict mitigation as a goal, understanding citizen participation as a necessary step to promote debate and move beyond prevailing authority discourses. Altogether, this approach aims for cultural resilience, as the capacity of a cultural system (contested urban contexts in our case) to adapt, absorb and respond to adversities. This capacity is a process in itself and acts as a framework society may follow to become stronger, more inclusive, and less polarised. In conclusion, cultural resilience is the cornerstone towards conflict mitigation in urban heritage adaptive reuse processes.

3 Case study of Acre, Israel

This Ph.D. thesis is part of the HERILAND programme, focusing in heritage landscapes and urban planning. The design of the project already included the research titles and topics. In my case: *Adaptive reuse of urban heritage in multicultural societies. The case of Acre in Israel*. This implied that the case was already chosen by the supervisory team. Yet, it must be highlighted how this choice was smart and key to make the research interesting, fruitful and relevant.

3.1 Background: Case study selection

The case selected is the city of Acre, a port city in the north-western part of Israel, with more than 4500 years of history. Being inscribed on the World Heritage List, the Old City of Acre preserves the urban and architectural elements of a historic town, its outstanding value relies on the Crusader remnants preserved under the Ottoman city (World Heritage Centre, 2013), showcasing the dynamism and continuous change of Mediterranean port cities. Acre has gone through many changes over time, each community and civilization has left their identities imprinted, materialized in the urban fabric and ambiance of the current city.

The oldest remnants of Acre date the Bronze Age (3000 B.C.E.), where Tel Akko is found, an artificial hill formed from the accumulated remains of mudbricks and other refuse of generations living on this site for centuries (Wilkinson, 2003), some kilometres away from the current Old City of Acre. The city was later occupied by the Assyrian Empire, and the Persian (525 B.C. – 332 B.C.), who shifted the city to the peninsula where the old city is currently located. After the change of location, different civilizations ruled the city, starting from the Hellenistic period (332 – 312 B.C.E.), passing by the Romans (55 B.C.E.), and the Byzantine era (330 A.C. – 638 A.C.). The Early Arab period (638 – 1099 A.C.) follows, in this moment the city enlarged its boundaries, having the biggest size in its history until the last century. During these periods different buildings were constructed over previously built ones, some were destroyed, or reutilized. Then, with the raise of the Crusaders (1099 A.D. – 1291 A.D.), the city of Acre was consolidated. They built the city that is currently buried under the later Ottoman one, which still remains almost intact. In 1291 A.D. – 1517 A.D., the Mamelukes conquered the city, which entered a period of decay, being their political strategy was to weaken the Mediterranean Christian harbours as a response to the Crusader expansion. This meant the destruction and erasure of parts of Acre's urban fabric and heritage elements.

The ruling of the Ottomans from 1517 A.D. to 1917 A.D. was fundamental as it is when the currently visible old city was built. The Ottomans constructed most of the public buildings, public areas and designed the characteristic urban fabric. When in 1917 A.D. the British got control of Acre, they maintained the old city as it was, and extended its boundaries through an expansion, an orthogonal urban grid surrounding the Old City, referred as the city Mandate. And finally, after the establishment of the state of Israel in 1948 A.D. the city got expanded to its actual size and municipal boundaries. (A deeper analysis and description of the urban evolution of Acre is provided in Chapter 4.3 Narrative Analysis in the Port City of Acre over time).

These transformations seem to demonstrate that each civilisation would build upon the vestiges of the last, which probably meant the reuse of buildings and infrastructures. During these adaptation processes not only buildings, but other tangible and intangible elements like public spaces and the sense of place, were transformed into others with a new use, preserving the city's and citizens memory (Wong, 2017). These processes create collective memory, which combined with identity, tradition, history, and culture provide continuity to the urban heritage (Stone, 2020). However, the dominant identities in each period created, erased or adapted the previous heritage depending on their needs and aims. These decisions shaped the city and are key to the continuity of certain heritage elements until the present moment.

3.2 Acre: A paradigmatic and extreme case

Acre has proven to be a great case to study adaptive reuse of urban heritage in contested urban contexts for the following reasons. On the one hand, this port city presents a **paradigmatic** situation where the thesis main topics converge:

- 1 it has numerous elements of urban heritage;
- 2 it is undergoing (and it has gone) through a process of decay, which encourages and urges for adaptation of its old and new city; and
- 3 it is located in a conflicted area, where tensions among citizens regarding different aspects are present (political, religious, economic...).

On the other, Acre brings all of these topics to the **extreme**, being this key to identify the problematic and analyse the situation more clearly. The fact that a high number of heritage elements are present (i), provides a wider-range of elements to choose from, broadening the scope, location and type of elements to be included in the research. Also, the deterioration in the city is acute (ii), creating many opportunities for improvement, which enrichen the study. Finally, the situation of conflict (iii) creates black or white dilemmas where stakeholders usually position themselves on one side or the other. This leaves room to find midway solutions and understand heterogeneous points of view¹³.

¹³ Acre is one of the eight mixed cities in Israel (Central Bureau of Statistics, Government of Israel, 2018) with more than 10% registered as “Arabs” and more than 10% registered as “Jews (Central Bureau of Statistics, Government of Israel, 2018). The Old City’s inhabitants are 90% “Arabs”, while the rest of the city is “Jew” in its majority.

Regarding heritage and conservation, the present city is characteristic of a fortified town dating from the Ottoman 18th and 19th centuries. The remains of the Crusader town, dating from 1104 to 1291, lie almost intact, both above and below today’s street level, providing an exceptional picture of the layout and structures of the capital of the medieval Crusader kingdom of Jerusalem. This fact creates various issues when intervening in the Old City’s urban fabric and underground (excavations, building foundation, and maintenance) (Stickley, 2021; World Heritage Centre, 2001).

The old city was nominated as a World Heritage site in 2001, and it is a conservation area as a whole. Beyond the old city there are 127 protected buildings, as listed by the Israeli Antiquities Authority (Solar, 2009). These elements fall under the IAA conservation rules. Yet, in the last decade, various interventions in the protected urban fabric have generated dissonance amongst the Old city’s and rest of the city’s citizens (Graves, 2020; Stickley, 2021).

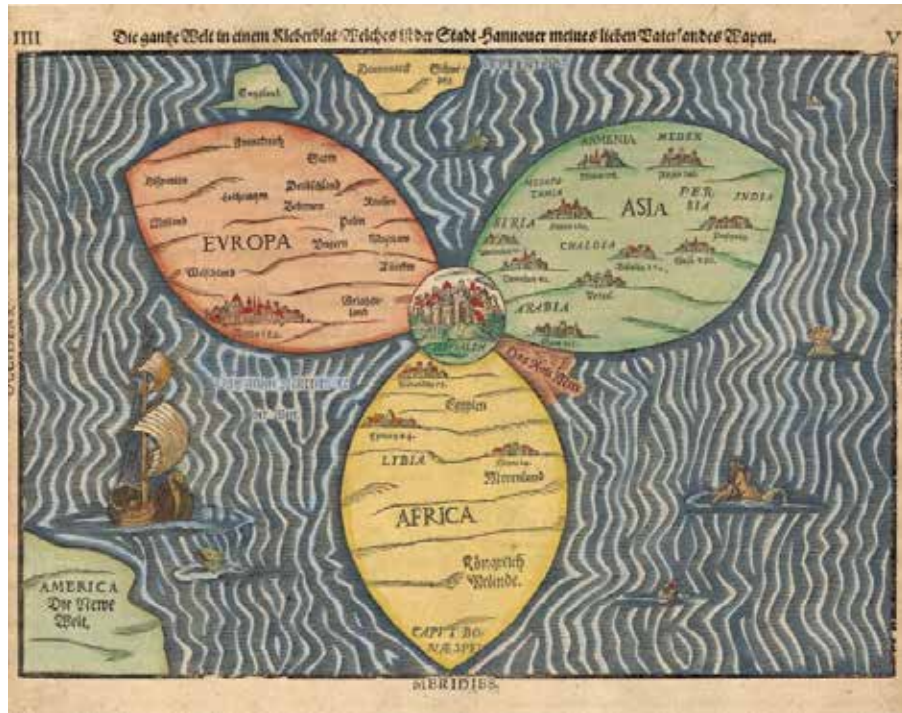


FIG. 3.1 Bunting's Map of the World (1580s) showing Jerusalem symbolically in the centre of the World

Moreover, other characteristics of Acre make it a great case study for the aim of this research. Its **geographical location** is fundamental to understand the importance of this city. Acre is located in the Middle East, in the transition between the East and the West (see Figure 3.1), and it was part of multiple trade and pilgrimage routes over history. For these reasons, Acre was an important enclave for various civilizations who imprinted their identity through the modification of its urban patterns, buildings, traditions and languages. Moreover, the fact that it is a port city in the Mediterranean makes Acre an excellent example of how this type of city has evolved and could develop over time. This opens the conversation to foresee future scenarios for the city's heritage and the **replicability** of the methods used in Acre into other port cities along the Mediterranean (or in conflict). These ideas of cultural diversity and replicability support the case study selection and consequently, the research goal: the development of a methodology to evaluate alternatives of adaptive reuse of urban heritage in contested urban contexts.

3.3 Problem Identification

As it was previously mentioned, Acre has continuously undergone urban modifications and has faced many challenges over time. Its strategic location in the Mediterranean, its role as a trade enclave, and its religious significance implied a continuous shift in the demographic fabric of the city. For example, during the Crusader period we found the Venetians or Genovese traders, who settled in the city's homonym quarters; or the pilgrims visiting the Holy city of Jerusalem who used the khans, (caravanserais, touristic accommodation). All of these had both positive and negative implications with regards to Acre's urban evolution. On the one side, the continuous movement of people and communities conferred Acre with a cosmopolitan atmosphere, being an economic and trading centre. On the other, the changes in political power brought war and conflict, adding destruction and deterioration to the formula.

Therefore, it seems that during Acre's history one aspect (demographic changes) went hand by hand with the other (political instability/change in power). Nowadays, the city follows a similar trend, but for different reasons. In fact, Acre is facing numerous challenges created by these two factors: a shift in the communities (local and tourists), which demand the adaptation and transformation of the fabric to their needs; and at the same time, the political instability and social unrest linked to the ongoing conflict between Israel and Palestine that was amplified during the mid-20th century. The fact that Acre is one of the eight mixed cities in Israel (Central Bureau of Statistics, Government of Israel, 2018) with more than 10% registered as "Arabs" and more than 10% registered as "Jews", it is an area prone to polarization (Central Bureau of Statistics, Government of Israel, 2018). Consequently, both issues result in confrontation and deterioration of the urban heritage.

3.3.1 Conflict of interests: social needs crash with conservation rules and economic priorities

The economic demands prioritize tourism as the main activity, while traditional livelihoods decline and risk of disappearing. As a consequence of tourism, in the last years, the Old City has undergone an accelerated gentrification process¹⁴. The transformations derived from it range from the conversion of households and heritage buildings into tourism accommodation, warehouses and craft workshops into souvenir shops and restaurants, fishing has been substituted by boat tours, and the historic Ottoman and Crusader buildings are used as museums and tourist attractions. Moreover, the modern lifestyle requires updating the infrastructure and the citizens' households. The limitations imposed by the laws and limitations in place result in a continuous deterioration of the urban heritage. As these modifications and renovations are usually made informally.

This situation has resulted in social discontent, as we confront a dichotomy where local residents lack the resources to maintain their households and end up leaving the site, while outsider investors and developers acquire the buildings as they can afford buying and rehabilitating them. Altogether, this condition generates a conflicting environment which results in non-consensual responses by the stakeholders, where the adequate preservation and continuity of these heritage elements is not guaranteed¹⁵.

3.3.2 Conservation Laws and Regulations

However, most of the visible city, the elements constructed during the Ottoman period, remains almost untouched thanks to the laws and regulations put into place since the British rule (1917– 1948). The British authorities passed the Antiquities Law and subsequent regulations covering all archaeological activities in Palestine (Department of Antiquities, 1929) and specifically declared the Old City of Acre an antiquity, which

¹⁴ Several examples showcase the gentrification in Acre in the past years: (1) the Efendi Palace, a luxury hotel in the middle of an impoverished area in the Old City of Acre, a project aligned with the Old Acre Development Company's intent to rebrand heritage buildings. (2) In similar lines, the selling of Khan El-Umdan, a public building, to private developers to build a luxury hotel. (3) The Ayalm NGO's project to promote the settlement of Jewish young people in mixed cities like Acre. In 2007, Ayalm received five buildings from the 'old Acre Development Company', to settle in Acre. (Shmaryahu-Yeshurun & Ben-Porat, 2021)

¹⁵ An example of this can be found in the work done by Acre's Women Association (AWA), which has a specific project to economically support families living in the Old City in the refurbishment of their homes, as they could be evicted if the household is declared ruin (see AWA's representative's interview in 12.2 Interviews).

conferred it with a high level of protection. These regulations were continued in the Israeli 1978 Antiquities Law, which enforced strict protective measures prohibiting any modification, demolition or addition of the urban fabric without prior approval by the Director of The Old Acre Development Company Ltd. Lately, in 2001, the Old City of Acre was declared a World Heritage property (World Heritage Centre, 2001), therefore, the levels of protection linked to the UNESCO World Heritage convention also apply to it.

Whereas the conservation and continuity of the tangible heritage, mainly monuments and 'elements of interest', has been managed; the intangible, mainly the local inhabitants and their customs, has faced many challenges and changes. Similar to other Old Cities worldwide, the Old City of Acre has followed a trend where stronger communities move out to the more modern side of the city, and people from the rural and surrounding areas come in. In the case of Acre, at the beginning of the 20th century the British began to develop the city and study future developments. Initially, they followed the guidelines in Ebenezer Howard's Garden Cities of Tomorrow (1902)¹⁶ to expand towards the north of Acre. Later, aiming to promote tourism, a Master Plan in 1944 called 'Acre Report' was designed by Percy H. Winter, also referred to as the Winter Report. In this document he defined the living conditions in the Old City of Acre as 'appalling', and describes the area as a slum, overcrowded, poor and unsanitary, containing great elements of cultural heritage. He concludes the report with the following:

'Acre must be thought of primarily as a living town and not as a museum. Archaeological interest usually requires looking backward to gain its best ends whereas a scheme of development is primarily a looking-forward gesture. Compromise will at times be called for and it will be a question to what extent antiquarian interest should give place to the needs of living interest. Given a broad-minded attitude on the part of the antiquarian and a sympathetic approach combining with knowledge and competency on the part of the architect, the two interests may often happily and usefully be reconciled¹⁷.'

In order to decompress the Old City, an adjacent New City was built to accommodate the residents, and an industrial area was built to promote jobs. The main strategy of the report is to make Acre a recreational destination, and make it a cleaner city.

¹⁶ A far more critical analysis of urban planning in Israel and Palestinian cities can be found in A Civilian Occupation: The Politics of Israeli Architecture, edited by Rafi Segal & Eyal Weizman, Babel and Verso 2003.

¹⁷ The Winter Report,

This goal was meant to be implemented soon after the end of World War II. Following the War, Acre was designated as part of the Arab State in the UN General Assembly Resolution 181¹⁸. Yet, the Israel War of Independence in 1948 brought another shift, where most of the Arab residents were forced to flee, and most of the buildings were taken by the State of Israel, who used parts of the Old City to host Jews and Arabs temporarily. Some years later, the Jews, who had improved their economic situation moved out to the newer city, and the old city became residence to the lower-income population, underprivileged Arabs. This became highly acute with the application of the Absentees' Law, which changed the ownership status of the site (Government Printer, 1948), as more than 80% of the Old City buildings became the State's property. The implications derived from this regulation have currently a great impact in the urban heritage, as most old city residents are leaseholders and lack enough resources to provide adequate maintenance of the site.

In 2000, 85% of the property in Old Acre was owned by the Israeli Land Administration, 10% owned by religious entities, and 5% was owned privately (World Heritage Centre, 2001). In addition, the industrial areas in the outskirts have worsen the environment's quality (World Heritage Centre, 2001), and unemployment within the Old City has remained high¹⁹. This trend, from the last decades, shows how the city is becoming more and more touristic. In fact, the Old Acre Development Company (OADC) has carried out various development projects including hotels, museums, shops and restaurants. This has opened the debate around Acre's future, as seen in the following critical publication by Hanaa Abu-Uqsa:

'Old Akko has suffered for many years from neglect on the part of government authorities and until recently only a localized and misguided approach was adopted regarding the city's development. The authorities were concerned with only the tourist sites and not the general urban tapestry. The change in approach, which is manifested in the guidelines set down by the late Prime Minister Yitzhak Rabin at the beginning of the 1990s, is meant to provide the city with a program that will address and treat all of its severe problems.'²⁰

¹⁸ Historic assessment

¹⁹ No figures were able to be located for unemployment exclusively within the Old City. However, oral statements estimated by the local population hover around 40%.

²⁰ Shared Heritage Vol 1, p 235, "The Serai – A Center for Social Activity" by Hanaa Abu-Uqsa

Nevertheless, these issues have been partially addressed thanks to The World Heritage Nomination in 2001, which added an extra layer of protection, providing an environment that guarantees the conservation and protection of the Old City, and enhances the economy of the area through cultural attractions, tourism, and other economic tourism-related activities. Since then, the institutions in Acre are working towards a shared vision of the Old City as a tourist attraction, enhancing the historic, architectural and cultural values of the WH property (Giladi, 2013; Harari, 2012).

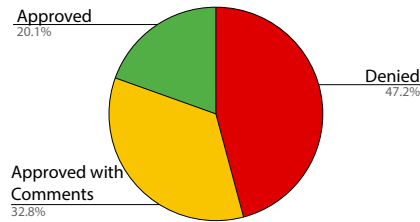
3.3.3 Akko Conservation Committee

In order to address the inconsistencies between the regulations in place and the citizens' needs and demands there is an executive body, the Akko Conservation Committee, which meets on a monthly basis to assess the renovation projects in the Old City. This organism is made up of various actors from administrative institutions, the private sector, the civil society and relevant citizens. One of their main roles is to approve, send for revision or decline the projects proposed in the Old City of Acre. It should be highlighted how this committee bridges the gap between the limitations set by the conservation and other laws, and the citizens' needs, which relate to basic services, sanitation, ventilation or change of use. Amid the challenges faced by this entity, this committee has a key role in the preservation of Acre as a living city, as well as enhancing its cultural interest for visitors.

However, the Committee's actions are limited to the projects proposed by private developers or local householders. So, when it comes to public elements or the wider context the gap between laws versus citizens' needs still exists. This is usually due to the fact that public heritage is more affected by political interest than the private.

In any case, the role of this committee is key for an adequate management of Acre's heritage as it provides an extra layer of supervision that includes the interpretation of each project on an individual basis, moving beyond generalizations and leaving room for modifications and improvement of these projects, as well as the rejection of those non-viable. This aspect can be observed after the analysis of the protocols, resulting documents after discussion over project proposals, generated by the committee between 2017 and 2020. During this period, almost half of the proposals were denied (47.2%), while 20.1% were approved, and 32.6% approved with comments.

Decision by the Committee



Decisions by Year

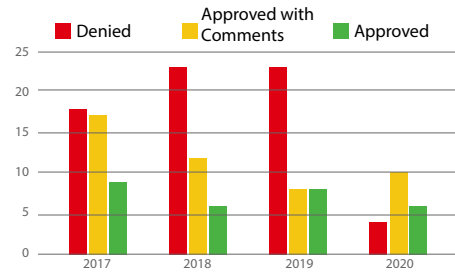


FIG. 3.2 Decisions on committee protocols 2017 - 2020 (left – general, right – by year)

In the following diagrams it can be observed the type of interventions that are more often denied. Half of these are linked to legal modifications, one third to projects related to the addition of elements, such as opening windows or adding a room, and 16.7% of the rejected projects implied the restoration of elements. In most cases, the denying was linked to technical reasons (42.2%), or the inadequacy or lack of plan (33.3%).

Denied

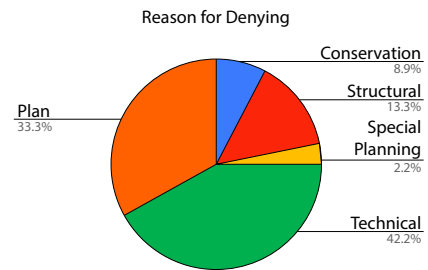
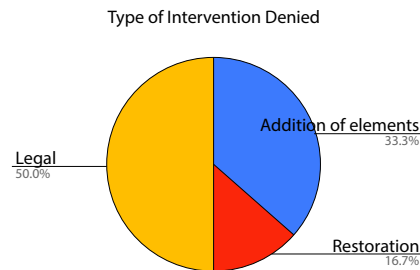


FIG. 3.3 Interventions denied (left - type, right - reason)

Regarding the approved projects, most of them were related to additions (80.0%). Also, similar to the denied ones, the comments given to the projects that were approved were also linked with technical questions (46.7%) and the adequacy of the plan (20.0%), but also in many cases these needed to revise legal aspects (20.0%).

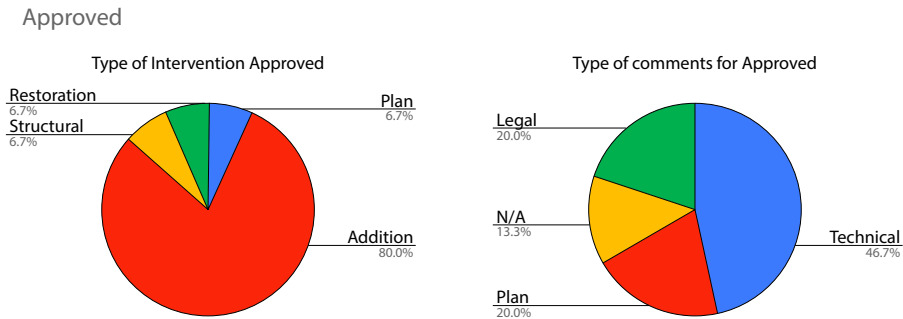


FIG. 3.4 Left - Type of intervention approved. Right - type of comments approved

The analysis of these protocols shows two main points. On the one hand, the key role played by the Akko Conservation Committee in the adequate management of heritage, as it guarantees a less biased decision-making process thanks to the diversity of members from diverse sectors and levels; and to the flexibility provided by an assessing body that evaluates and gives advice on the projects for the Old City of Acre. On the other, there is room for improvement on the approval system, as almost half of the petitions are denied. This showcases the gap between the criteria followed by the decision-making bodies and the needs and interests of the developers and citizens that submit the proposals. Therefore, a tool that facilitates participation and provides midway alternatives instead of rejection could be useful to bridge this gap.

3.4 Final Remarks

Altogether, Acre provides a great case to be studied for the aims of this Ph.D., not only its geographic location and long history make it an adequate city to be studied, but also its particularities, such as the social complexities, being a UNESCO World Heritage site, and the legal and managerial systems in place, make Acre an interesting and challenging case. This point is important as per the research itself, but it also supports creating the baseline for future research, and the replicability of the methodology in other cities.

SECTION 2

Interrelations between place, communities and process

4 Understanding the place through the communities

Chapter Goals

The following chapter focuses on the importance and influence of past and current narratives in the evolution of urban heritage in Acre and how they may influence current adaptive reuse processes so that they mitigate societal conflicts. In doing so, the following **steps** are taken:

- A a historical analysis of the evolution of port city attributes;
- B the analysis of contemporary voices to understand Acre's stakeholders' views on the previously identified port city attributes; and
- C three urban heritage elements are utilised to test how the past and present narrative analysis can be applied in actual cases, and provide adaptive reuse alternatives which may (or may not) contribute to the mitigation of conflict.

Research Questions addressed

The aim is to understand the multiplicity of narratives and perceptions about Acre's Urban Heritage, and to identify the urban elements with potential for change and conflict mitigation. Similarly, a systematic review and analysis of the evolution of Acre and its urban heritage elements over time advocates for informed decision-making processes in the urban planning, urban design and heritage management sectors.

Ultimately responding to **Research sub-questions SQ 1 and SQ 2**:

- **SQ1** | *How can we arrive at a shared or common understanding of Urban Heritage by different stakeholders in and out of Acre?*
- **SQ2** | *How can conflicting values be included in the processes of the Adaptive Reuse of Urban Heritage?*

4.1 Methodology: Narrative analysis

4.1.1 Definitions

Narrative

According to Thesaurus Dictionary (*Thesaurus Dictionary*, 2021), a narrative is ‘a story that connects and explains a carefully selected set of supposedly true events, experiences, or the like, intended to support a particular viewpoint or thesis’. In the same way, Cambridge Dictionary (*Cambridge Dictionary*, 2021) defines a narrative as ‘a particular way of explaining or understanding events’. For the aim of this chapter, a narrative is understood as a combination of both definitions: *a story that connects a series of selected events explained in a particular way, with the intention to support a particular viewpoint*.

Past Narratives

Therefore, the analysed **past narratives** refer to the stories extracted from historic documents that tell a series of events in Acre over time, told by the dominant perspectives in each period. These stories present the city of Acre in different periods, understanding the city as the subject that tells its own story through the evolution of its elements.

New Narratives

The **new narratives**, by contrast, comprise contemporary stories told by diverse stakeholders in the city. Contrary to past narratives, we currently have access to all the voices in the city, which reflect Acre’s complex and contested reality. These are based on elements from past narratives, and at the same time, address the current urban issues from various perspectives, creating a reality of dissonant identities.

Past Narratives

For the Past Narratives, historical documents were studied to identify the narratives linked to the city, and the city's urban heritage; and then this was categorized into the attributes of urban heritage identity found in port cities, as per the Final Outcomes from the Workshop in Fukuoka in 2020 (UNESCO World Heritage Centre, 2020).

The consulted historical documents include archaeological reports, history books, and data from heritage institutions^{21,22}. The bibliography consulted on the history of the Mediterranean and Acre consists of the seminal books by Braudel, 'A history lesson' and 'Mediterranean'; David Abulafia's 'The Great Sea: A Human History of the Mediterranean'; 'On the Ocean: The Mediterranean and the Atlantic from Prehistory to Ad 1500.' by Cunliffe; and Mediterranean history books by Jacoby, Folda and Sakel.

The distilled narratives encompass the comprehensive regional, local, tangible, and intangible cultural values and the Outstanding Universal Values of World Heritage Cities (OUV). In order to avoid historical bias and move beyond the authorised discourse (Heidtman, 2014), the analysis covers all the periods the city of Acre went through. This is addressed as a way to reveal changes, trends and other details that are not evident or that have been systematically neglected. Regardless of Acre's OUV being linked to the Crusader and Ottoman periods, the broader understanding brought by the analysis offers new perspectives on its significance at other levels, the continuous change over time, for instance.

For this reason, the analysis studies the city's **regional significance linked to the trade routes and the Mediterranean, through the visualization of the historical data in chronological maps**. Similarly, the attributes of the urban heritage identity found in the port city of Acre are identified and mapped. This results in two sets of maps that highlight Acre's significance as a Mediterranean port city, and it unveils layers of the city key to understand conflicting values and the heritage elements with potential for adaptive reuse.

²¹ The bibliography consulted on the history of the Mediterranean and Acre is the following: (Abulafia, 2011; Aubet, 1994; Avni, 2011; Bacci & Fribourg Colloquium, 2014; Braudel, 1994; Braudel et al., 1997; Cunliffe, 2017; Folda, 2005; Jacoby, 1977, 2015; Norwich, 2006; Sakel et al., 2014)

²² The data on the heritage of Acre is mainly extracted from the World Heritage documentation (World Heritage Centre, 2001, 2013) and the documents by the Israeli Antiquities Authority (IAA): (Boas, 1997; Folda, 2005; Kedar & Stern, 1995; Kool, 1997; Smithline et al., 2013; E. Stern, 1999b, 1999a, 2001, 2014; E. J. Stern, 2013; E. J. Stern et al., 2017)

In addition to the chronological overview, four periods are focussed upon:

- Crusader
- Ottoman
- British Rule
- Modern State of Israel.

These are the most relevant in the city's history and influential in the authorised discourses.

In addition, four quotes have been included to understand the perspectives about the city by different people in different times: two of them appear in *Itinerarium Peregrinorum Regis Ricardi*, a Latin prose narrative of the Third Crusade, describing the town in other moments; the third one by an English Augustinian canon, in the 13th century; and the fourth by Sir Laurence Oliphant in the 19th century. These quotes are likely to be the closest materialisation of the past people's views, which differ from the hegemonic narrative. They are included in the chapter to provide additional interpretations, as the diversity of voices in the past was not documented.

Altogether, the analysis and identification of the attributes of urban heritage identity found in port cities, serve to produce chronological maps of the city from the bronze age until nowadays, as well as regional maps showing the relevance of the city with regards to trade and religion.

The first set of maps focus on port city attributes, which include natural features, such as topography and hydrology, an port city attributes directly linked to the built environment, both historic and contemporary, the infrastructures above and below ground, open spaces and gardens, and the land use patterns and spatial organization (UNESCO, 2011, p. 3). Attaining to visualize the historical data and geographically place the location of the different urban heritage attributes found in port cities, which in many cases reveal buildings and urban elements that were targeted for adaptive reuse over time. At the same time, these maps help with locating neglected areas, erased elements, and with the understanding of the city by the ruling bodies over time. This is, their interests and values as a society.

The second set of maps visualizes the trade and religious routes within and through the Mediterranean Sea. This supports the understanding of Acre's regional significance over time, correlating with the heritage elements built in each period.

New Narratives

To understand the New Narratives, the local and regional stakeholders' interests and values are identified, through the analysis of their institutional websites, interviews and documents (See sources in table 4.1). To analyse these sources, two aspects are considered: the periods of time the institution finds relevant (because they mention or highlight heritage elements of these period); and the institutional values, extracted from their website statements and interviews (e.g., economic, cultural, religious).

Not only the local stakeholders are analysed, but also the outsider perspective is included through the analysis of social media posts about Acre, aiming to compare local and tourist views on the city. The resulting conflict of interests influences current urban processes, as urban heritage continuity is jeopardized.

Therefore, understanding each stakeholder's values, interests, and trade-offs offers a wide range of lenses to observe the previously identified port city attributes. It also shows how these points of view are based on some of the past narratives to justify and create a new one complying with the previously mentioned interests. The resulting new narratives are essential to address current challenges in the city, as well as to inform adaptive reuse processes. In the same way, understanding their evolution over time is fundamental to observe any urban trends related to adaptation or continuity.

4.1.3 Preliminary Considerations

Before delving into the topic, it is essential to consider data availability and bias. The following historic analysis investigates the urban changes in the city of Acre at different periods; it has been extracted from the historical data available. It is essential to acknowledge the bias in the historical narratives (McCullagh, 2000), as the winning side usually writes the history. This unique portrayal means that we lack an overview of the diversity of narratives in every age; therefore, the narratives presented up to the 20th century represent those dominant. It is only with the documentation produced in recent decades that a broader range of perspectives is included and in which we can find dissonance.

The analysis of urban transformations is limited to the available maps. Not every period produced a plan, map, or illustration of the city; these do not necessarily relate to the actual geographical location. The archaeologists made the prehistoric map of Tel Akko, representing the approximate settlement situation (Killebrew et al., 2010), and the Crusader map is a schematic drawing of the city, from which diverse illustrations of the city have been derived. On a positive note, the Ottoman plan made by the British in 1840 is remarkably close to reality, providing an accurate representation of the urban fabric (See Figure 4.1).

Moreover, these four periods are again the most relevant when contemporary narratives are analysed. These include the following four eras (See Figure 4.2, marked in red):

- Crusader
- Ottoman
- British Rule
- Modern State of Israel

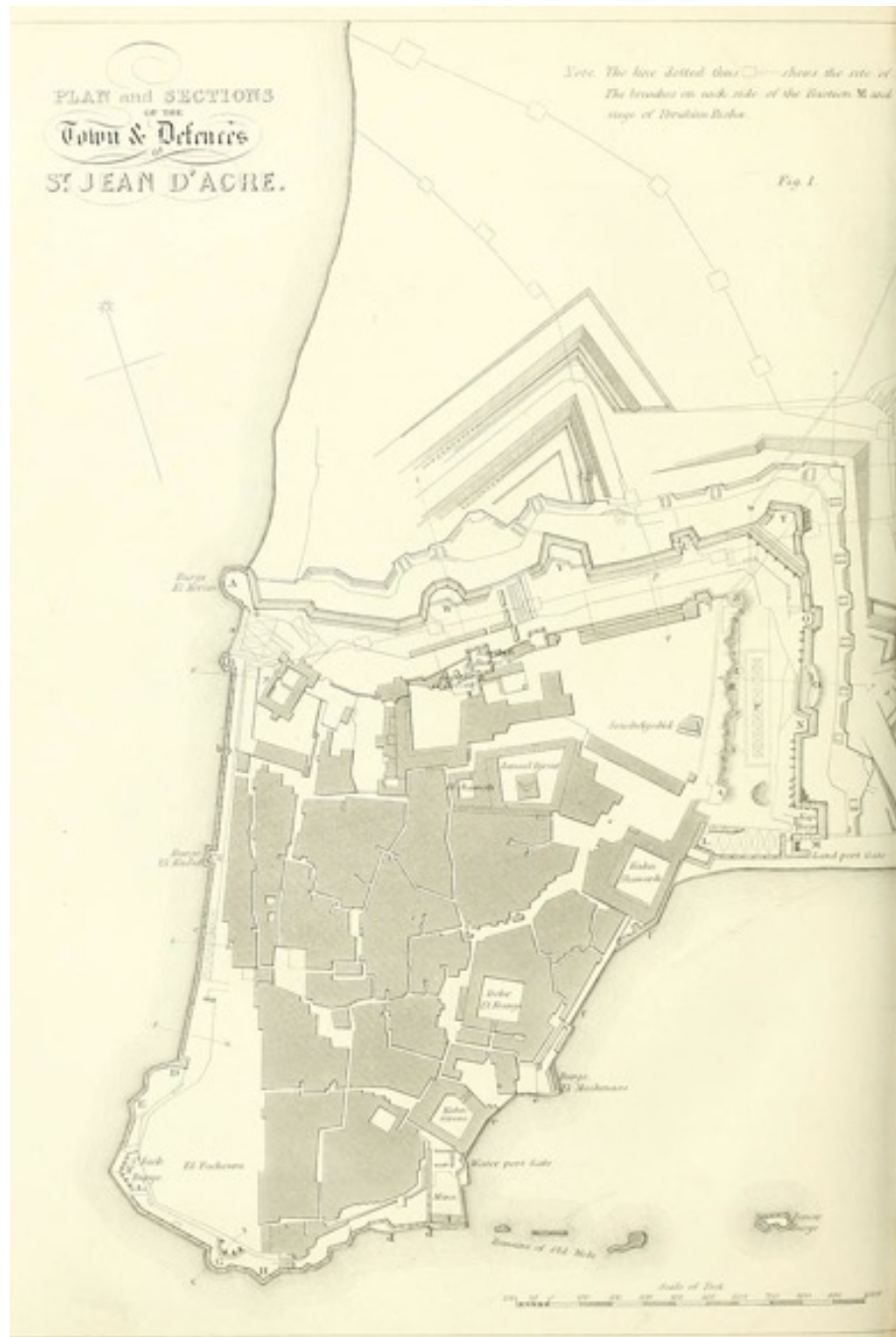


FIG. 4.1 Acre in 1841, as mapped by the British Royal Engineers after the Oriental Crisis of 1840_Wikipedia Commons

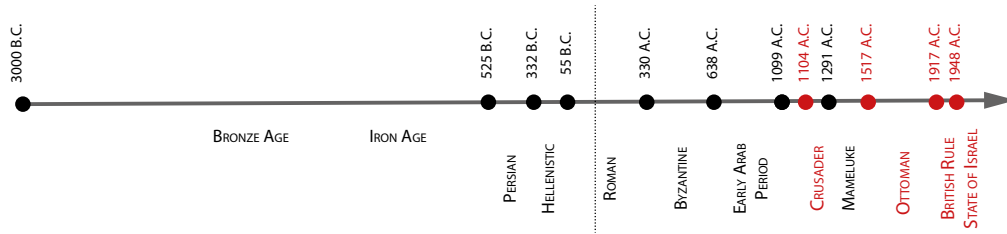


FIG. 4.2 Timeline of Acre with Arab periods

4.2 Results of the Narrative Analysis in the Port City of Acre over time

4.2.1 Past Narratives^{23 24}

The history of Acre dates back nearly 4500 years. Acre was first mentioned in the Ebla tabloids, circa 2400 – 2250 BCE. Even if there are no remains from this period, this datum shows the importance of its location and how it made it favourable for trade in the region. What follows is an overview of the changes in the regional significance of Acre linked to the trade routes, supported by the city's historical evolution, paying particular attention to the value of the city, the importance of the water, and the development of urban elements in each period.

²³ To avoid constant repetition of the sources all over the Past Narratives section, it is noted that the bibliography consulted on the history of the Mediterranean and Acre is the following: (Abulafia, 2011; Aubet, 1994; Avni, 2011; Bacci & Fribourg Colloquium, 2014; Braudel, 1994; Braudel et al., 1997; Cunliffe, 2017; Folda, 2005; Jacoby, 1977, 2015; Norwich, 2006; Sakel et al., 2014)

²⁴ The data mapped on the heritage of Acre is mainly extracted from the World Heritage documentation (World Heritage Centre, 2001, 2013) and the documents by the Israeli Antiquities Authority (IAA): (Boas, 1997; Folda, 2005; Kedar & Stern, 1995; Kool, 1997; Smithline et al., 2013; E. Stern, 1999b, 1999a, 2001, 2014; E. J. Stern, 2013; E. J. Stern et al., 2017)

A Regional significance

The following diagram (Figure 4.3) summarises Acre's regional significance fluctuation over time. Its relevance augmented during the Crusader and Ottoman periods, and it got diminished with the Mamelukes and during the British Mandate when Haifa became the reference port in Israel.

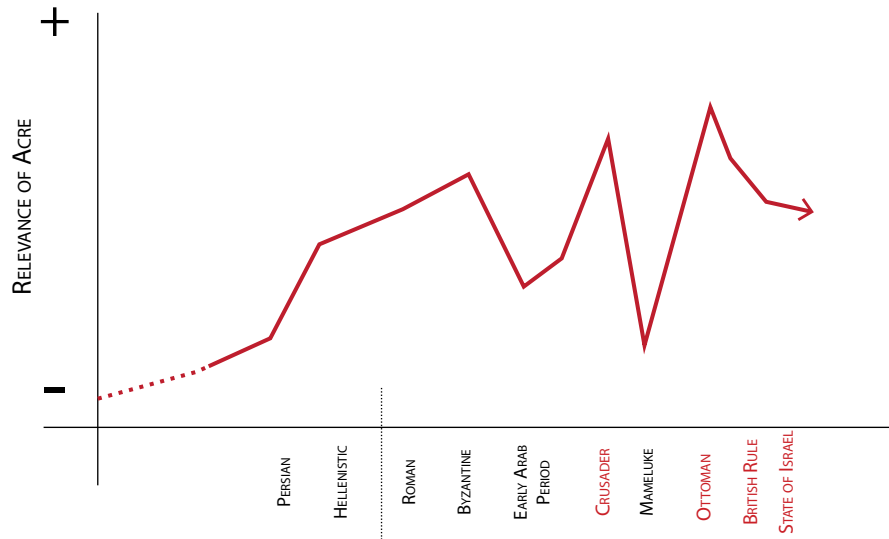


FIG. 4.3 Relevance of Acre evolution graph

Acre maintained its role as a gate between continents as a constant, being its link to the sea routes enhanced during the more western and Christian periods, and the land routes were promoted during the Arab eras, to link the far East with the West economically.

B Historical overview of Acre

Tel Akko: shifting the importance from the land to the sea

The oldest remnants of Acre date the **Bronze Age (3000 B.C.)**, and are related to Tel Akko, an artificial hill formed from the accumulated remains of mudbricks and other refuse of generations living on this site for centuries (Wilkinson, 2003), some kilometres away from the current Old City of Acre (See Figure 4.7).

Tel Akko was located in the path of the Via Maris and other ancient trade routes connecting Africa, Asia, and Europe, which dated to the early Bronze Age. The regional geostrategic location of the settlement will be permanent throughout history, while these ancient routes become highly influential in the socio-economic development of Acre (See Figure 4.15).

The existence of a river tributary and fertile land determined the location of the Tel. The proximity to the ocean was also advantageous. Hence, the city only stayed linked to the river until trade and defence gained importance, and the sea became the cornerstone for Acre's evolution. The following quote by Richard de Templo during the Third Crusade not only confirms but also strengthens the city's location's importance and its relationship with the water bodies.

A city called Ptolemais was formerly situated on top of Mount Turon, which lies in the vicinity of the city... The river which flows to the city is called the Belus. It has a narrow bed and is not deep, but Solinus claims no little glory for it, including it among the wonders of the world and stating that it has sands like glass... Mount Carmel rises loftily on the south side of the city.

A writer during the Crusader. From Richard the Lionheart: The Crusader King of England By W.B. Bartlett. (Bartlett, 2019)

Trade remained the leading enterprise during the Iron period (1200 B.C. – 525 B.C.). Yet, the more favourable agricultural position of other cities, like Tell Keisan, decreased Acre's significance. This was to be regained with the conquest of the Assyrian Empire, which benefited from the natural barrier of the sea to promote a trade port and became the major Persian harbour (525 B.C. – 332 B.C.).

During this period, the location of the city shifted to the more strategic peninsula at the seashore. The Phoenician presence in the Mediterranean enhanced sea trade. The proximity of Acre to the main Phoenician cities of Tyre and Sidon made its port active, promoting it as one of the most important in the region (See Figure 4.8).

Prosperity of Acre as a strategic harbour

During the Hellenistic period, thanks to Alexander of Macedonia (332 – 312 BCE), the city gained popularity as a leading port and formed a strategic piece in the Macedonian Empire. They maintained most of the previous Phoenician Sea routes, conferring the Mediterranean Sea with its world economic status (See Figure 4.16).

The Roman Empire also took Acre as a main maritime link after Pompey's conquest of the land of Israel in 55 B.C. Their influence went beyond the sea routes, creating an intricate sea-land route network that guaranteed the Empire's survival for centuries. Acre was again crucial in the Levant region and served as a gateway to the sea (See Figure 4.17). The Roman presence enhanced the urban development of Acre by expanding the city to include Roman elements, such as the cemetery on the western side of the city (See Figure 4.10).

The most significant contribution of the Romans to Acre is linked to the significance of the water. Even though the sea remains the main water body, a freshwater system was built consisting of an aqueduct bringing water from the northeast and a cistern in the centre of the old city (where we find the Al-Jazzar Mosque nowadays).

Foundation of a fortified city

Throughout the following centuries, the fight to win Acre remained constant. This quote by a writer from the Crusader period poetically predicts this fact, showing how the city was perceived as the centre of the world.

Acre will certainly win eternal fame for the whole globe assembled to fight for her.

A writer during the Crusader. From Richard the Lionheart: The Crusader King of England By W.B. Bartlett. (Bartlett, 2019)

Its geographic location at the intersection between the three continents made it a fundamental piece of the Asia – Mediterranean trade. At this moment, the ancient trade routes formalised and morphed into the Byzantine ways (See Figure 4.19).

During these medieval times, a more formalised city was built. First, the city's fortification was constructed, delimiting the area where the Byzantine Empire (330 A.C. – 638 A.C.) built the foundations of Acre as a port city strategically located in the Mediterranean —becoming the main port of Palestine during the Early Arab Period (638 – 1099 A.C.).

The value as a trade centre is highlighted through the building of a large mosque and the extension of the city, resulting in an area much bigger than the current Old City area (See Figure 4.9 Figure 4.10). The city's foundations served as a basis for the Crusader urban fabric.

Acre continued to be an important port, becoming the eastern Mediterranean's principal port and the Jerusalem kingdom around 1170. Its value not only resided in its strategic location and the trade, but another value was created: the religious. During the Crusader period (1099 A.D. – 1291 A.D.), pilgrimage to the Holy land was crucial for Christians coming primarily from Europe, as well as for Muslims going to Mecca. The pilgrim routes, linked to the political and religious setting, work mostly separately, differing from previous ways (See Figure 4.20).

The city is triangular in shape: narrower on the west, more extended on the east. More than a third of its perimeter, on the south and west, is enclosed by the flowing waves. Its harbour is not as good as it should be. It often fails to protect vessel wintering there so that they are smashed to pieces, because the outcrop of rock which runs parallel to the shore is too low to break the force of wave in a storm.

In *Itinerarium Peregrinorum et Gesta Regis Ricardi* (Journey of the crusaders and deeds of King Richard) by Richard de Templo, an English Augustinian canon (also known as Richard of Holy Trinity or Richard of London). (Nicholson, 2010)

Richard de Templo, an English Augustinian canon in the 13th century, describes the city as above, highlighting the difficulties in accessing the port and the inefficiency of the seawall. The Crusaders strengthened this element during the following decades, turning it into the main port for pilgrims.

The city of Acre became the main port of pilgrimage to the Holy Land, but it lacked holy elements. This fact encouraged the sacralisation of the city through the construction of churches in every neighbourhood related to various relics. At the same time, its value as a trade city at the intersection of continents and land and sea routes attracted foreign merchants who moved into the city. The combination of these two elements: the sacralisation of the city and the settlement of foreign traders, resulted in the urban tissue presented in the following plan (See Figure 4.10).

An essential feature of the urban layout of Crusader-period Acre was the physical division within the city between the various maritime communes and the military orders. The value as a religious destination for Christian pilgrims is showcased as each quarter revolves around the primary or multiple churches (See Figure 4.4 and Figure 4.5). Additionally, the significance as a trade city is highlighted by the port city attributes (governor, religious buildings, etc.) with particular emphasis on the importance of the port and the walls.

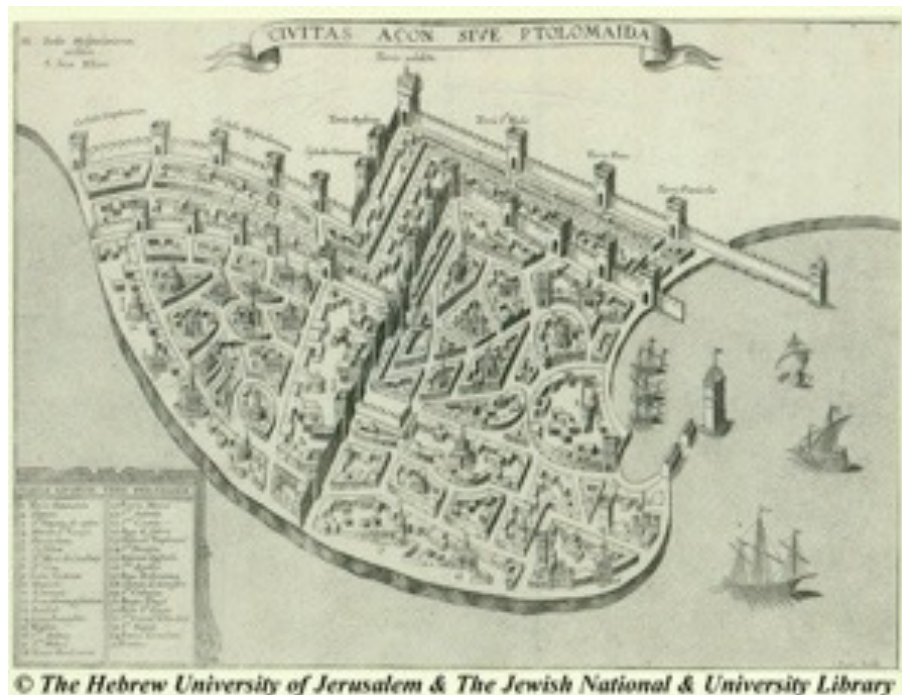


FIG. 4.4 Crusader map. The Hebrew University and The Jewish National and University Library.



FIG. 4.5 Aerial view with urban division. The Hebrew University and The Jewish National and University Library.

Decay and rebirth

These two constant values, the trade hub and its strategic location, continued even after the Mameluke capture of the city. The trade towards the Christian West remained limited during the Mamluk period (1291 A.D. – 1517 A.D.). Still, the connections with the Muslim dynasties continued with the trading activities on the Levantine coast (See Figure 4.21). This event changed the city's social fabric, as most Italian traders fled to Cyprus, reducing the city's population to the remaining Arab and Jewish communities.

Amid the decay, the port was still in use, and the city welcomed traders and Muslim pilgrims, providing continuity to the urban heritage linked to commerce and the Islamic religion. The Ottoman revived the city (1517 A.D. – 1917 A.D.) when it became the capital of the autonomous sheikdom. The existing trade routes were maintained as the Ottoman routes strengthened, thanks to the railway construction during the late Ottoman years (See Figure 4.21). The line joined Haifa with Damascus

via Acre, shifting Acre's importance to Haifa. During this time, a new city was built over the Crusader ruins. The prominent rulers of this period, Zahir al-Umar and al-Jazzar, undertook ambitious architectural projects linked to trade, like the adaptation of main buildings into caravanserais (khan), accommodation for travellers (See Figure 4.11). The enthusiasm for the city and its tourism potential is expressed by Sir Laurence Oliphant, and is described in his book *Haifa – Living in Modern Israel* at the end of the 19th century as follows:

'Nowhere in the East will you find a more typical market than that of Acre...Acre is a most interesting place to spend a few days, not to mention its delightful antiquities or its new buildings which are undoubtedly worthy of attention...'

Quote by Sir Laurence Oliphant from 'In Haifa – Living in Modern Israel' (Dana, 1886)

The religious value created during the Crusader period prevailed and materialised with the construction of mosques. Also, the presence and influence of the Baha'i faith should be noted. The religious leader and founder of this religion, Baha'u'llah, lived and died in Acre (1868-1892), leaving prominent sacred places for Baha'is and Baha'i pilgrimage sites in the city: the mansion, the shrine, and surrounding gardens.

Expansion of the city and the development of tourism

After 500 years under the Ottoman government, the British (1917 A.D. – 1948 A.D.) overtook Acre. At the regional level, during the end of the 19th century, the port of Haifa gained importance, shifting Acre's trade activities to the new and more significant port (See Figure 4.22). Acre would remain a fishing and craftsmanship town, its trade value having been lost. The railway continued to increase in importance as more lines were built by the Palestine Railways government company.

The city was reconstructed and expanded (See Figure 4.12). On the one hand, the British converted the fort into a prison; on the other, they developed the new city of Acre extra-murus. The design of the further expansion followed an orthogonal grid in contrast with the organic pattern of the Old City (See Figure 4.13).

In 1948, the State of Israel was founded. The regional significance of Acre was maintained as a fishing port, and its importance resided in its political value linked to the Israeli-Palestinian conflict, which drove constant demographic change until

the 1990s (Central Bureau of Statistics, Government of Israel, 2018; Della Pergola & Jewish People Policy Institute, 2011). In 2001, the World Heritage nomination repositioned Acre as a touristic destination (World Heritage Centre, 2001).

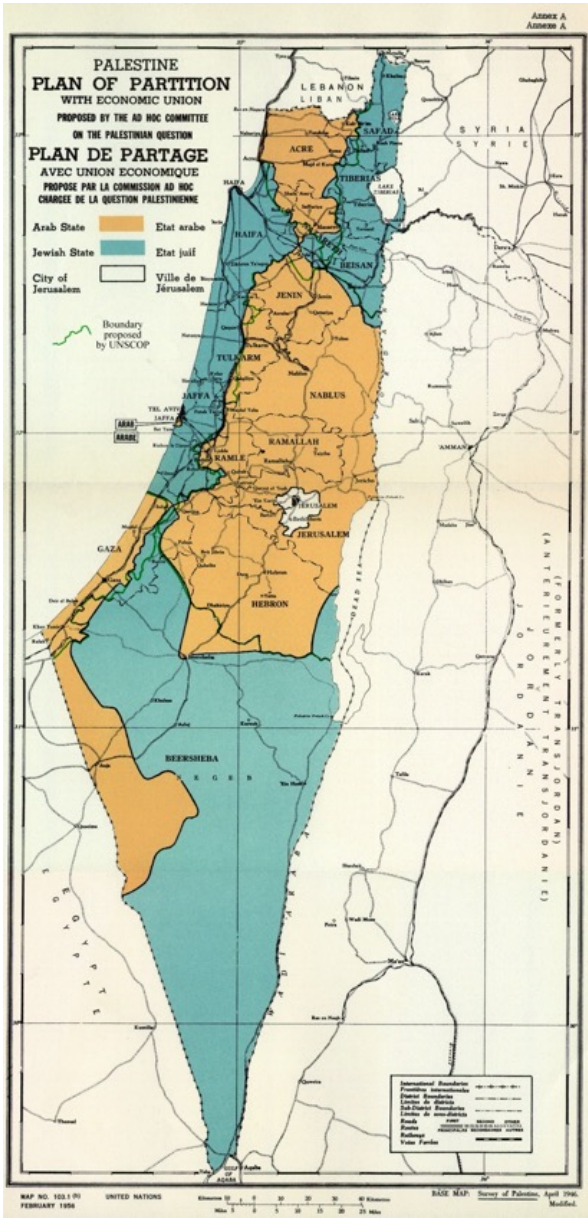


FIG. 4.6 February 1956 Map of UN Partition Plan for Palestine, adopted on 29 Nov 1947, with boundary of previous UNSCOP partition plan added in green

The migration of Jewish people from all over the world influenced the urban development of Acre, which underwent its most extensive expansion up to the city's current boundaries (See Figure 4.14). This new fabric followed modern values; the British Mandate adjacent areas maintained their street alignment and plot proportions, as well as materiality and style. The contemporary infrastructure contrasts with the Old City, including the railway, a broader and orthogonal street grid, a planned water and electricity system, and other updated elements.

Set of maps

Port City Attributes

Bronze Age: 3000 B.C.

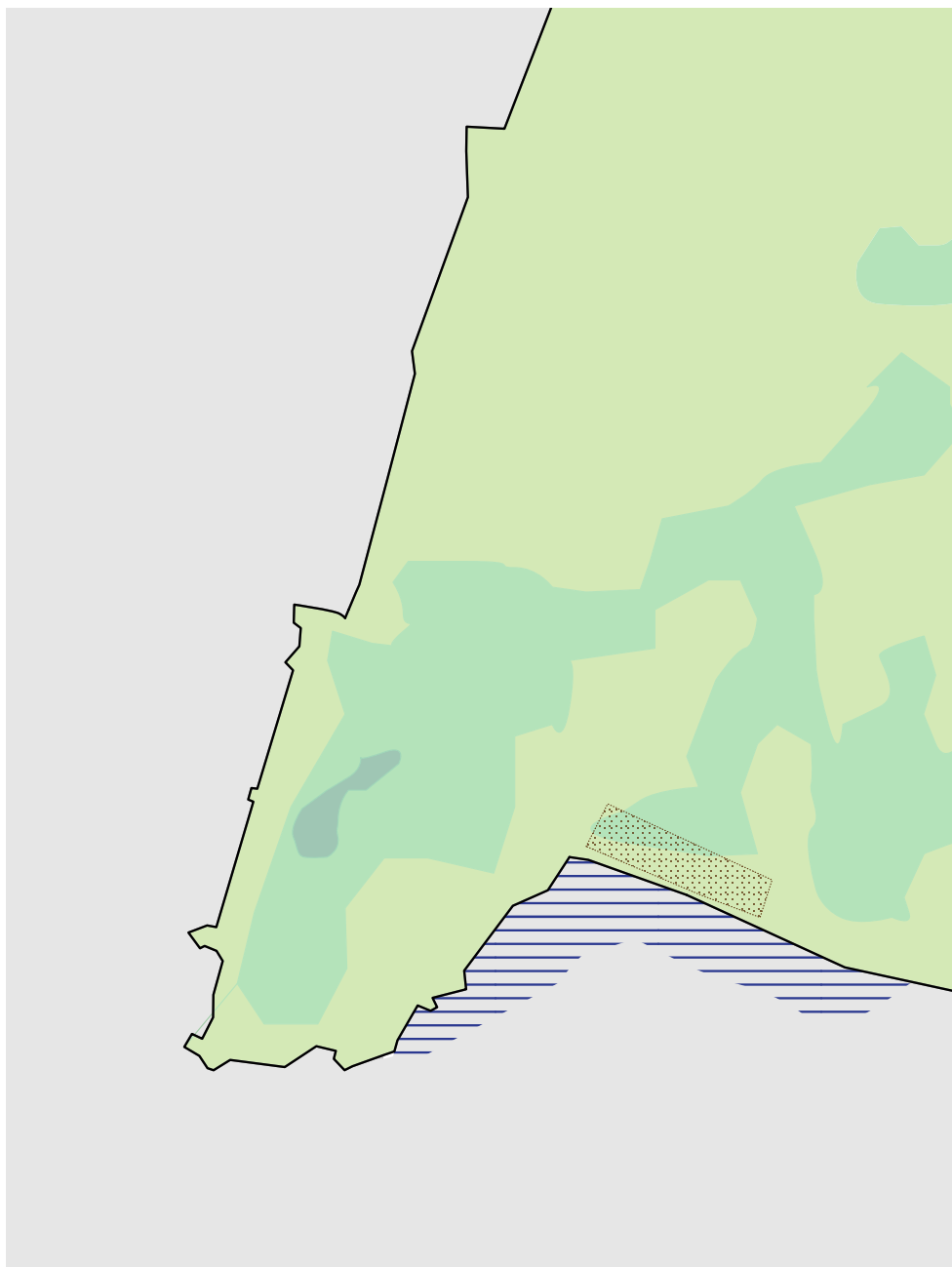
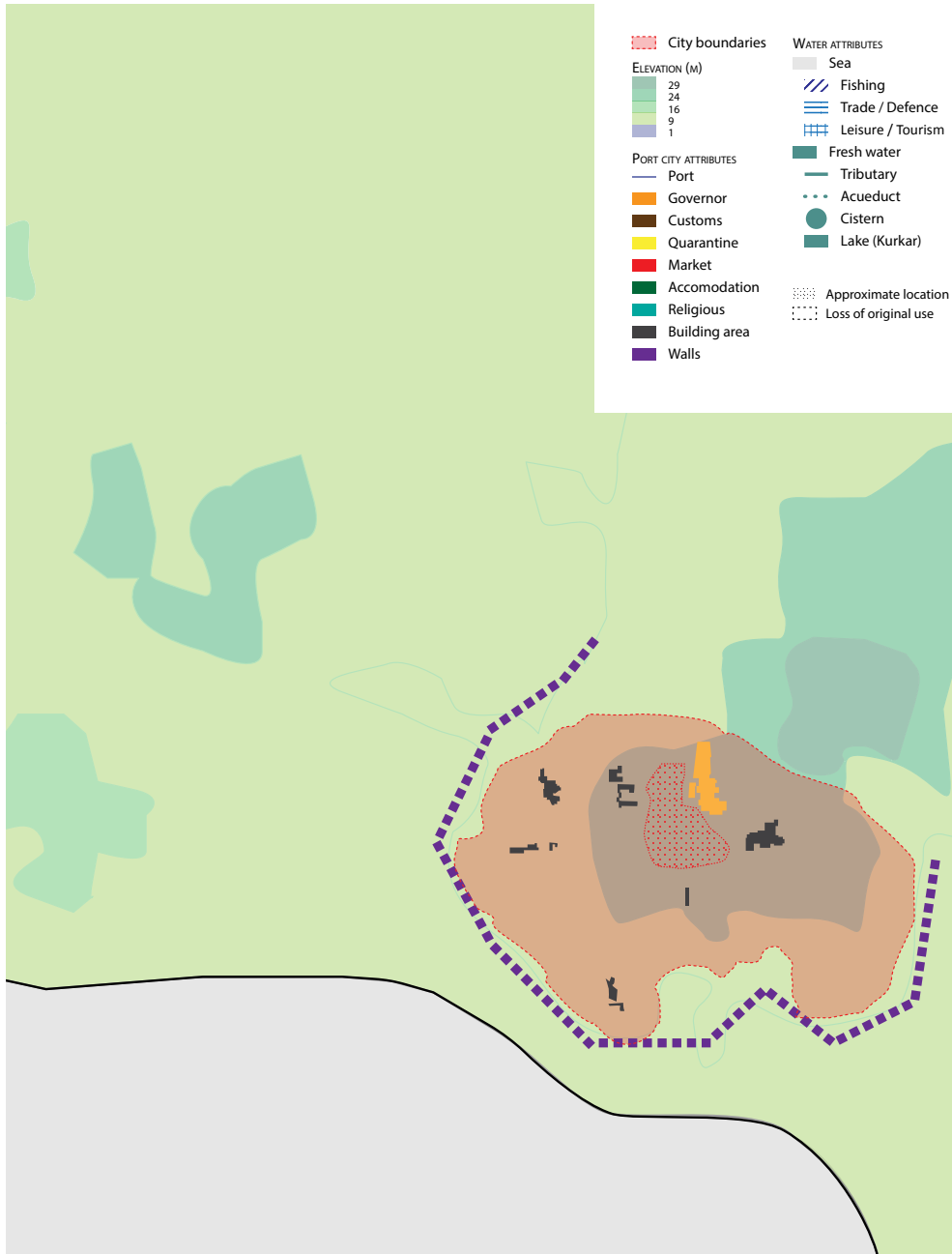


FIG. 4.7 Map of Acre – Bronze Age | Port city attributes



Hellenistic / Roman Period

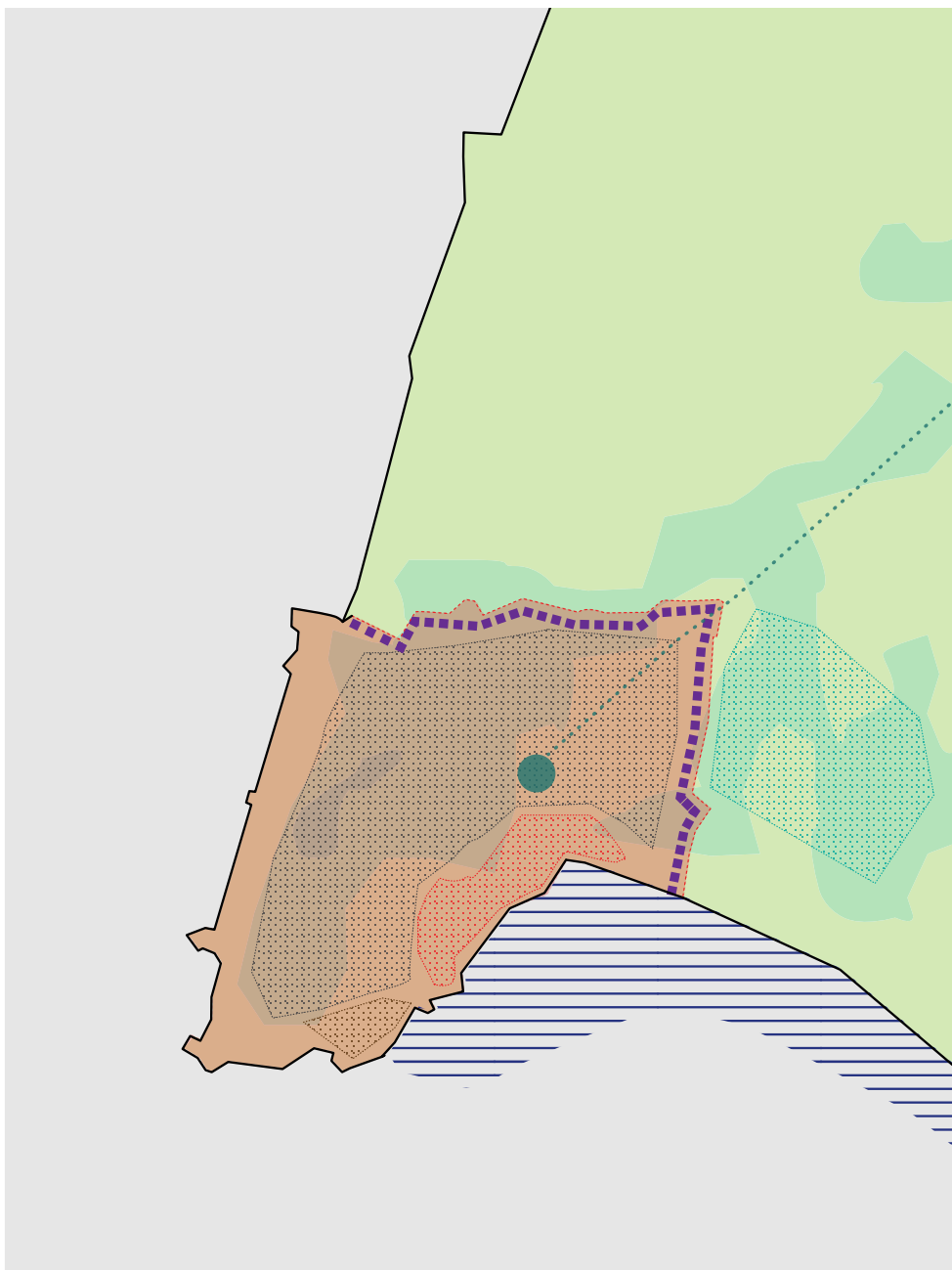
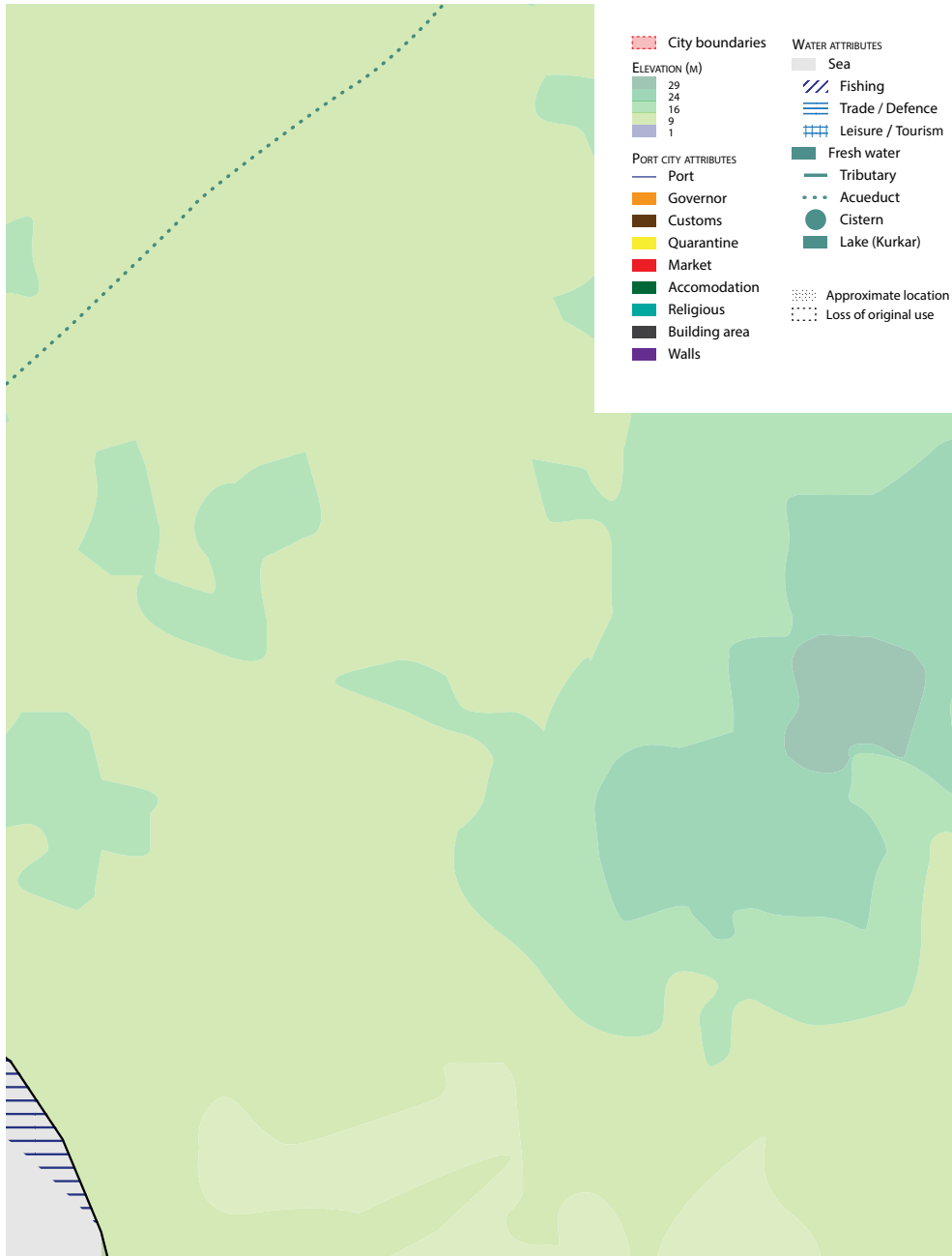


FIG. 4.8 Map of Acre – Hellenistic / Roman period | Port city attributes



Early Arab Period

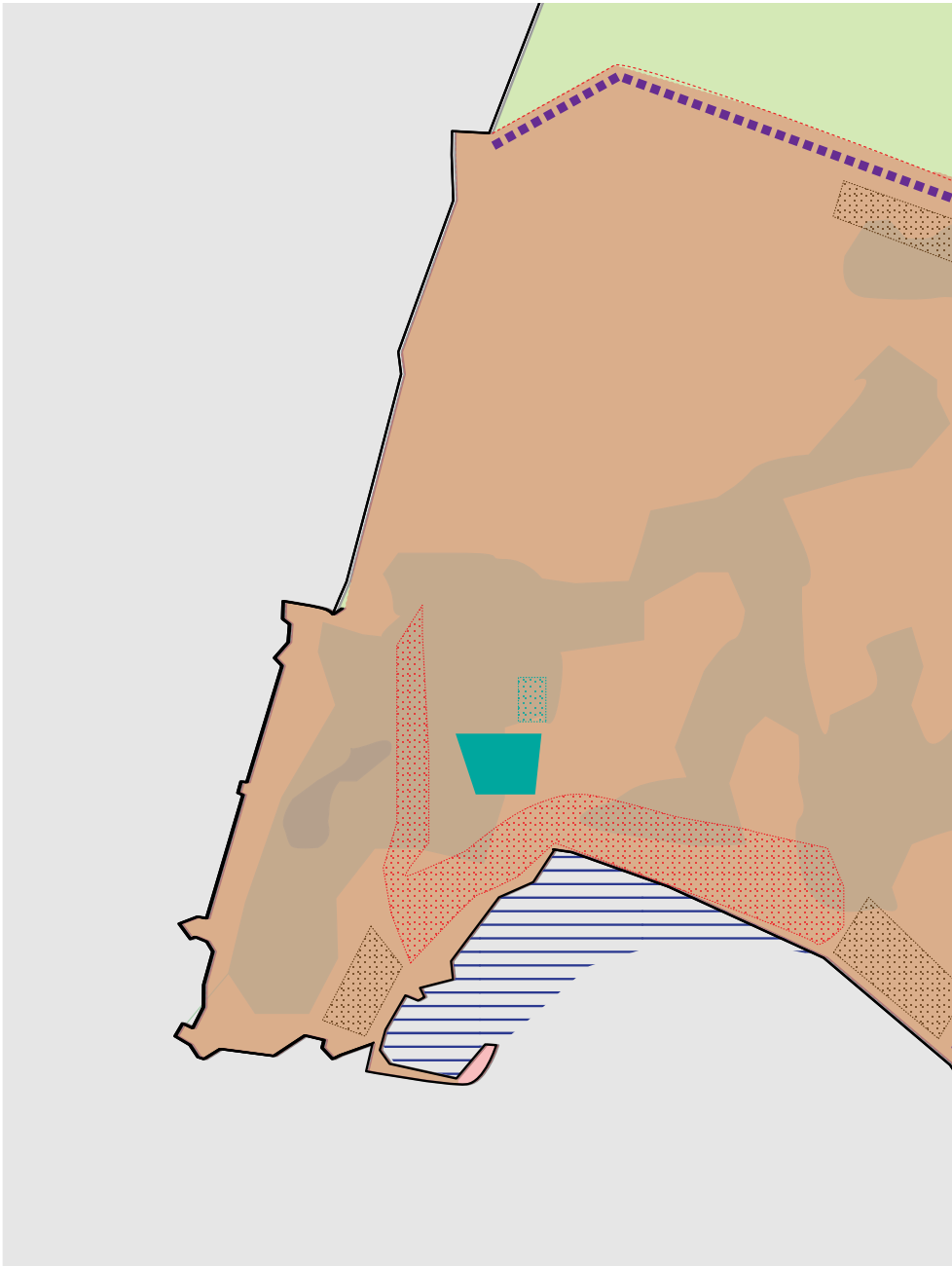
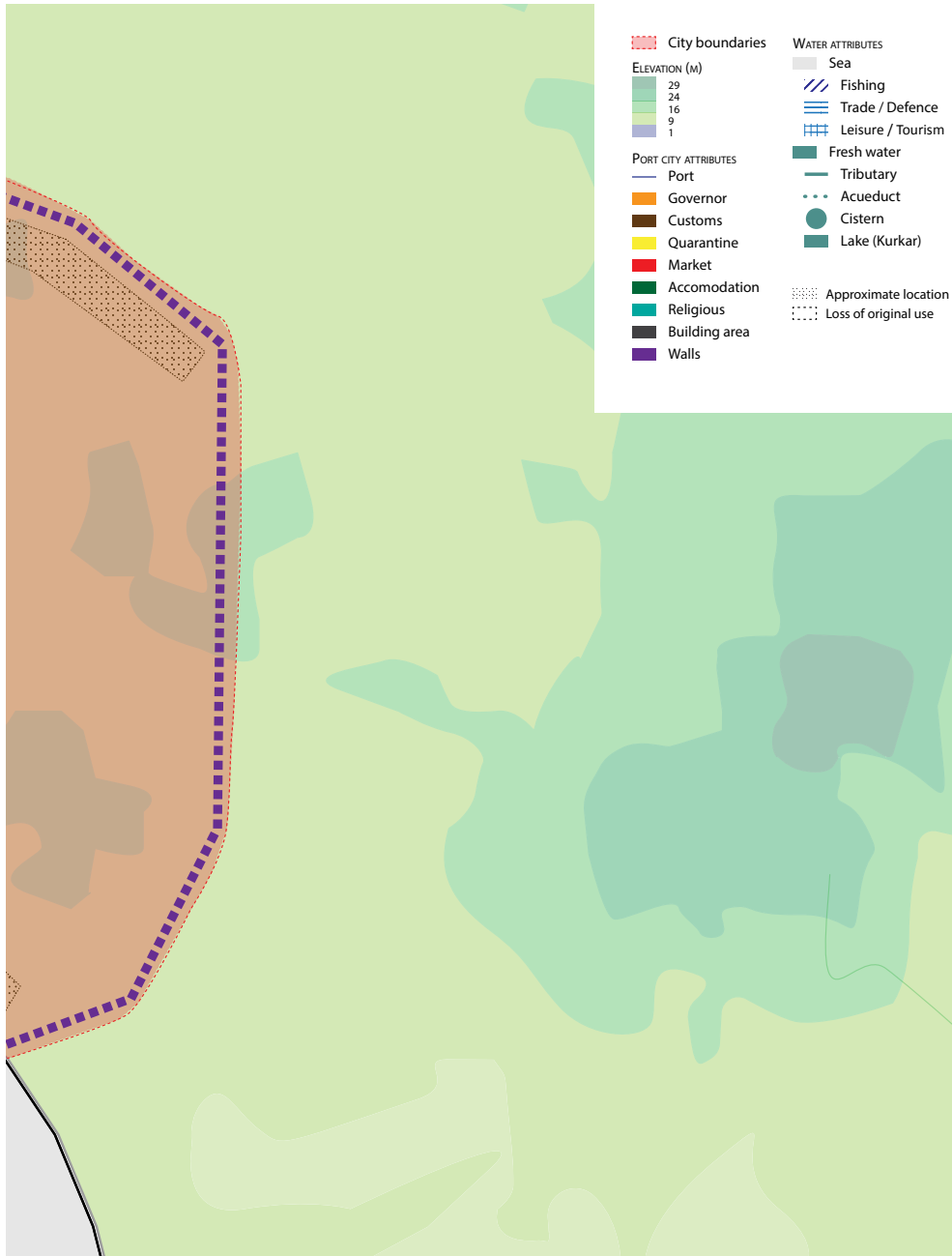


FIG. 4.9 Map of Acre – Early Arab period | Port city attributes



Crusader Period

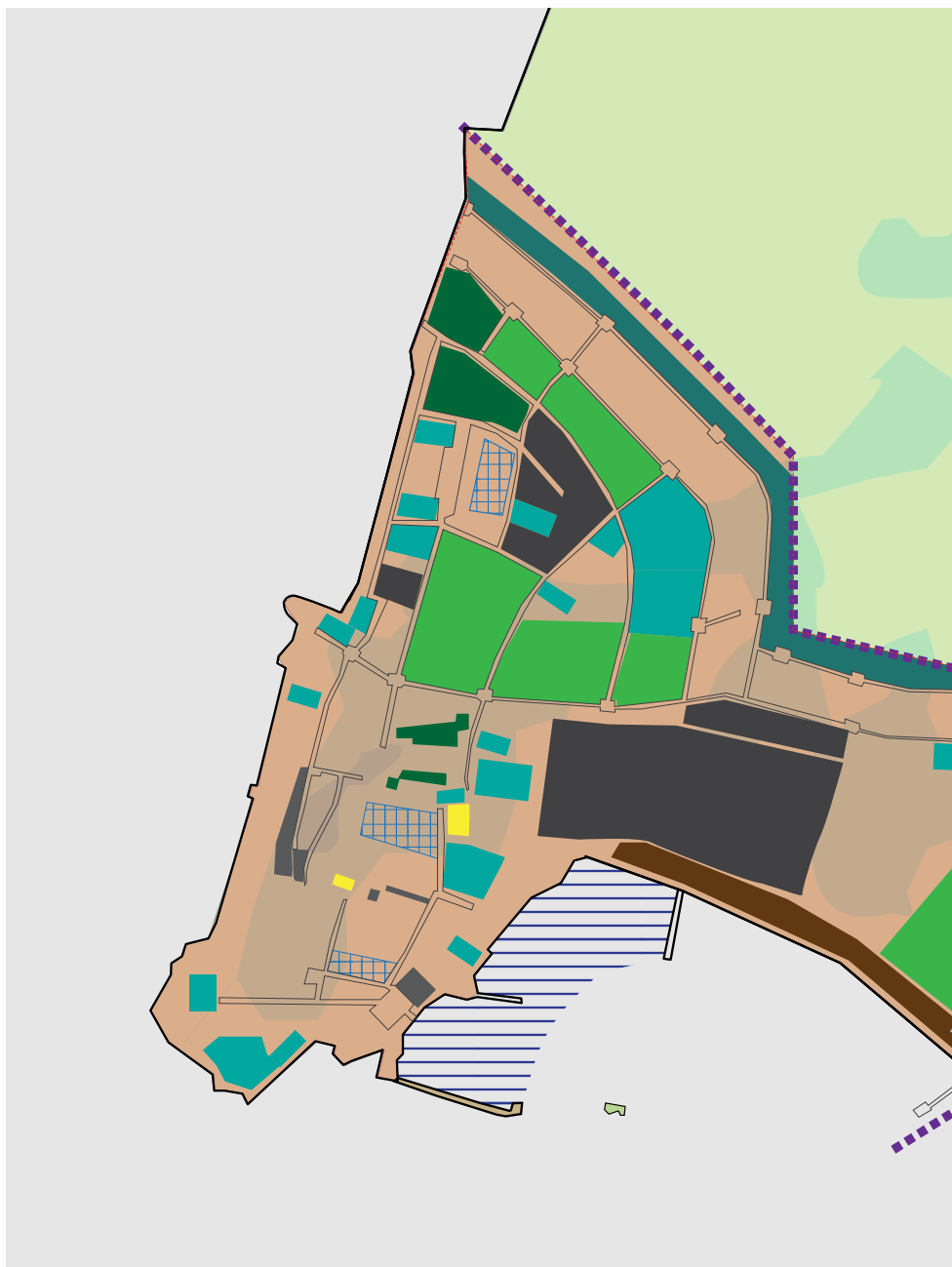
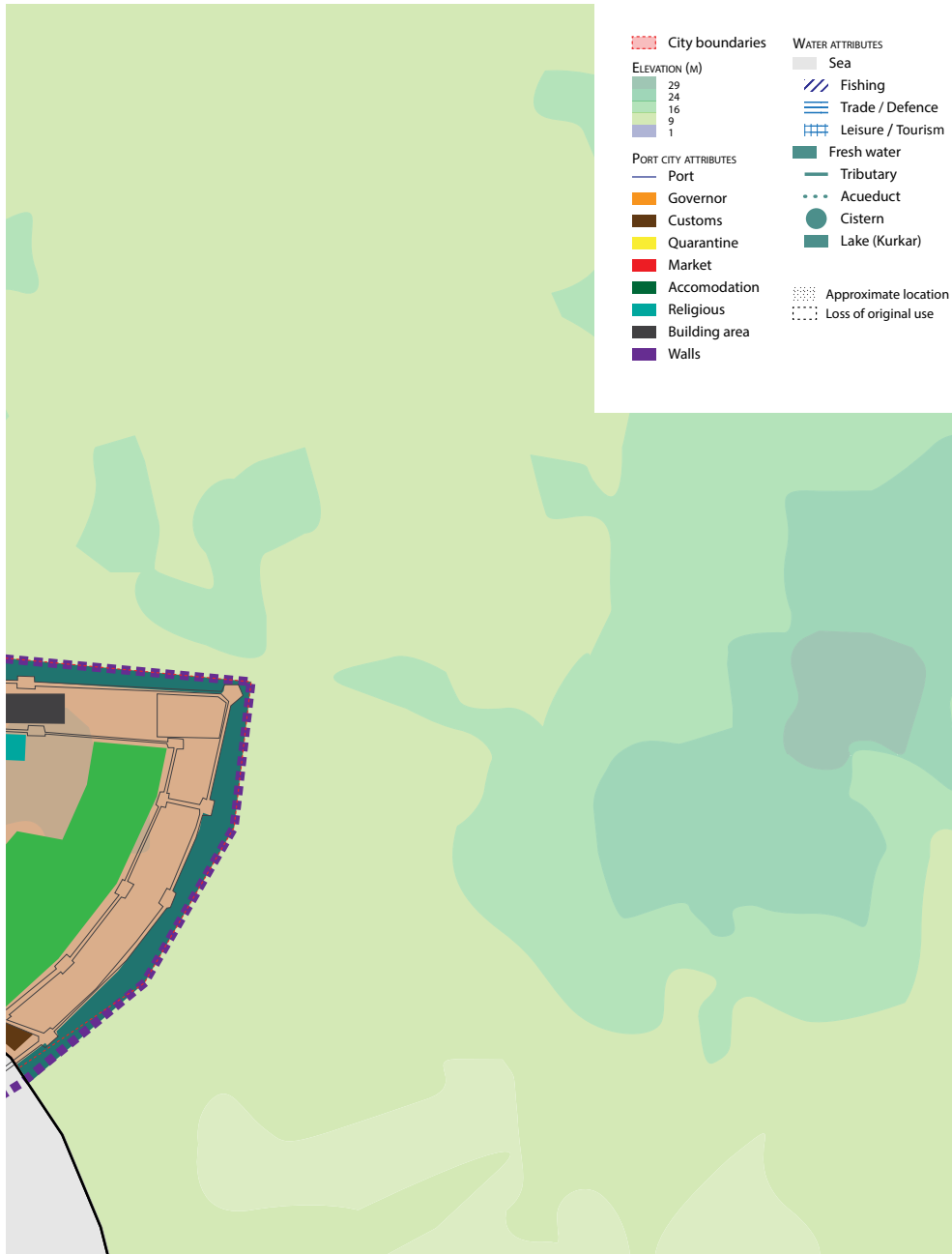


FIG. 4.10 Map of Acre – Crusader period | Port city attributes



Ottoman Empire:

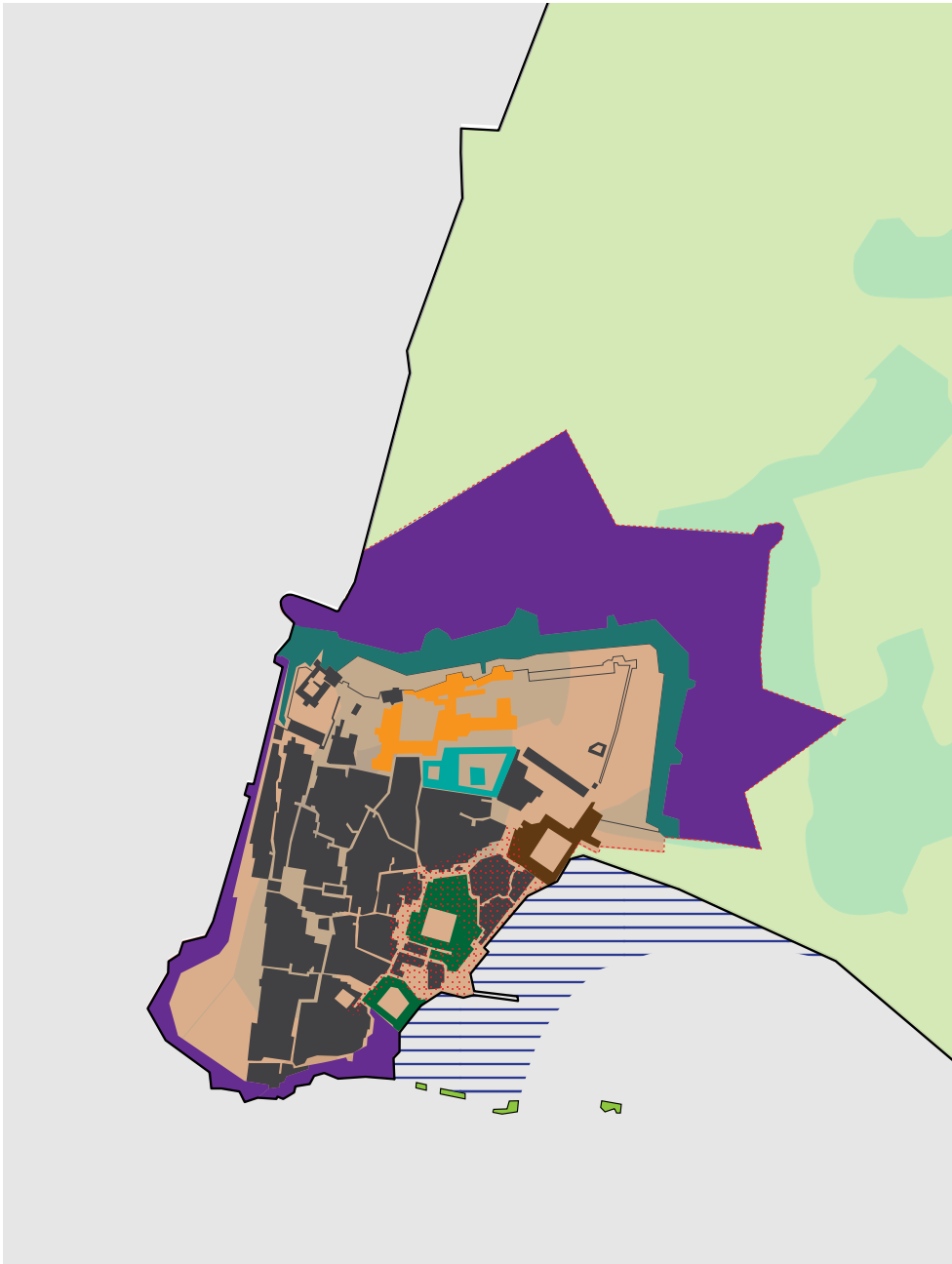
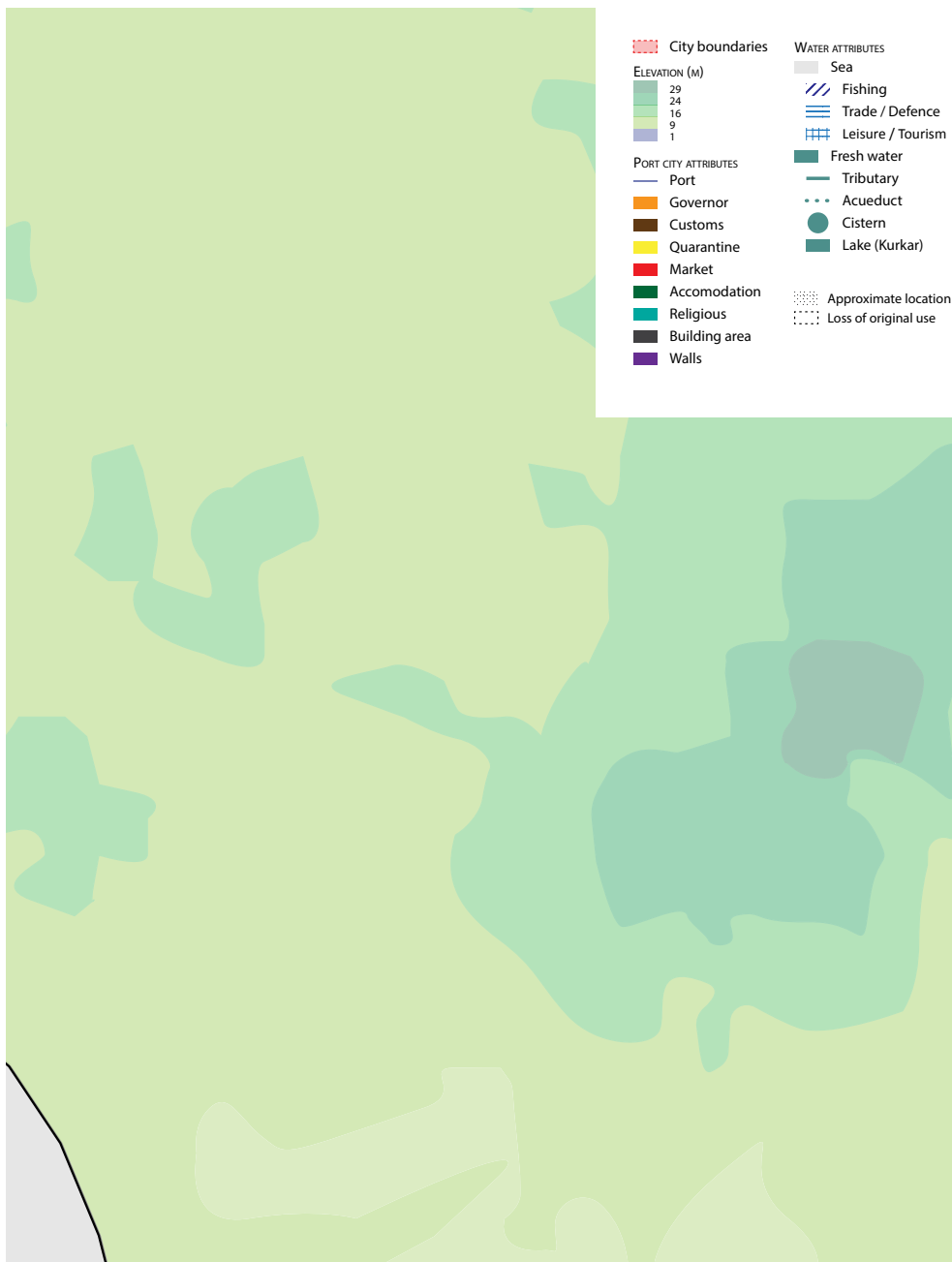


FIG. 4.11 Map of Acre – Ottoman Empire | Port city attributes



British Mandate:

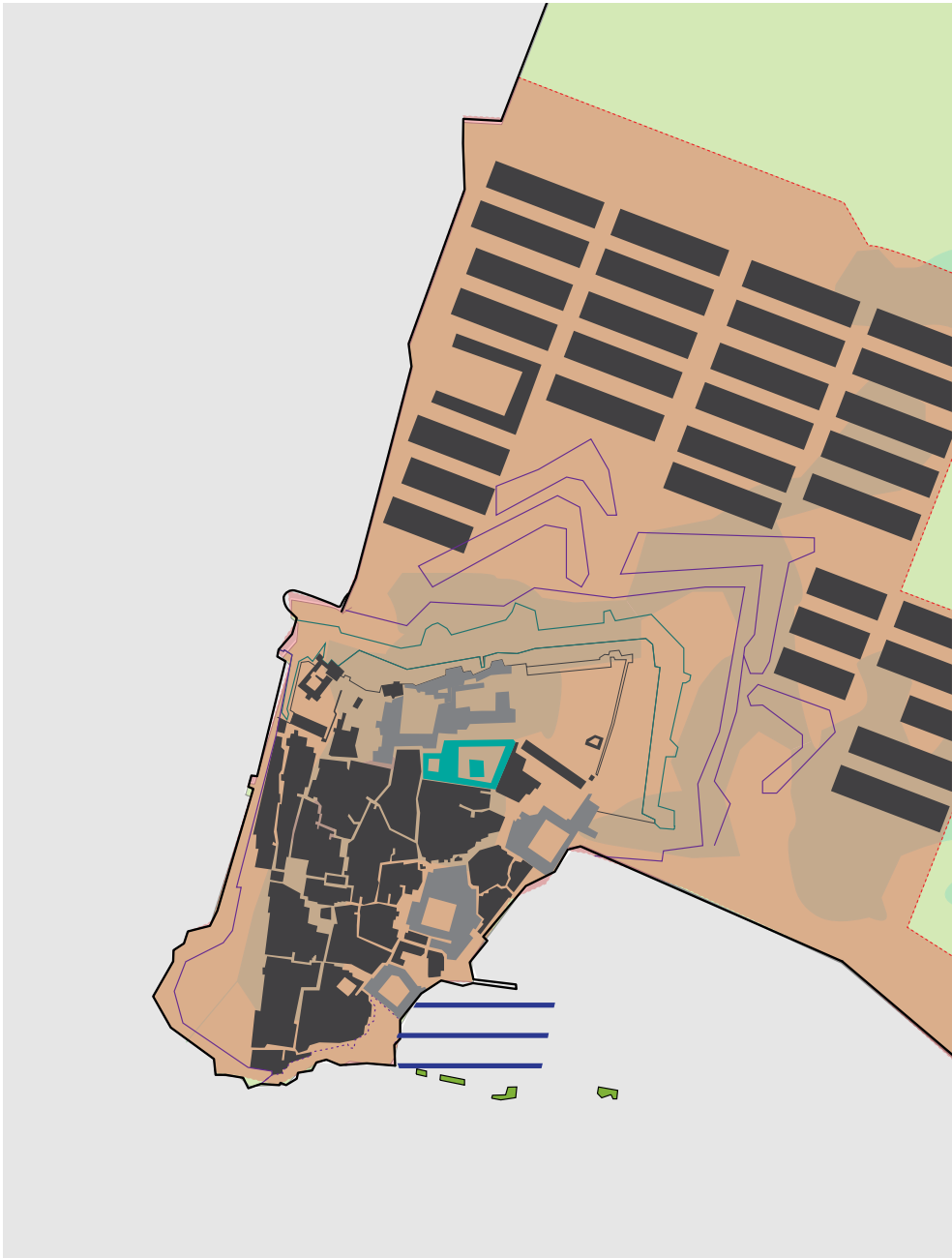
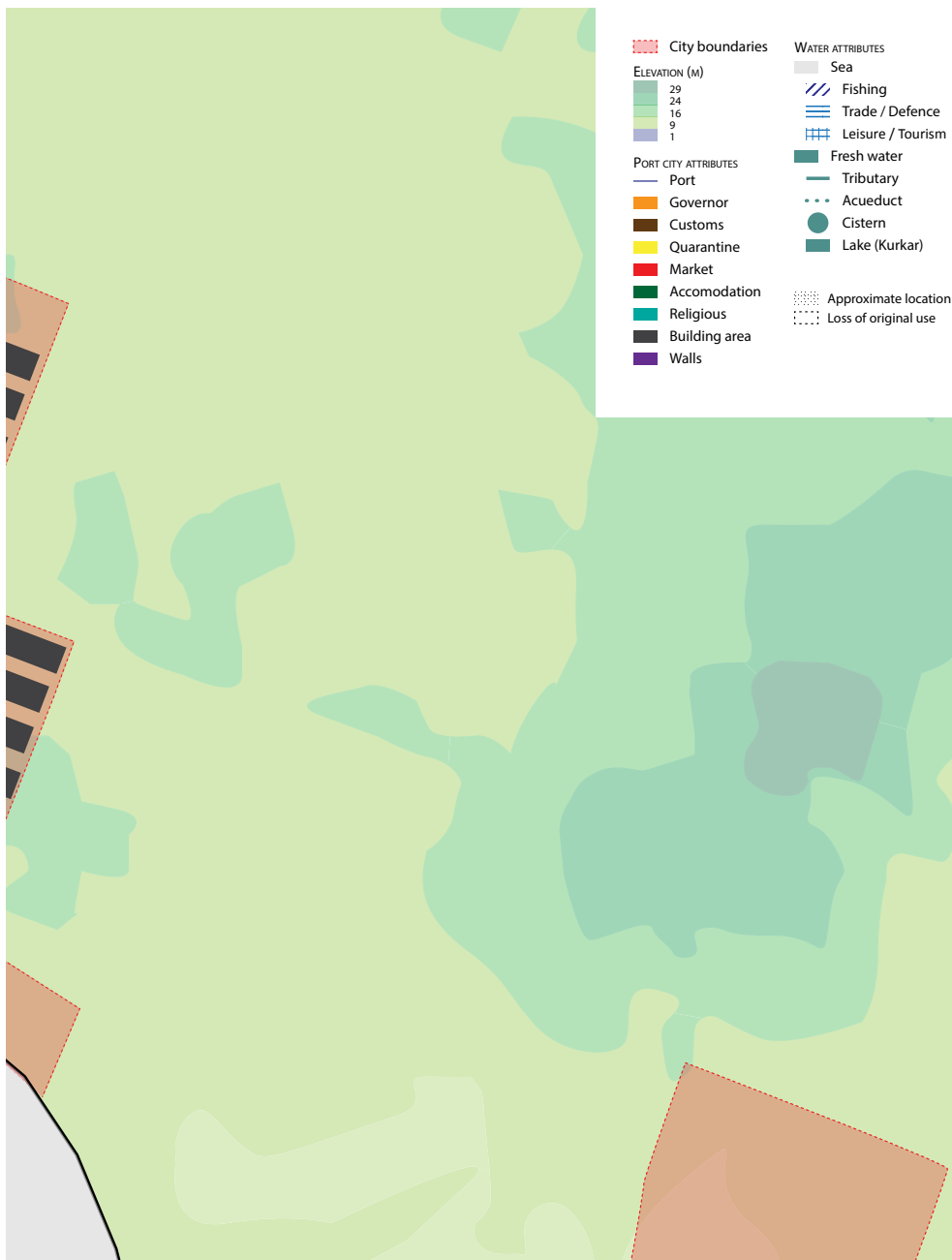


FIG. 4.12 Map of Acre – British Mandate | Port city attributes



British Mandate:

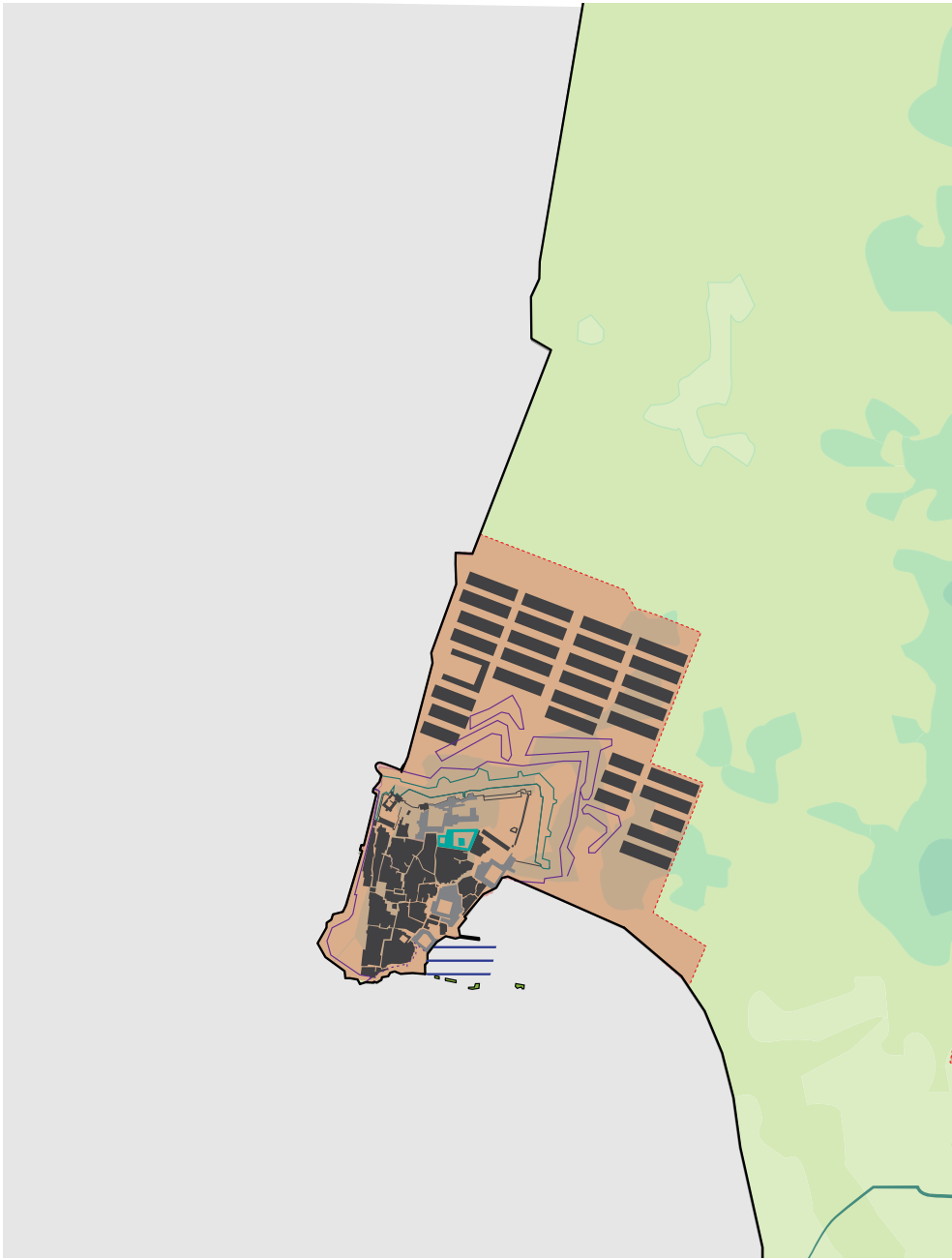
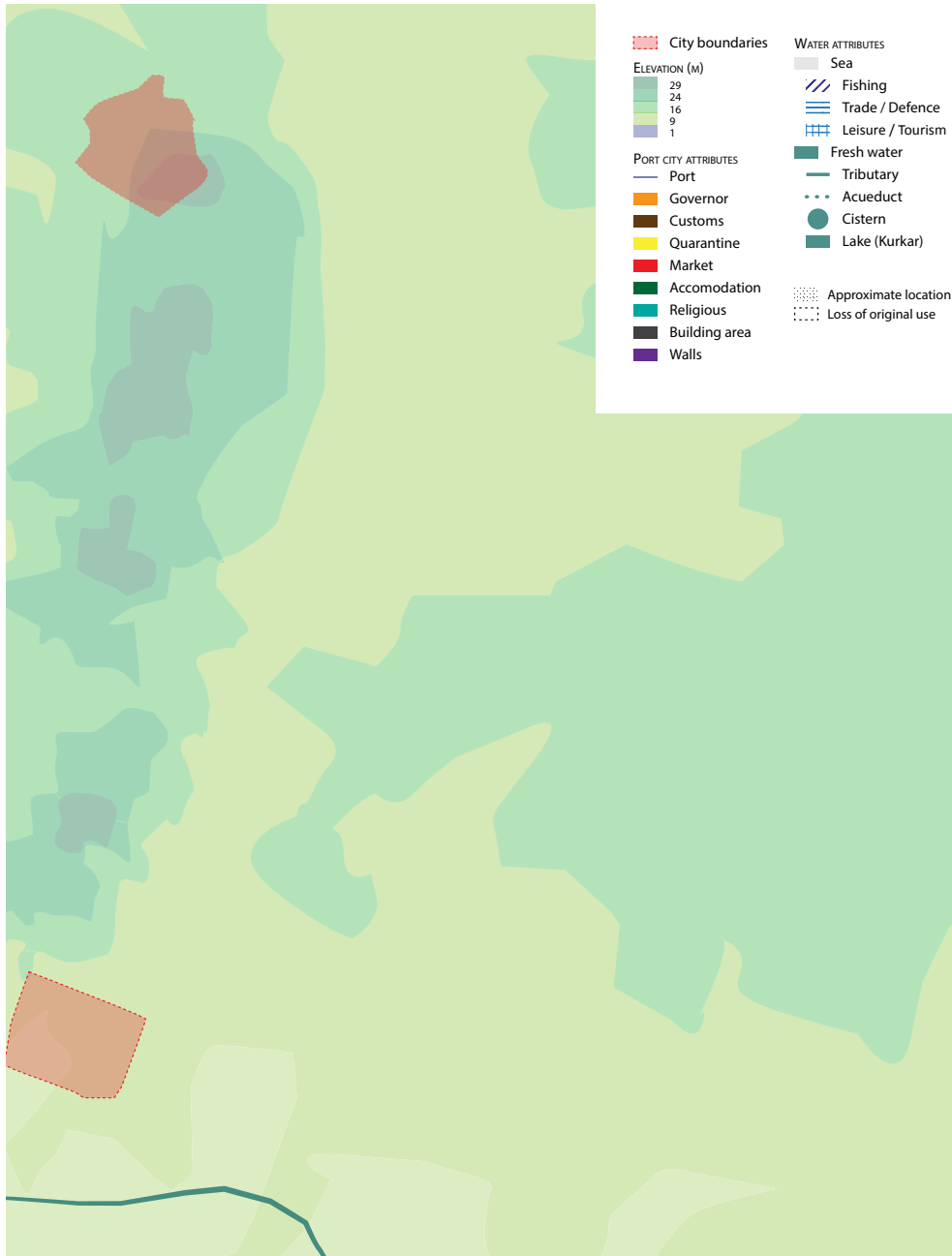


FIG. 4.13 Map of Acre – British Mandate (larger scale) | Port city attributes



State of Israel: 1948 - present



FIG. 4.14 Map of Acre – State of Israel (large scale) | Port city attributes



Set of maps

Historical, Trade and
Religious Routes

Bronze Age: 3000 B.C.

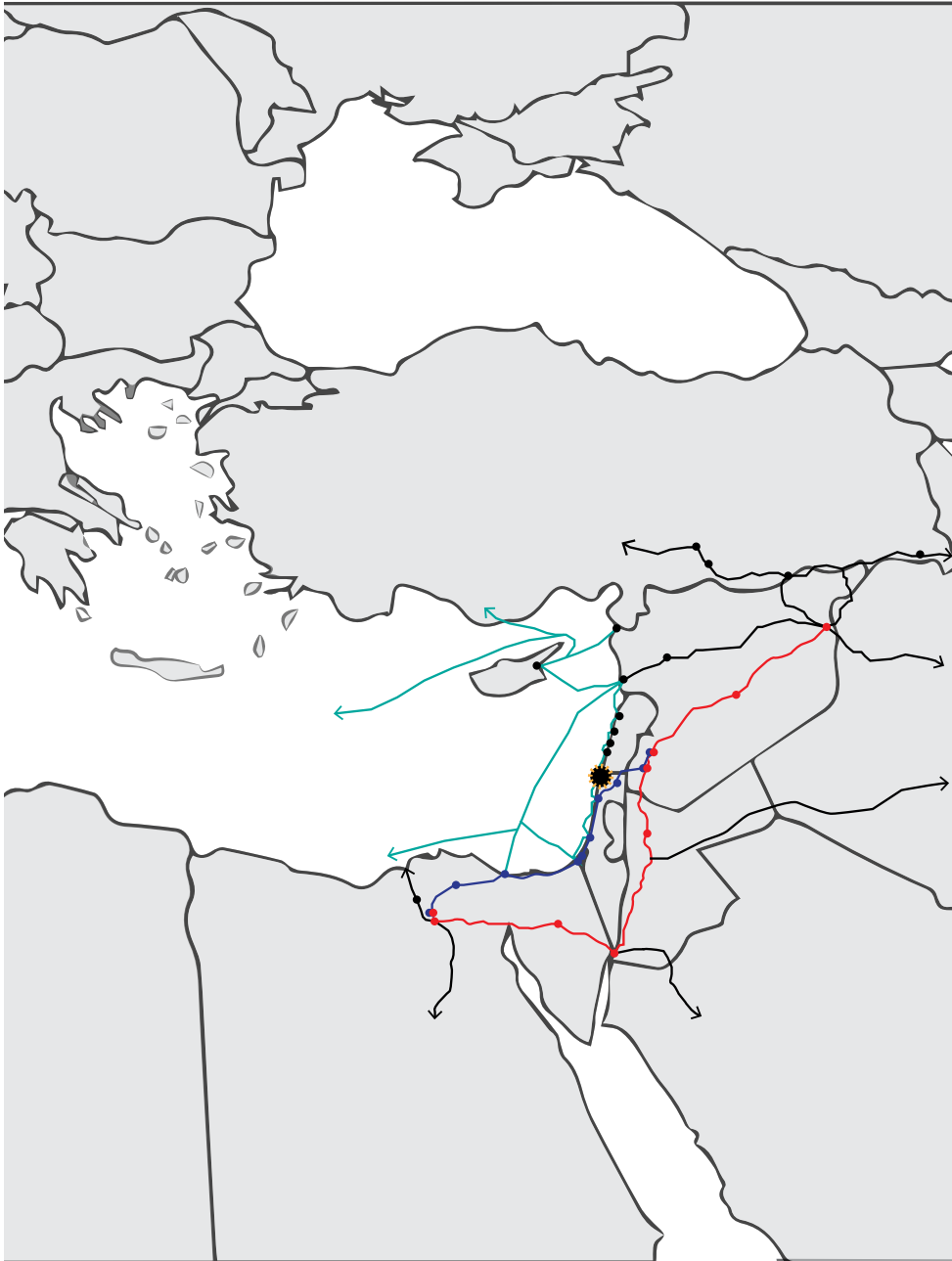


FIG. 4.15 Historical, Trade and Religious routes connected to Acre in the Mediterranean Basin – Bronze Age

Phoenician States



FIG. 4.16 Historical, Trade and Religious routes connected to Acre in the Mediterranean Basin – Phoenician States

Roman Empire

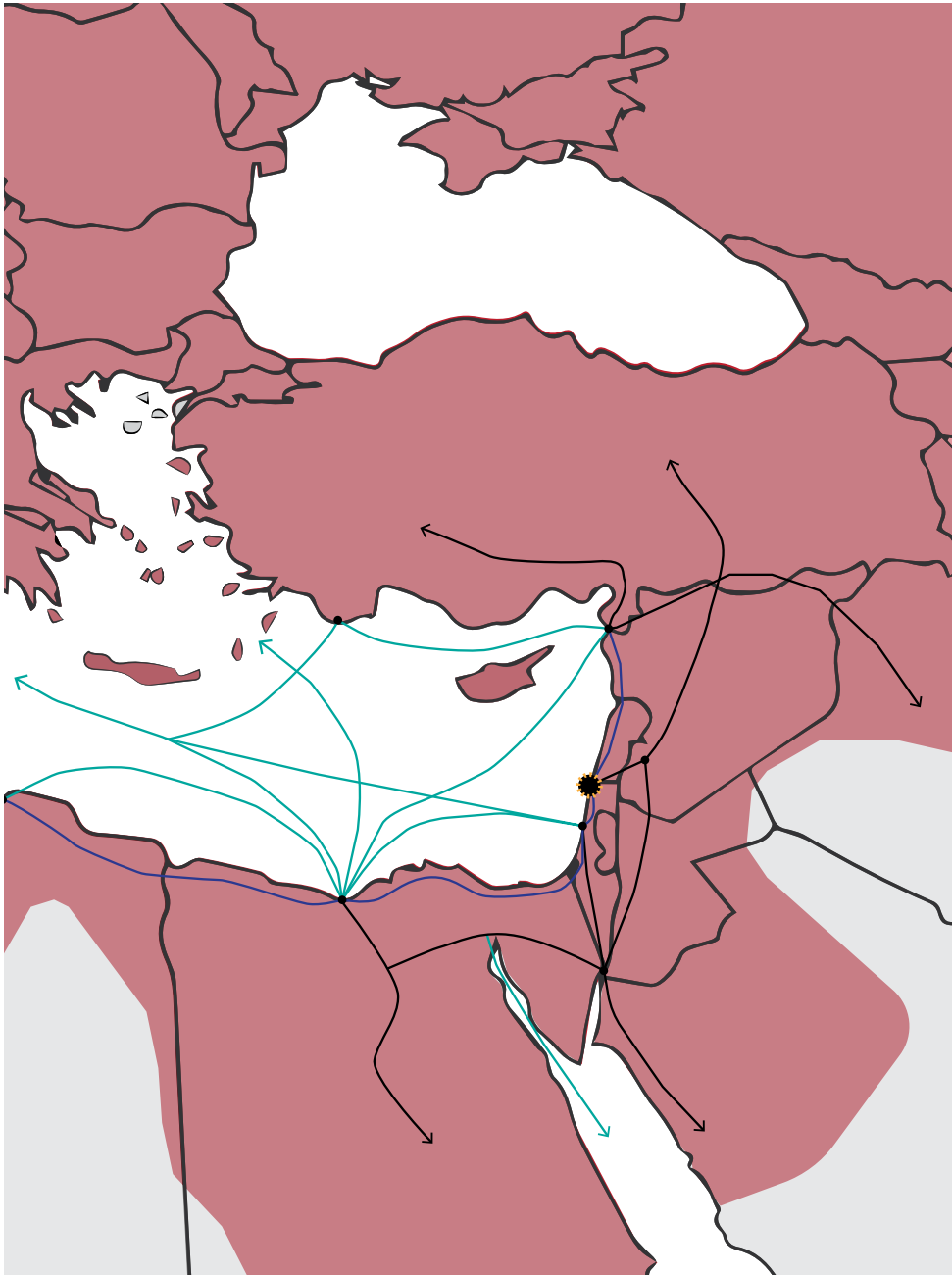


FIG. 4.17 Historical, Trade and Religious routes connected to Acre in the Mediterranean Basin – Roman Empire

Mamluk Kingdom

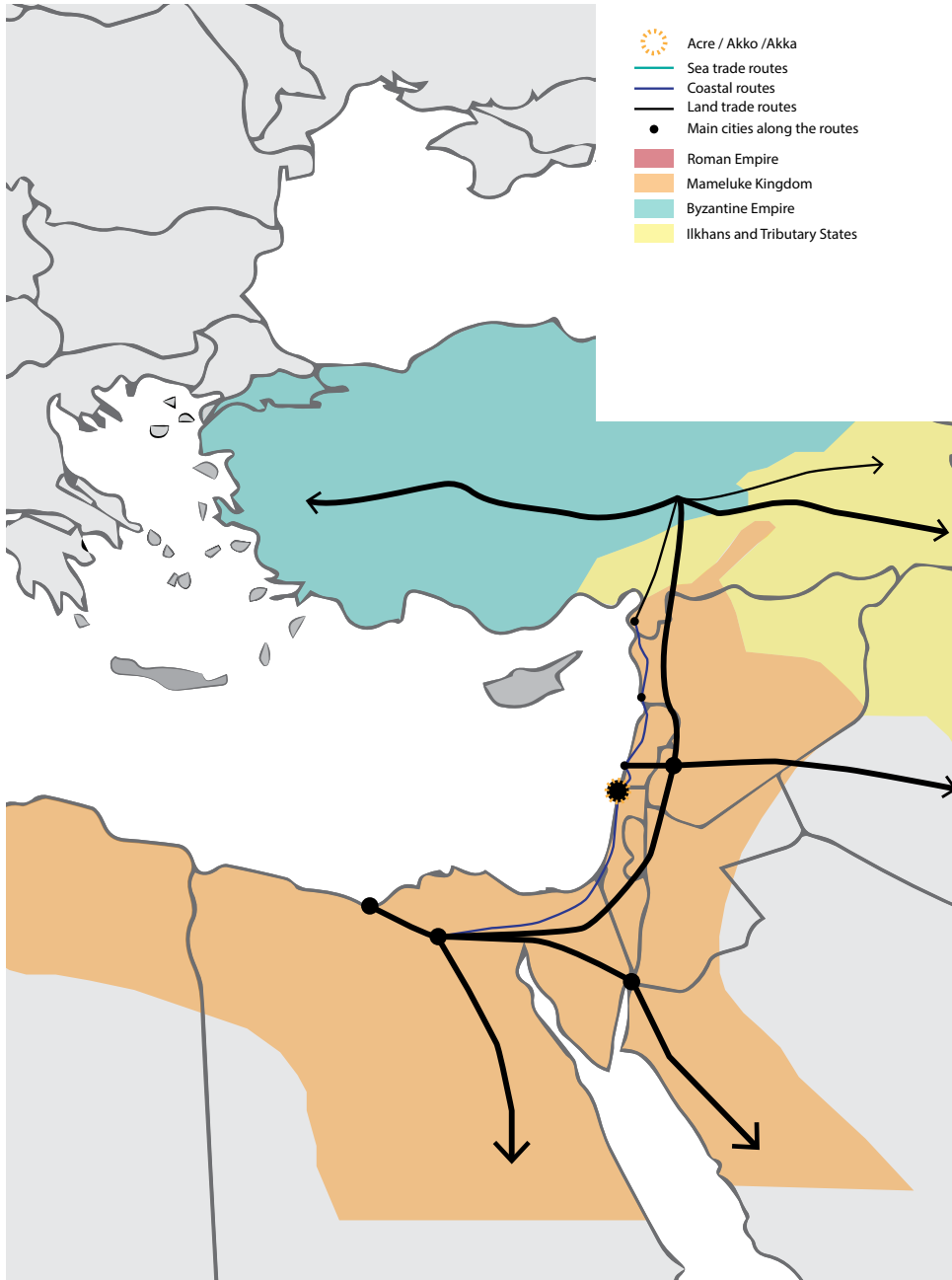


FIG. 4.18 Historical, Trade and Religious routes connected to Acre in the Mediterranean Basin – Mamluk Kingdom

Byzantine Empire

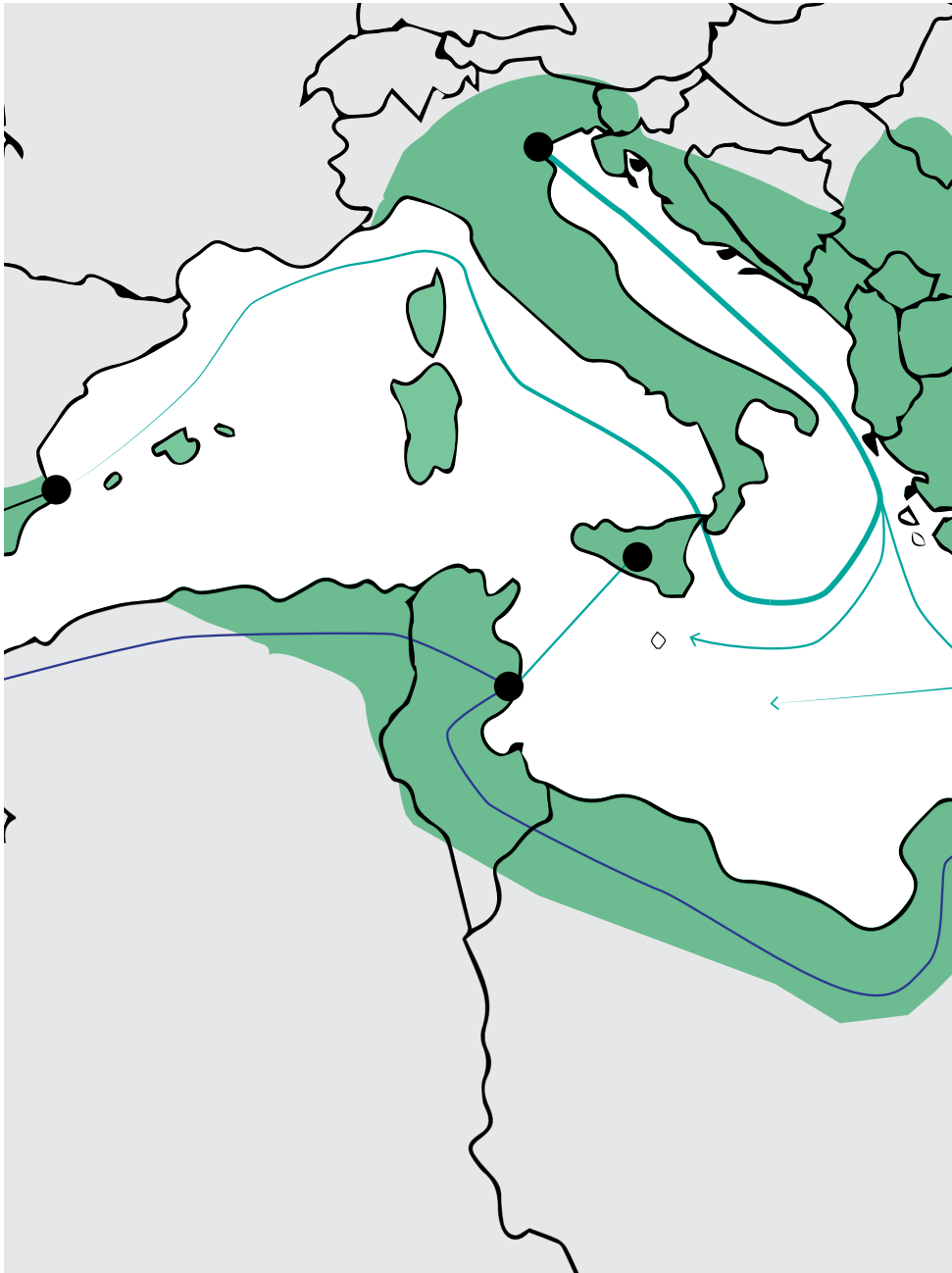
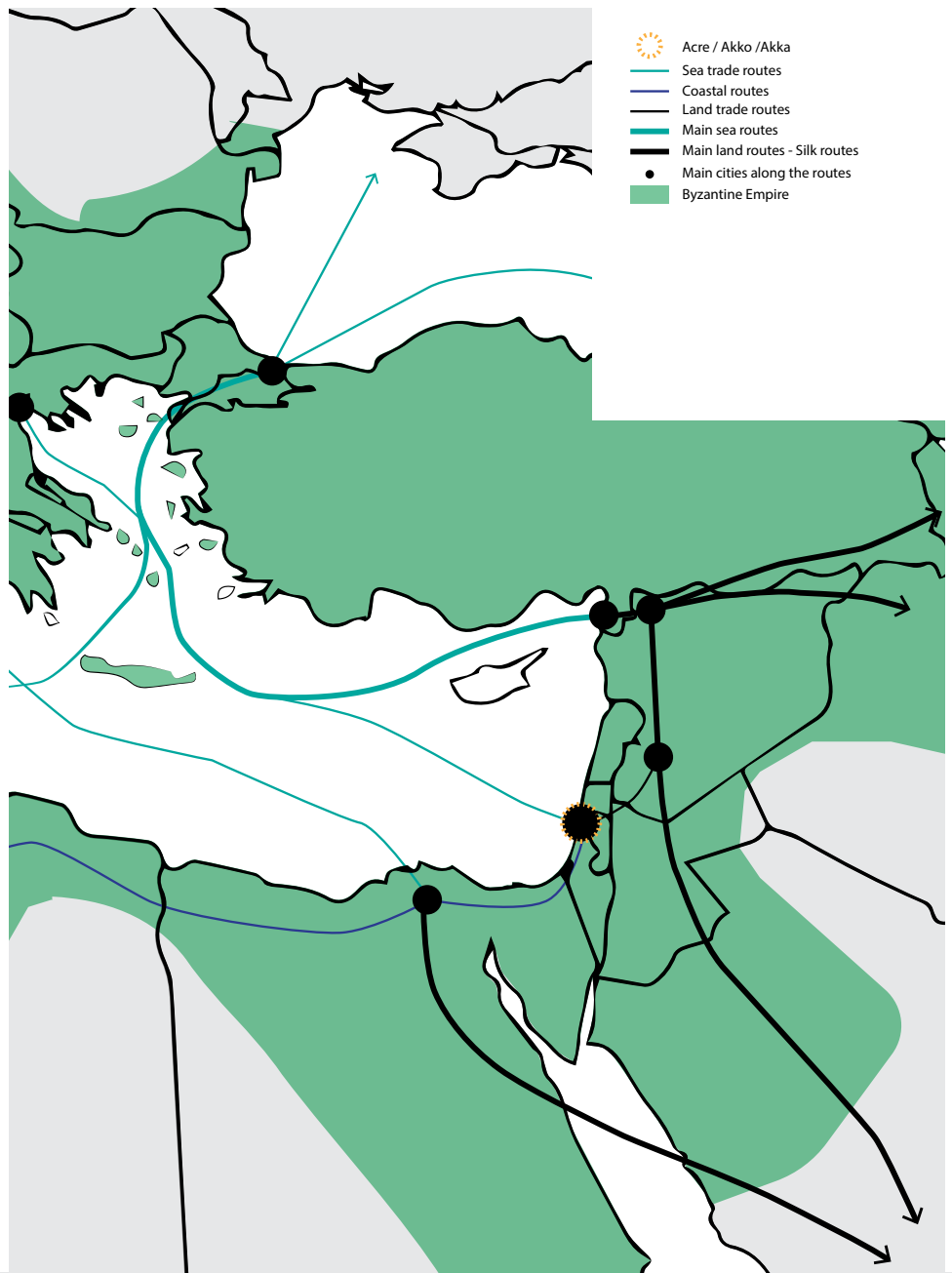


FIG. 4.19 Historical, Trade and Religious routes connected to Acre in the Mediterranean Basin – Bizantine Empire



Crusader Period

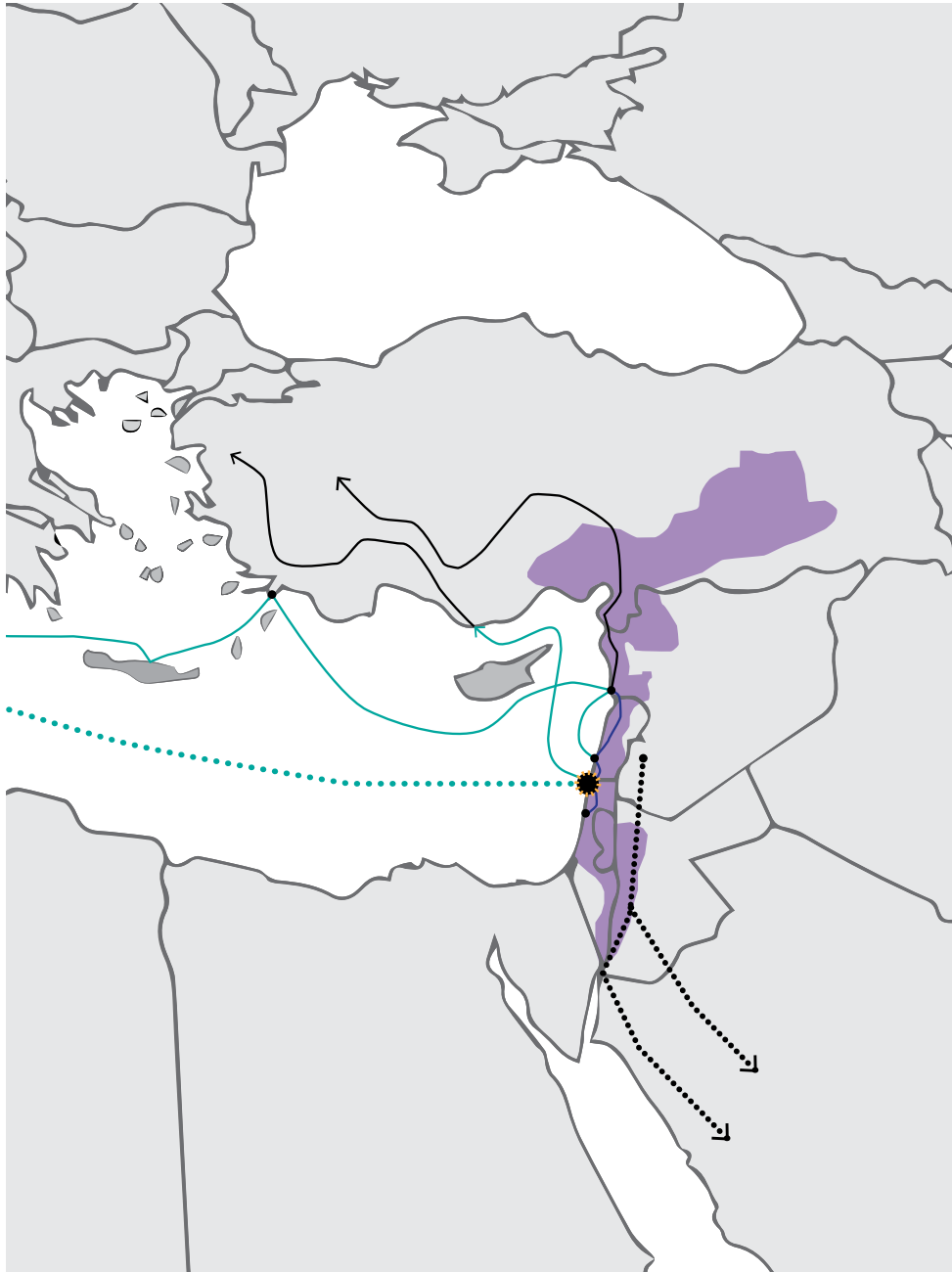


FIG. 4.20 Historical, Trade and Religious routes connected to Acre in the Mediterranean Basin – Crusader Period

Ottoman Empire

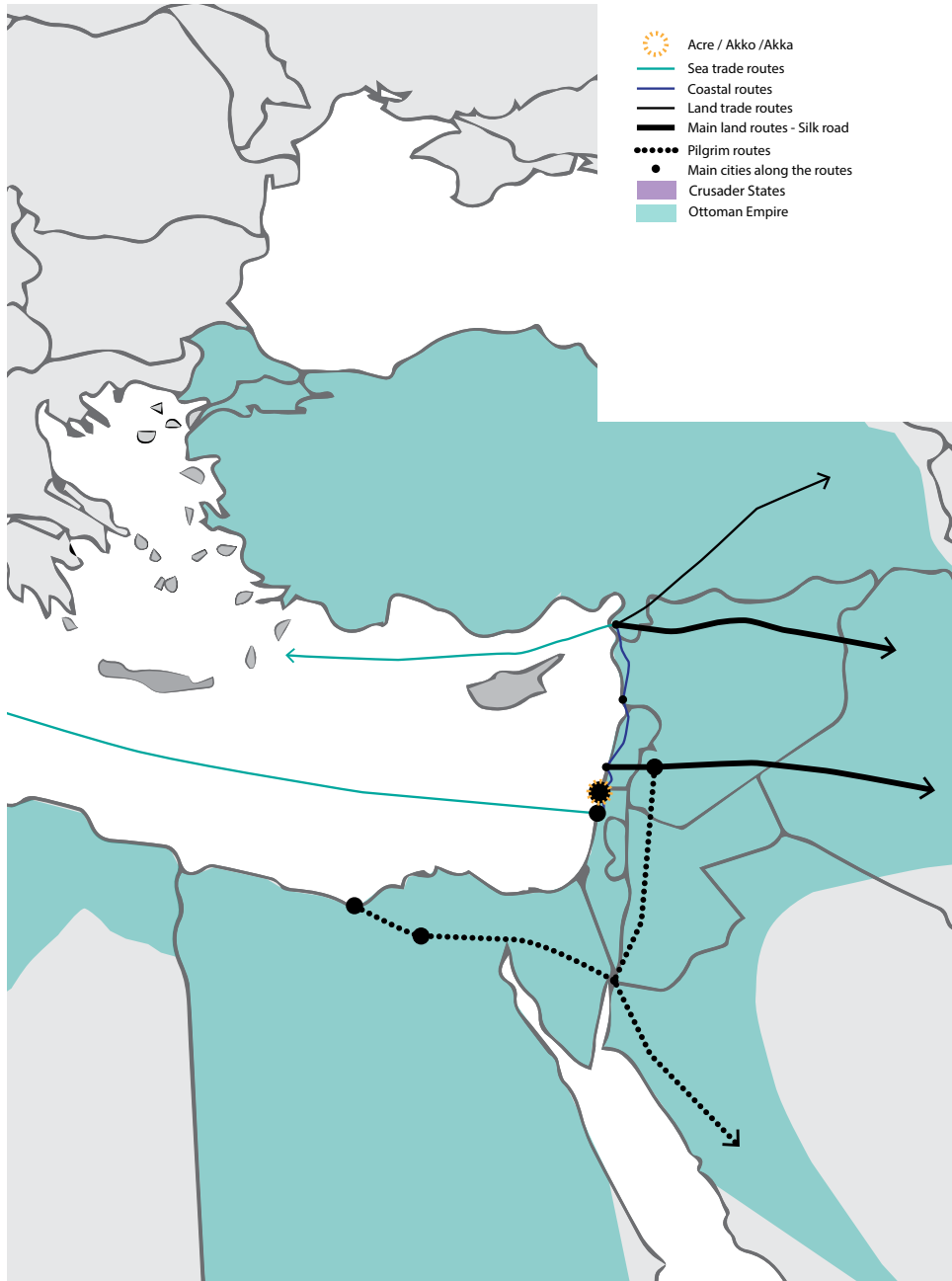


FIG. 4.21 Historical, Trade and Religious routes connected to Acre in the Mediterranean Basin – Ottoman Empire

British Empire

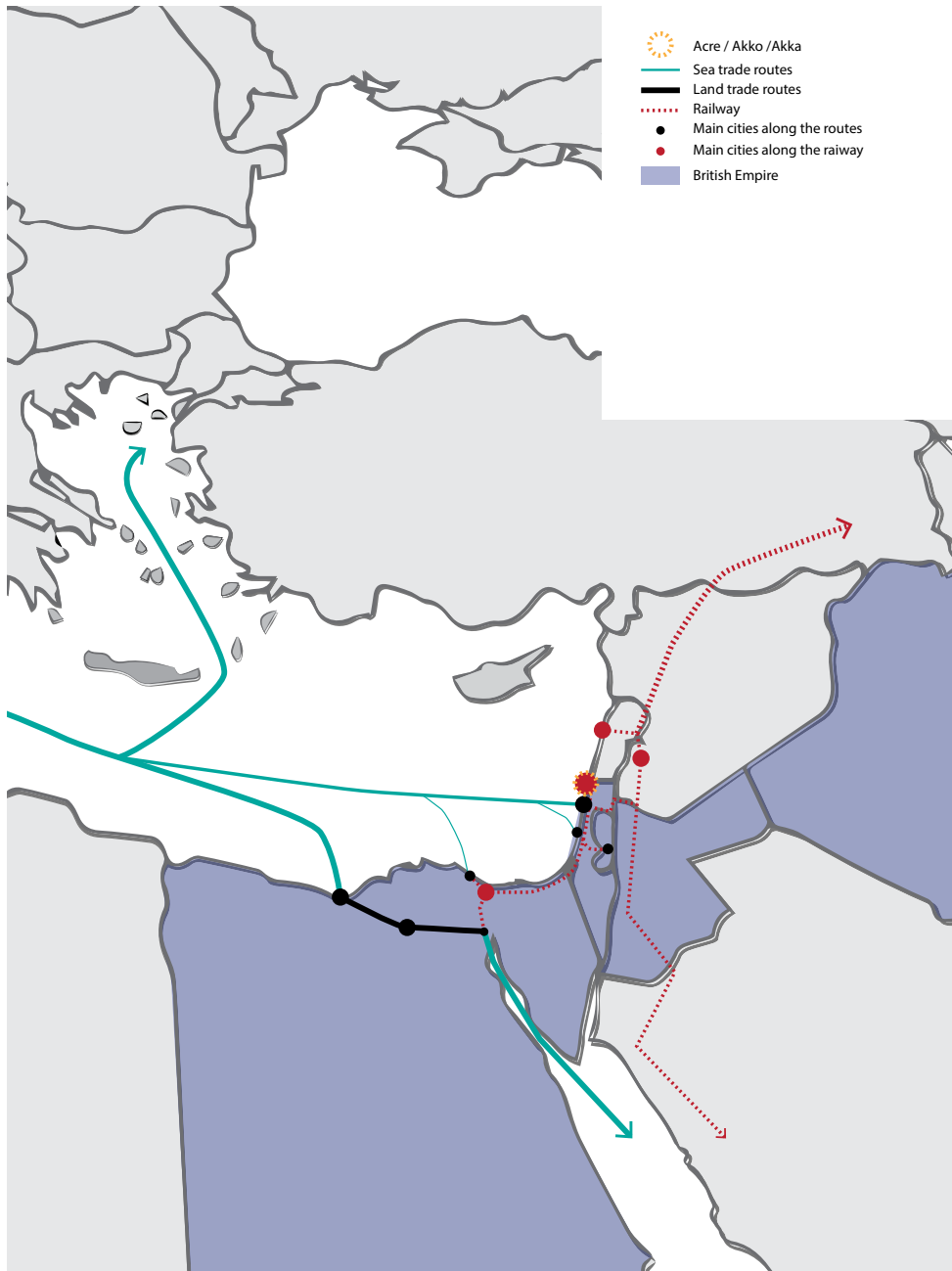


FIG. 4.22 Historical, Trade and Religious routes connected to Acre in the Mediterranean Basin – British Empire

C Main Takeaways from the set of Maps

These two set of maps provide extensive information and they can be used for multiple purposes. In the case of this chapter, the maps support the response to research questions SQ1 and SQ2.

First, we find **various commonalities** among all the periods:

I The access to fresh water is highly important

Although the way to access it changes over time (Bronze Age – Tributary river > Roman – Aqueduct, Cistern, and fountain network > Ottoman – Aqueduct (old and new) and kurkar dams in the outskirts of the city> British – piped system), the elements linked to fresh water distribution are maintained or adapted. The best example of this is the Roman cistern that collected fresh water brought by the aqueduct. Its structure served as a wall for a church during the Crusader period, and the Ottomans built Al-Jazzer mosque on top of it, and they still use the cistern to collect water for the prayer ablutions.

II The importance of the port

Since the city of Acre moved from the Tel to the peninsula, the port has been a key element in the city. Regardless of the change in its use in the last decades due to tourism, this area is a constant.

III Same location of specific buildings and urban elements

Similar to the port, specific buildings stay in the same location, or their use remains over time. This is the case of the following elements:

- Khan El-Umdan, which is situated in the same place as a customs building from the Crusaders;
- the Governor's Palace, now a museum, is located on top of households previously owned by the Church during the Crusader period; and
- Al-Jazzer mosque is the best example of overlaying, as it is located over the ruins of a church, which at the same time was built in the place of a Muslim tomb, and the latter on the same place as the aforementioned Roman cistern. Although this can be read as the location being crucial, it can also mean that the different rulers used this specific location for their monumental/signature buildings to show their power in the city.

- IV The fact that Acre remained an important port, trade and pilgrimage centre, as well as a link between the East and the West over the centuries, portrays the city's East - West duality. This point becomes highly relevant when understanding the interventions in the city nowadays, as opting for fully western or fully eastern initiatives can increase conflict and neglect Acre's dual history.

Regarding the **differences** between maps we can also extract some conclusions:

- I The location and number of religious buildings and areas differs from period to period: the Crusaders scattered churches all over the city, while in the Ottoman and the Early Arab periods the focus is placed on one big and central mosque. This imbalance between buildings of different religions in the Old City continues until nowadays and it is a source of conflict (Heidtman, 2014).
- II The boundaries of the city, limited by the wall, keep changing and only the ones established during the Ottoman period remain. This is the one the authorised discourse values and the baseline for the Conservation Law, and heritage decisions.
- III The communities living in the city keep changing as new ruling bodies take on the city of Acre. This presents a continuous change in the governing narratives related to the heritage, ownership and identity. This emphasizes the complexities brought by an overlaid and multi-layered city, as well as increasing the conflict among communities.

The former four aspects demonstrate a high level of consensus over time, with regards to the importance of fresh water, the port, the location of certain buildings, and the East-West influence. These points of **consensus** are key to reaching a shared or common understanding of urban heritage by different stakeholders nowadays, as they serve as a starting point for dialogue.

The differences highlight the points of **dissonance**, issues to consider and address in decision-making processes to facilitate the mediation between stakeholders, and include conflicting values in the process.

4.2.2 New Narratives

The new narratives created after the foundation of the State of Israel are heavily influenced by the creation of municipal and local authorities dealing with the urban and heritage components in Acre, as well as the regulations linked to them. Developing the planning guidelines, city master plan and conservation plan promoted the protection of the Old City and the adequate development of the new city. The former is showcased by including the Old City of Acre on the list of World Heritage Sites by UNESCO in 2001 (World Heritage Centre, 2001). The Outstanding Universal Value is inherent in the Crusader and Ottoman layers, which form the basis for conservation and are a priority for the Israeli Antiquity Authority while also developing the narrative for tourism promotion.

The World Heritage nomination returned regional importance to Acre, but rather than trading activity, tourism was enhanced. Tourism promotion is the focus of the current stakeholders in Acre, who adapt the existing structures and activities to serve this new and growing economic activity. The transformations derived from tourism range from converting households and heritage buildings into tourist accommodations, warehouses and craft workshops, souvenir shops and restaurants. Also, fishing has been substituted by boat tours, and the historic Ottoman and Crusader buildings are used as museums and tourist attractions.

These new narratives are shaped by the modern needs and demands (Butler & Hinch, 2007), with the influence of past narratives. The following tables show the variety of views from different actors in Acre. The first one (Table 4.1) focuses on the public, private, and civil society, while Table 4.2 delves into tourists' perceptions. It should be considered how the authorised discourse is the one presented by the public actors, and the rest suppose alternative narratives, which are usually not considered for policies and planning. Bringing together the multiplicity of discourses aims to include conflicting values and perspectives into the decision-making processes, as well as visualizing the points of consensus among different stakeholders in Acre (SQ2).

TABLE 4.1 Narratives by the stakeholders.

STAKEHOLDERS	TIME NARRATIVES				CURRENT ISSUES					SOURCES
	Crusader	Ottoman	British	S. of Israel	Economic dev.	Conservation	Social Inclusion	Religious	World Heritage	
PUBLIC										
Municipality										http://akko.muni.il/
Dev. Company										https://www.akko.org.il/en/Acre-Tourism-Development-Strategy
IAA										http://www.iaa-archives.org.il/
AMIDAR										https://www.amidar.co.il/
PRIVATE										
Muslim WAQF										Interview with WAQF member
Jews										Data provided by the IAA
Christian										Data provided by the IAA
Baha'i										Data provided by the IAA
Hotels										Data provided by the Dev. Co.
Investors										Data provided by the Dev. Co.
CIVIL SOCIETY										
Entrepreneurs										Entrepreneur WhatsApp group
Women's group										Women's group Leaflet
Old city settlers										Interview to Johayna Saifi (Saifi & Chávez, 2019)
New city settlers										

Not found

Main narrative

Secondary narrative

□ Not found ■ Main narrative ■ Secondary narrative

TABLE 4.2 Narratives by tourists.

STAKEHOLDERS	TIME NARRATIVES				URB. HERITAGE / PORT ATTRIBUTES					SOURCES
	Crusader	Ottoman	British	S. of Israel	Sea / Harbour	Old City	Market	Food	Religion	
Jewish Tourists										עכו # on Instagram 'Akko'
Arab Tourists									M	عكا # on Instagram 'Akka'
International Tourists									B	#acreisrael on Instagram

□ Not found ■ Main narrative ■ Secondary narrative ■ Residual narrative

In the following table, we can appreciate how the stakeholders, grouped by their role in society (public, private, or civil society) base their interests and values on past narratives. It can be observed how they are mainly concerned with specific issues (divided into economic, cultural, social, religious, or World Heritage nomination status). This exercise aims to acquire a holistic understanding of Acre's actors' perceptions, to extract their interests and incentives. The following table shows how these intertwine:

The narratives of the current stakeholders share the following points:

- The Ottoman period is relevant for most of the stakeholders.
- Economic development is a priority, and heritage conservation is also crucial for some: mainly the preservation of the Old City and the harbour.
- The Crusader remnants are only valued by the IAA and international tourists.
- The British expansion and the new city are valued for their development potential but do not generate touristic or cultural interest.
- The port city attributes relevant to the city settlers and tourists are confined to the Old City as a whole, the Ottoman heritage such as Al-Jazzar Mosque, and the Hammam, the port, and the market.
- By contrast, investors value the built heritage in the Old City, depending on its potential for tourist accommodation (e.g., the transformation of buildings into hotels)

An analysis of Instagram posts was the main primary used to develop v. The posts under three hashtags were analysed to understand various tourists' perceptions of the city. The Hebrew and Arabic versions of '#Acre' (אֶרֶץ and #אֶרֶץ) aim to understand Jewish and Arab perspectives, while #acreisrael intends to grasp the international tourist perceptions.

The studied elements are related to the four periods (Crusader, Ottoman, British and State of Israel), and the port city attributes. The posts were narrowed down into the following topics (Table 4.3):

- Harbour and the sea
- The Old City
- The market and the food as part of the intangible cultural heritage

The analysis shows how all tourists focus on the Old City, the food and the sea; and how little difference is found among the Jewish and Arab hashtags regarding religious elements. It should be noted the reduced importance given to the historical layers by the Jewish and Arab, in contrast to the medium appearance in the international posts. This clashes with the current political narrative in the country, which shows both communities deeply attached to their history. The analysis shows how Jewish and Arab communities (as tourists in Acre) similarly see the city and value the same elements.

It should also be highlighted how the international tourists share a similar perception with the ‘local’ Jewish and Arab vision, with the minor alteration around religion and/ or World Heritage. The Bahai sites are mainly visited by the international, probably because they are pilgrim sites and UNESCO WH sites, while the Arab tourists focus more on Muslim buildings.

TABLE 4.3 Tourist perceptions on Instagram (24/08/2020).

	Old City	Sea / Port	Food	Ottoman	Crusader	Market	Baha'i	Muslim	New City	Jewish	Christian	State of Israel	British	Comparative images
#acreisrael	242	219	64	50	41	35	30	28	5	4	4	2	1	0
#עכו (Akko)	41	69	35	5	1	8	1	4	4	5	0	0	0	0
#عكا (Akka)	41	68	3	0	0	4	1	11	3	0	1	0	0	3

4.3 Final Remarks

The proposed way to address the conflicts of interest relies on two components: On the one hand, the understanding of the narratives of the past, extending the concept of the city beyond the historic ensemble, adding the hinterland, as well as moving between scales from the building to the regional level. On the other, including the dissonant voices in the decision-making process through analysing the current stakeholder narratives. Altogether, this narrative analysis provides an adequate and solid baseline that will be utilized in the next chapters, and that conforms the first step in the evaluation tool: *A_ Understanding the place from the perspective of communities: Identification of the urban heritage in Acre through analysing past and present narratives about the city of Acre*. In a similar way, the data collected in this step is utilized in the next ones, making the overall process iterative, where we can go back and forth to expand the data collection and carry out a more precise analysis.

On another note, the research sub-question SQ 1 and SQ 2, tackled in this chapter, are partially responded:

- **SQ1** | *How can we arrive at a shared or common understanding of Urban Heritage by different stakeholders in and out of Acre?*
- **SQ2** | *How can conflicting values be included in the processes of the Adaptive Reuse of Urban Heritage?*

First, it is key to arrive to a broad understanding of the past and present narratives in the city of Acre. This includes an extended literature review and comprehension of the various historic periods in the area, the changes in the relevance of the city and its elements. This serves as the base to identify the points of conflict and consensus, crucial to *arriving to a shared or common understanding of Urban Heritage by different stakeholders in and out of Acre (SQ 1)*.

Furthermore, the analysis and identification of urban heritage elements, as well as the identification of the values related to them over time and nowadays is also key to unveil and showcase the multiplicity of voices present in the city of Acre. The consideration of this variety of perceptions enables *the inclusion of conflicting values in the processes of the Adaptive Reuse of Urban Heritage (SQ 2)*.

5 Understanding the place over time: Analysis of the evolution of the urban heritage in Acre

Continuity, Adaptation, or Erasure

Chapter Goals

This chapter focuses on the urban heritage in Acre, it specifically studies its evolution over time with regards to the changes the different elements underwent. The historical overview in chapter 4 (See 4.3.1 Past Narratives) showcased how the complexity and diversity of periods influenced Acre's urban heritage. The values of each period materialised into elements that continued, were adapted, or erased, supporting the narratives of the city in each period. This chapter studies these trends in order to acquire a complete picture of the urban heritage history, and gather evidence to make informed based decisions on the elements' adaptive reuse future proposals.

On another note, the narrative analysis presented in the previous chapter has shown the most relevant urban elements in Acre. These include elements with varied uses: religious (mosques, churches, and a tomb), commercial (the souk and the customs building), infrastructure (the aqueduct and the hammam), tourism/pilgrimage (the khans), and housing (Ottoman buildings); and also with varied urban scales, from small scale (buildings) like the hammam; neighbourhood/medium scale like the mosque compound; and larger/city-level projects like the aqueduct, that have a regional influence.

Therefore, in order to better understand how these transformations happened, and how their history can influence the present, the following tasks are carried out:

- A Analysis of the port city attributes mapped in Chapter 4, as the urban transformations found in Acre are related to its status as a port city.
- B Identification of three urban heritage elements to test adaptive reuse alternatives, aiming to showcase how the study of the urban heritage evolution, in addition to the analysis of past and present narratives can provide more informed and consensual adaptive reuse proposals.
- C An overview of the adaptation and continuity strategies utilized in the identified heritage elements over time.
- D Identification of changeable and non-changeable parts in adaptive reuse processes.

Research Questions addressed

Aiming to address sub-questions SQ 2 and SQ 4, an analysis of change in values and an identification of the urban heritage values, capacities, and vulnerabilities are carried out, correspondingly.

- **SQ2** | *How can conflicting values be included in the processes of the Adaptive Reuse of Urban Heritage?*
- **SQ4** | *How can processes of Adaptive Reuse support Urban Heritage values?*

The former (analysis in change of values), provides information-based data to support decision-making processes, shifting the focus from sentiment (specific identity, individual interest) towards pragmatism or societal values (based on hope and a better future, collective interest). And the latter (identification of heritage elements), facilitates the activation of these elements' potential towards the ultimate aim, socio-spatial conflict mitigation.

5.1 Methodology

5.1.1 Analysis of the attributes of urban heritage identity in port cities

The following tables (Table 5.1, Table 5.2, Table 5.3 and Table 5.4) present the port city attributes categorized by urban heritage type. The elements' evolution over time is identified through colours: those that continue (green), adapt (orange), are preserved (blue), or erased (red). The continuity, the adaptation, or the erasure of the port city attributes is linked to the past narratives. Analysing the interrelations between the city attributes in a given period or between the same attribute over time identifies historic trends, can help understand the narratives over time, and could ultimately inform current adaptive reuse processes.

TABLE 5.1 Acre's wider context heritage elements and port city attributes over 4 periods of time

WIDER CONTEXT					
URBAN HERITAGE IDENTITY ATTRIBUTES IN ACRE	PORT CITY ATTRIBUTES TO BE ANALYSED	TIME			
		CRUSADER	OTTOMAN	BRITISH RULE	MODERN State of Israel
Natural features					
Interaction with the environment					
Hydrology	SEA, TRIBUTARY, FRESHWATER SYSTEMS	SEA: Trade and pilgrim routes. Military	SEA: Trade and military	SEA: Fishing	SEA: Leisure
			KURKAR: Freshwater	KURKAR: Erased due to being a source of infection	KURKAR: Reactivated as a fresh water source
Views and vistas					
Orientation (e.g. to seaside, mountains, river fronts)	TEL AKKO AND THE PENINSULA OF ACRE	Peninsula of Acre, seafront	Peninsula and part of the bay. Seafront	Peninsula, seafront	Extended Acre, peninsula, bay, tel and beyond
Skylines					

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 ■ Preserved / Conserved
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At the wider level, the sea and the orography of Acre remain constant. The peninsula is maintained as a strategic location, except during the Bronze and Iron Ages, when the inland boundaries expanded accordingly. The use of the sea changed depending on the needs of every period. The freshwater lake, kurkar, was erased during British Rule due to it being a source of infection. The ecological value of this attribute was reconsidered when freshwater availability became a priority in the region.

Trends are distilled from the urban attribute analysis. In most cases:

- The Crusader, regardless of reusing some pre-existing structures, set up the foundations of the city for the next eras.
- The Ottoman use the Crusader elements as a foundation, adapting the use to their priorities.
- The British follow a conservation approach including additional elements for the same use in the city extension, while the Crusader and Ottoman elements are preserved, though detached from their original use (e.g. the city walls are no longer used for defence).
- The State of Israel continues the British approach, extending the city limits, and adapting the elements to the current needs (e.g. the harbour converted into a marina for tourism).

TABLE 5.2 Acre’s urban heritage elements and port city attributes over 4 periods of time

URBAN ELEMENTS					
URBAN HERITAGE IDENTITY ATTRIBUTES IN ACRE	PORT CITY ATTRIBUTES TO BE ANALYSED	TIME			
		CRUSADER	OTTOMAN	BRITISH RULE	MODERN State of Israel
City walls		Stone walls in similar location as Roman	Reconstruction and strengthening of previous walls	Conservation of walls, not used for defence	Conservation of walls, new uses of the moat
Markets	ZOUK, MARKETS, COMMERCIAL AREA	Market area in every quarter	Area among and between the khans. The white market	Markets in the Old city	Markets in the Old City
				Markets in the new extension	Markets in the new City

>>>

TABLE 5.2 Acre's urban heritage elements and port city attributes over 4 periods of time

URBAN ELEMENTS					
URBAN HERITAGE IDENTITY ATTRIBUTES IN ACRE	PORT CITY ATTRIBUTES TO BE ANALYSED	TIME			
		CRUSADER	OTTOMAN	BRITISH RULE	MODERN State of Israel
Architectural identities					
Historical layers	CRUSADER, OTTOMAN, BRITISH EMPIRE, MODERN	Crusader layer on the Roman base	New layer on top of the Crusader	Protection of previous two layers, new city extension	City expansion beyond previous layers
Urban water systems and water elements	FRESH WATER PROVISION, ACCESS TO THE SEA	Use of Roman cistern and aqueduct	Use of Roman cistern water for the Mosque.	Use of Roman cistern water for the Mosque.	Use of Roman cistern water for the Mosque.
			Kurkar used for water provision.	Cancellation of kurkar due to infection.	
			Fountain network.	Fountain network.	Underground urban water system.
Local communities and social groups					
Migrant communities		TRADERS: Genoa, Venice, Pisa, Middle East	TRADERS: Ottoman Empire		
		PILGRIMS: Western European			
				Jewish communities from Russia and Eastern Europe	Jewish communities from Eastern Europe, Northern Africa, and Asia
				British citizens, military, diplomats	Israeli citizens
Street vendors/ cafes					
Port/ Harbour	PORT ENTRANCE, LIGHTHOUSE, CHANNELS, SEAWALL	Inner and external harbour, island of flies with lighthouse and seawall	Inner and external harbour, island of flies with lighthouse and seawall; upgrade of key buildings (khans)	Seawall deteriorated; inner harbour mainly used; decay of harbour and its key buildings	Harbour used for fishing and tourism; upgrade of the port to a marina (seafront)

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 ■ **Adapted / Different location**
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TABLE 5.3 Acre's architectural heritage elements and port city attributes over 4 periods of time

ARCHITECTURAL ELEMENTS					
URBAN HERITAGE IDENTITY ATTRIBUTES IN ACRE	PORT CITY ATTRIBUTES TO BE ANALYSED	TIME			
		CRUSADER	OTTOMAN	BRITISH RULE	MODERN State of Israel
Governor building		Hospitaller's Castle	Change of use	Change of use	Change of use
Customs building		Castle (khan)	Khan	-	-
Quarantine building		Infirmary	Khan	-	-
Religious buildings		Churches	Mosques	Churches, mosques, and new synagogue in the expansion	Synagogues, churches, and mosques
Travellers' accommodation	CARAVANSERAI	Religious hospitals	Khan Al-Umdan, Khan Al-Shawanti, Khan, Khan	Preservation of Khans	Hostels, hotels

□ Not found
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Adaptive reuse is a constant in the architectural heritage of Acre. An example is the al-Jazzar Mosque, built on top of the Cathedral of the Holy Cross (Radojewski, 2010), reusing stones from the ancient ruins of Caesarea (Schvoerer et al., 1999). These two points showcase the importance of reuse in the evolution of Acre at a wide range of levels: from the reuse of materials, the adaptation of buildings, and the reassessment of urban values, like trade.

TABLE 5.4 Acre's intangible cultural heritage elements and port city attributes over 4 periods of time

ELEMENTS OF INTANGIBLE CULTURAL HERITAGE (UNESCO, 2004)					
URBAN HERITAGE IDENTITY ATTRIBUTES IN ACRE	PORT CITY ATTRIBUTES TO BE ANALYSED	TIME			
		CRUSADER	OTTOMAN	BRITISH RULE	MODERN State of Israel
Festivals					
Markets					
Social mix					
Cultural diversity	MULTICULTURAL SOCIETIES	Palestinian	Palestinian	Palestinian	Palestinian
		Italian	Ottoman	British	Israeli
		Middle Eastern	Middle Eastern	Middle Eastern	Middle Eastern
		Western European		Russian and Eastern European	Russian and Eastern European
		Christian		Christian	Christian
		Jewish	Jewish	Jewish	Jewish
		Muslim	Muslim	Muslim	Muslim
			Baha'i	Baha'i	Baha'i
Spirit of place					

■ Not found
 ■ Found / Continue
 ■ Adapted / Different location
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The multiculturalism is linked to the constant migrant communities identified in the urban attributes. This intangible heritage is perceived in the multiplicity and diversity of identities present in the city. The historic buildings and traditional festivals cover a wide range of cultures and religions, while the ambience in the city keeps changing as we move from one area to another.

The trends distilled from the tables serve as reference for future adaptive reuse interventions in the future, as they tell the story of the element. The consideration of this information in adaptive reuse processes can support the adequate management of the heritage element, its significance, and values (SQ4). For instance, if an element has continuity over time with few changes in its use, nowadays it is less likely that a consensus over its change of use is reached. By contrast, an element that keeps being changed or erased in the past, it is more prone to bring consensus over its adaptation in the present.

5.1.2 Identification of Urban Heritage elements to test adaptive reuse alternatives

Therefore, three urban heritage elements have been identified to test the adaptive reuse evaluation methodology. This aims to showcase how the study of the urban heritage evolution and the analysis of past and present narratives can provide alternative adaptive reuse options in environments with dissonant stakeholders.

The three urban heritage elements are the following:

- Khan El-Umdan
- Al-Jazzar Mosque area
- Ottoman Aqueduct.

Each one is selected because they belong to three of the four categories into which urban heritage is divided: an architectural element, an urban element and one from the wider context.

These three cases are studied using diverse methods, including their chronological evolution, to understand the critical historical phases that influenced them and the key architectural and urban attributes that characterise them. Moreover, the possibilities around the change of use of these elements are explored through alternative use proposals. These are based on Acre stakeholders' interests, analysed in the new narratives section (See 4.2.2 New Narratives).

The exercise exemplifies how adaptive reuse processes are being managed (Plevoets & Van Cleempoel, 2019) and how using past, and new narratives in evaluating adaptive reuse processes could provide consensual alternatives in environments with dissonant stakeholders that could potentially mitigate existing conflicts of interest.

Khan El-Umdan

The architectural element, linked to the smaller scale, is Khan El-Umdan, a caravanserai. Caravanserai is an inn surrounding a court in eastern countries where caravans rest at night (Merriam-Webster, n.d.). Khan El-Umdan was built during the Ottoman Period in 1784, aimed to accommodate the growing needs brought by the expanding commerce of hosting travellers and merchants. It is one of al Jazzar's principal construction projects in the city and the most prominent khan in Israel.



FIG. 5.1 Khan El-Umdan during the Ottoman period_CARNE, John. Syria, The Holy Land, Asia Minor, &c. Illustrated. In a series of views, drawn from nature by W.H. Bartlett, William Purser, &c. First [... Second... Third], London, Fisher, Son & Co., 1836-1838.



FIG. 5.2 Khan El-Umdan
1964 – 65_Poll, Willem van de_
www.nationaalarchief.nl/jpg



FIG. 5.3 Khan El-Umdan, Acre, Israel_Flickr-Behyar

The Great Mosque compounds

The urban element, the Mosque compound, another project undertaken by Jazzar Pasha, who was Acre's third great restorer (Dichter, 2000). The White Mosque, also known as the Great Mosque or Mosque of Jazzar Pasha is the most important of all the buildings erected by him. This building is the largest of all the mosques built in Ottoman Palestine and the third largest in Israel after Al-Aqsa in Jerusalem and the Cave of the Patriarchs Mosque in Hebron. Its structure was meant to immortalise the power of Ahmed al-Jazzar's rule and the importance of Acre (Berri, 2004). The surrounding area of the mosque became the heart of the city, where the souk was located, being the entire area the urban element to be analysed.



FIG. 5.4 El-Jazzar Mosque Located in Acre_ Osāma as-Silwādy_The palestinian museum <https://palarchive.org/item/74845/el-jazzar-mosque-located-in-acre/>



FIG. 5.5 Jezzar Ahmed Pasha Mosque in Acre (Akko/Akka), Palestine, circa 1900_Ottoman Archives



FIG. 5.6 A view of the Syphon Aqueduct over the Acre Sidon Road. B01306_Alamy

The Aqueduct

The third element is part of the wider context, the aqueduct of Acre connecting the Old City with Kabri, where the source is found.

The remnants currently found in Acre belong to the one built by Suleiman Pasha in 1812, who initiated a complete reconstruction of the original aqueduct, built by Jazzar at the end of the 18th century, but with a new trace that facilitated the irrigation of the Pasha fields. Contrary to some assumptions, there is no archaeological evidence that these Ottoman aqueducts were built on Roman foundations (Frankel, 1983).

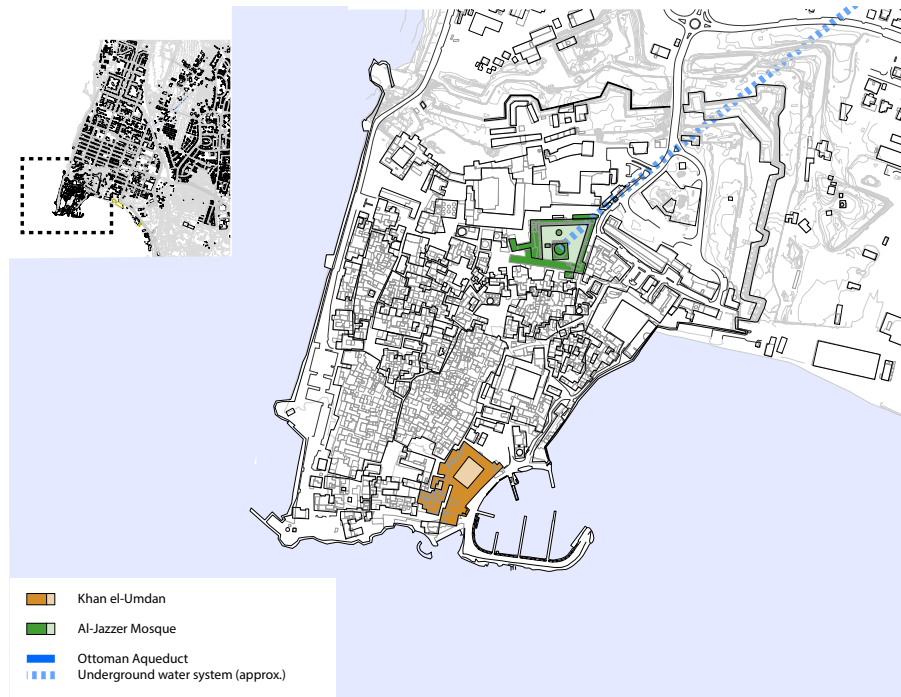


FIG. 5.7 Plan with the three urban heritage elements selected in Acre: Khan el-Umdan, Al-Jazzar Mosque, and the Ottoman Aqueduct

These three urban heritage elements are identified and selected as cases to study how adaptation has happened over time, and to identify the changeable and non-changeable parts of these. This is important in order to understand how adaptive reuse processes happen, specifically in Acre, and how the study of these processes can provide insight on how to carry out adaptive reuse processes in Acre in the future.

The three heritage elements share that they were strategically located in the same place as the previous elements. Adaptive reuse was a common strategy throughout history based on conquests and victory in war. Therefore, it is no surprise that the different rulers in the city utilized the remnants of Acre as sites for adaptive reuse. The difference in customs between the victors and the previous inhabitants turns obsolete parts of the entire city, suddenly becoming an opportunity for adaptation. There are many ways in which adaptive reuse can happen; in the case of this study the overwriting of structures was more common in Acre than gradual adaptive reuse; this strategy of demolition, as adaptive reuse, was used to show the supremacy of the victors. An analysis of how these practices happened in each element is provided, giving special attention to the changes not only in use but also in the values and components maintained and erased in the overwriting process. Again, this analysis provides key insights on how adaptive reuse supports heritage values (SQ4), as seen in the evolution of the studied cases.

Khan El-Umdan

This great caravanserai was built in the exact location as the Royal Customs house of the Kingdom of Jerusalem during the Crusader period (Abulafia, 2011; Arbel, 2020; Berri, 2004; Cunliffe, 2017; Dichter, 2000; Jacoby, 2015). Refurbished to accommodate the growing needs of expanding commerce, it is one of al-Jazzar's principal construction projects in the city and the biggest khan in Israel.

The khan is a rectangular two-storey building enclosing a spacious internal courtyard with a pool in the middle. Flanking the courtyard, on the ground floor, an arcade of red and black granite columns, taken from Caesarea, Atlit and the ruins of Crusader monuments in Acre, that give the name to the khan ('Caravanserai of the Pillars'). Behind the arcade are storage spaces covered with barrel vaults. The second-floor arcade is held by masonry piers and leads into small cross-vaulted guest rooms. In 1906 a tall clock tower was built adjacent to the main entrance to the khan.

Due to its proximity to the port, Khan El Umdan has, throughout its history, been an important trading spot. Merchants arriving in Acre used the khan as a warehouse while the second floor functioned as a hostel. Commercial activity in the khan ceased due to the vast destruction brought upon the city by the Egyptian conquest of 1832, although the structure was not harmed in the attacks (Abulafia, 2011; Norwich, 2006; Sakel et al., 2014). The khan later gained importance for the Baha'i community as it was where Baha'u'llah received guests, and after that, it became the site for a Baha'i school.

In 2001, Khan al Umdan, together with the rest of Acre's old city, was designated as a World Heritage site. The khan was a significant tourist attraction and was used as an open-air stage during festivals in the city. However, since 2013 it has been closed to visitors because the authorities plan on converting the khan into a luxury hotel. This situation has created a debate among the citizens and stakeholders in Acre, who witness how this valuable cultural asset has been withdrawn from the public and is to be used for private economic profit, an intervention promoting gentrification in the old city (Harari, 2012; McMaster, 2020; Saifi & Chávez, 2019).

The evolution of the Khan (Figure 5.8) can be understood as an epitome of the evolution of Acre, as the use of the building in each period reflects the coetaneous values and needs. The accommodation use always present dissolves as Haifa port gains importance, and the more local uses shift into tourism-aimed ones as soon as the World Heritage Nomination happens, raising the Old City's status and visibility.

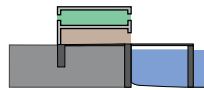
Therefore, the last decade's lack of intervention in this hegemonic building is not surprising. The city of Acre and the caravanserai have evolved to align with the times, and the city's values and future vision are currently under debate. The type of adaptation chosen for this building represents the direction the city is willing to follow.

The adaptation strategies of this element are linked to the flexibility of the building, which is designed the following way: The spaces in contact with the outside world promote its use for the public; the existence of a second floor with a repetitive sequence allows having uses which require medium size spaces repeatedly (such as a hotel or a school); and its location near the port enhances its representativeness and its availability for commercial/ trade uses (market, customs, storage...). This strategy can be considered adaptivity through flexibility.

USE OF THE BUILDING

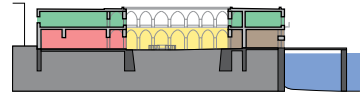
Customs	Market	Religious
Accommodation	Public / Tourism	WH Site 2001

Crusader Period

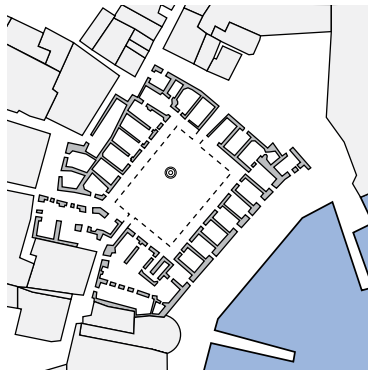
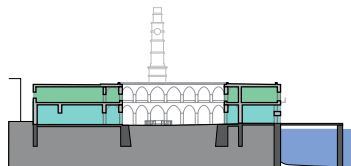


There was a customs house there, a plain building with a large room on the upper floor for sleeping accommodations.

Ottoman Period



British Empire



1948 - 2013

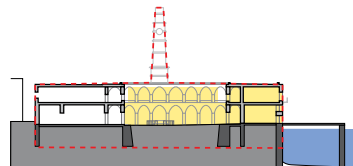


FIG. 5.8 Evolution of Khan El-Umdan uses over time

The Great Mosque compounds

The mosque compound's location is layered with history, a great example of overwriting. Different academics provide various theories for the site's origins, going back to the Roman era, the Mamelukes, the Crusaders and finally, the visible layer of the Great Mosque. Some theories have not been adequately verified as they first need to confirm the location based on textual evidence.

Goldmann proposes that today's mosque is on top of the main church of the quarter of the Hospitallers, the Cathedral Church of the Holy Cross and on top of the vast ruins of the Church of St. John (Goldmann, 1994, pp. 30–31). Other authors mention these two churches as the origins where the mosque and the cistern are situated, being the cisterns obviously from the Crusader period and the site probably the same as the Crusader churches (Kesten, n.d.; Makhoul & Johns, 1946). Another theory by J. Murphy-O'Connor suggests a different adaptive reuse strategy where the Church of St. John was transformed by al-Jazzar into the cisterns themselves (Murphy-O'Connor 2008: 183), fed by the water aqueduct of Acre. The most followed idea is that the Church of the Holy Cross is the basis for the Mosque of Jazzar Pasha (Grabois, 1983, pp. 19–22; Schiller, 1983, pp. 93–98), this is mentioned by M. Beventi (Dichter, 2000) and by Miss M.E. Rogers, who visited Acre in 1884:

The great mosque of Jazzar Pasha, which has been restored again and again (...), occupies the site of the cathedral (Petersen 2001: 73–74).

Before the construction of the Cathedral of the Holy Cross, there are various sources which state that during the Early Islamic Period, the building was known as the Friday Mosque and that this turned into a church after the conquest of Acre by the Crusaders in 1104 (Berri, 2004; Pringle, 2009). The descriptions by travellers support this narrative, highlighting the greatness of the mosque. Al-Muqaddasi, a geographer from Jerusalem who visited Acre around the year 985, and a Persian traveller, Nasir i-Khusrau, after he visited Acre in 1047, described it like this correspondingly:

The mosque here is very large. In its court is a clump of olive trees, the oil from which suffices for the lamps of the mosque, and yet besides (Pringle, 2009; Schiller, 1983)

The Friday mosque is in the middle of the town and is on the highest spot. It is tallest building in the city and all the columns are made of marble. The courtyard of the mosque is partially paved in stone and partially planted with grass. They said that Adam cultivated that very spot (Pringle, 2009) (Abu 'Uqsa 2004: 74; Pringle 2009: 35).

Other narratives present theories regarding the location of the Tomb of Prophet Salih in the same place as the Cathedral of the Holy Cross as a Persian traveller, al-Harawi, who travelled in 1173, writes:

It is said that the Tomb of Salih is in the south wall of the mosque of Acre; in reality it is where we already signalled it [in Yemen], and some also say that is in Mecca (Pringle, 2009)

Opposing voices claim that if the tomb was a part of the Mosque and later the Cathedral, it had to be close to the cemetery of Nabi Salih (Kedar, 1997, p. 171), therefore it would have been located outside the city, as for a text by Nasir i-Khusrau. In any case, the exact location of the Cathedral of the Holy Cross cannot be confirmed. Yet, considering that the memories of religious places like the tomb were maintained for centuries, this could be applied to the Great Mosque. From the descriptions of the Friday Mosque, we can extract similarities with the Jazzar Pasha Mosque.

The Cathedral Church of the Holy Cross and the Church of St. John are also thought to be the site where the water cisterns are located and would be under the mosque compound we see now (Makhouly & Johns, 1946; Radojewski, 2010). In the Guide to Acre, by N. Makhouly and Johns from 1946, the cisterns are described as vaulted, a typical characteristic of the Crusader period. Therefore, it is believed that the mosque occupied the site of the Crusader Church of St. John (Makhouly & Johns, 1946).

The centrality of the site in the Old city of Acre was fundamental for the different rulers to build religious monuments in this compound. This representative location encouraged the strategy of overwriting and erasure of previous structures to emphasize the power of the ruling body. If the theories about the tomb were confirmed, the tomb of Prophet Salih would have been the original heritage element

from the Early Arab period, along with the building of the Friday Mosque. On top of it, the Cathedral Church of the Holy Cross and the Church of St. John were built during the Crusader period after the city's capture. Finally, it was overlayed by the Great Mosque during the Ottoman era. In every case, the establishment of a representative building meant the activation of the surrounding area. These interventions had an objective beyond religion and symbolic power: the dynamism of the surrounding areas, as these were used for commerce, as a public gathering place, and probably for religious festivals. The literature on this is too vague, yet the historical maps of Acre insinuate these uses around the main building (Se Figure 5.9, Figure 5.10). The formalization of the souk into a concrete structure during the Ottoman period is an example of this, showcasing the influence of these representative buildings on the urban fabric and social dynamics, as well as the importance of adapting (or overwriting) them in every period.

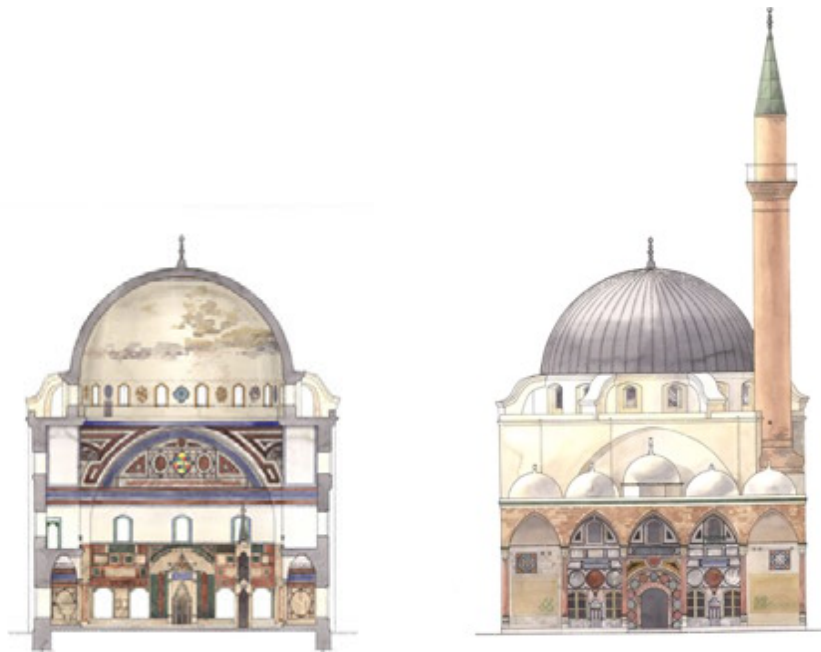


FIG. 5.9 Cross section of al-Jazzar mosque – details of the interior and main façade Adeeb Daoud Naccache – Architecture & Urban studio

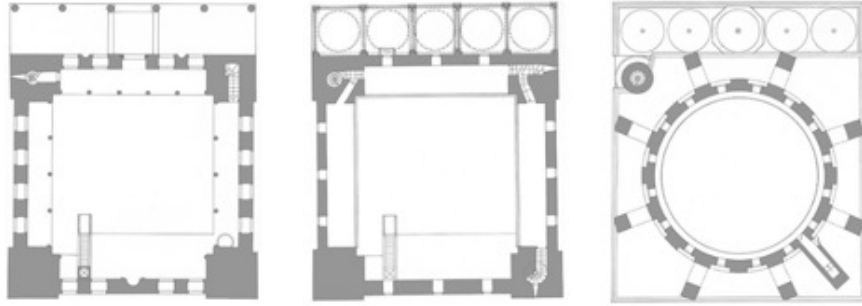


FIG. 5.10 Plans of al-Jazzar MosqueAdeeb Daoud Naccache - Architecture & Urban studio

The Aqueduct

The foundation of Tel Akko during the 2nd Millennium BCE, according to the Historical Sources and in Light of the Archaeological Excavations, next to the kurkar hill was highly strategic as the lands were fertile and close to natural anchorages along the coast (Marcus, 1998, p. 135). Moreover, natural springs are situated nearby, the largest of which, 'En el Baqr, was used until the end of the Ottoman period (Sivan et al., 2001). The water flowed through several aqueducts constructed over 2,000 years, running in different routes from Kabri springs to the city. The oldest line was built during the Hellenistic period, while the modern one – which is visible today in various stations along the route – was built during the Ottoman era. Contrary to some scholars' assumptions, no archaeological evidence supports that the Ottoman aqueducts were built on Roman foundations (Frankel, 1983).

In 1785, as a response to the rapid population growth in the city, al-Jazzar planned the construction of an aqueduct from the Kabri springs to Acre (Dichter, 2000, p. 230). This infrastructure was highly avantgarde for partially consisting of a vaulted cisterns system under the mosque, which collected water from the aqueduct and rainwater, avoiding the usual contamination of water wells (Schiller, 1983, pp. 93–98; Shor, 1983, pp. 173–176).



FIG. 5.11 A view of the Syphon Aqueduct over the Acre Sidon Road. B01306Alamy

Proverbs 5 15-16: 'Drink waters out of thine own cistern, and running waters out of thine own well. Let thy fountains be dispersed abroad, and rivers of waters in the streets.'

Throughout history, rainwater has been Acre's principal and constant source. Its aqueducts were often destroyed and rebuilt, causing the cut in the supply from Kabri. For example, during the siege of Acre, Napoleon destroyed it to benefit his troops from the water supply. Therefore, the aqueduct had to be reconstructed by Jazzar's son Suleiman from 1814-1815. The new one took a new course to the west to irrigate the fields owned by the ruler. The present remains of the aqueduct are part of Suleiman's. This system kept running and being continuously repaired until it was retired in 1949 (Schiller, 1983, pp. 222–224).

In the case of the aqueducts, these continuously existed since the Hellenistic times linking the Kabri water source with the old city of Acre. The continuity strategy, in this case, differs from those of the khan or the mosque compound as the heritage element remains the same, an aqueduct. Still, its location keeps changing from time to time: the Hellenistic trace is different from that of Jazzar's, and Suleiman's is moved towards the west. Therefore, the adaptations' aim is not linked to the use but to the secondary benefits of the aqueduct. We could consider this strategy adaptive relocation instead of adaptive reuse.

The issue of water supply to their city is a significant issue that is also related to their development. In the case of Acre, it is vital to expand the problem, address the existing water reservoirs in the Al-Jazzar Mosque complex, and examine the economic, urban and social connection between the mosque's location and its proximity to the city's commercial and urban artery.

5.2 Results: Changeable and non-changeable parts in Adaptive Reuse processes

The evolution of these heritage elements shows how different approaches to adaptation were put in place over time for numerous reasons and how these elements have been maintained until nowadays. Even though the adaptation followed different strategies, there are some similarities in how some specific attributes of these elements were not changed, as their transformation would have meant the erasure of the element itself. An analysis of how this happens is done to understand if there is a trend or a rule about which parts are changeable or non-changeable in adaptive reuse processes, which could be useful in approaching these processes and determine a consensual baseline (SQ2).

Khan El-Umdan

The case of the Khan is paradigmatic as it shows one of the most common ways of adaptation through the changing use of the building and very few additions to the original structure. In this case, it must be highlighted how the customs building was in place before the Khan was destroyed, yet the use continued. Then, the structure continued, but the use changed after the Khan was built. The success in preserving the building almost untouched is the conservation mindset brought by the British and followed by the State of Israel. This legal framework, in addition to a flexible, valued and practical structure, is an ideal formula for conserving the building.

Considering the aforementioned positive aspects, the physical attributes of the Khan are non-changeable, mainly its modular and repetitive distribution and the characteristic Ottoman architectural elements, such as the windows, pillars and veranda. Another critical aspect of the Khan is its location; if it were entirely removed

and reconstructed elsewhere, it would lose its essence and the fundamental link with the port, commerce and tourism. However, the latter can open a conversation about how relevant it is to preserve the physical aspects of the building if the location is maintained. Some argue that the importance of the place surpasses any other element; therefore, the facility could be replaced by another structure and still maintain its essence.

The Great Mosque compounds

The evolution of this area showcases how the physical attributes are changeable, as these were overwritten several times while the location and representativeness of the new structures continued. Therefore, it seems essential that this location maintains its representative character by always having an element of significance. In addition, the use of the area as a religious one surrounded by public use is also a continuity factor, as this is a non-changeable attribute.

However, the site's religious significance was also linked to the values in the society of each period. If we consider that the values supported and aimed in the 21st century are not connected to religion, it would be reasonable to change the use of the element on this site if its representativeness is maintained.

Regarding the surrounding area, it is also fundamental to preserve its public use, as this also represents its continuity and, if changed, could drastically affect the social dynamics in the Old City. Again, the type of public use is changeable as the data available does not provide insight into what this area used to hold. Yet, the current commercial use, mainly pedestrian, confers a dynamic atmosphere in the area, a positive characteristic as per urban planning parameters and global frameworks guidelines, such as the New Urban Agenda (*New Urban Agenda*, 2017).

The Al-Jazzar Mosque is an excellent example of the importance of a religious structure also in the spatial and economic aspects of the city, in addition to cultural ones. The mosque includes public buildings used today, such as the large library, study rooms, activity areas, etc., that were active in the past and are no longer today. It is essential to learn about the history of Gad in Islam and how to make this compound tax functional.

The Aqueduct

The evolution of this wider context element, the aqueduct, over time showcases how the non-changeable part was the use, an aqueduct, and the source of the water in Kabri. Whereas the location, materials, physical characteristics, or technicalities

are changeable. Nowadays, when its use as an aqueduct is obsolete, we confront the question of what to do with it, as the constant was its use. Moreover, the fact that other elements changed over time raises another question about which elements from the current aqueduct should be kept. From a heritage preservation point of view, it would be obvious to follow a conservative approach, maintain the physical attributes by all means, and find a new use for the structure. Yet, other procedures may opt for erasure, or the adaptation of some of its physical attributes for contemporary uses, or even embrace the adaptation of this element from a more abstract approach where the virtual trace is maintained as a historical memory without any physical remains.

In the three studied cases, the understanding of their evolution, adaptation, and changeable and non-changeable parts proposes an informed-based framework to address the hypothetical adaptive reuse of the urban heritage elements. This new approach encourages a dialogue around the changes the heritage element goes through over time, which may or may not influence its values and attributes. This change of prism is an attempt to move beyond static and lifeless heritage elements to embrace their past integratedly (SQ4).

5.3 Final Remarks

The systematic analysis of the evolution of urban heritage elements in the city of Acre offers extensive insight on how these specific processes happened over time, and how they differ from one category of urban heritage to another. These results combined with an overview of the adaptation and continuity strategies followed by the urban heritage elements of Arce over time provide a clear picture on how these adaptive reuse processes have happened, and the key points to consider when carrying out adaptation. Finally, the last step involving the identification of the changeable and non-changeable parts in adaptive reuse processes indicates how future adaptive reuse processes should be carried out in order to honour the history of the place, its narratives and maintain coherence for the urban heritage element to be changed. Altogether, consolidating the second step of the evaluation tool: *B_Understanding the place over time: Analysis of the evolution of the urban heritage in Acre: continuity, adaptation, or erasure.*

This chapter emphasises the importance of change over time by focusing on the evolution of urban heritage elements, their attributes, the values related to them, and the necessary considerations for the adaptive reuse process to be relevant and coherent. All of these, support *the inclusion of conflicting values in the processes of the Adaptive Reuse of Urban Heritage (SQ 2)*; and showcase *how the actual adaptive reuse processes can support urban Heritage values (SQ 4)*, as seen in 5.4 Changeable and non-changeable parts in Adaptive Reuse processes.

6 Understanding how the communities use the place

Survey and interview the communities on their habits, use, and vision of the city

Chapter Goals

This chapter explores how the different communities in Acre use the city, its urban elements, the activities they do there or would like to do in these areas, as well as their vision for the city. To do so, various methods were carried out:

- social media analysis
- interviews
- a survey

The social media analysis focuses on the vision different groups of people have about the old city of Acre. The analysis studied how this city is portrayed on social media: the stakeholders' institutional websites and Instagram posts.

The interviews provide an in depth understanding of how different stakeholders view the city and its urban heritage; as well as how their institutions address the urban heritage challenges in the city, and the institutional views for the city. These interviews focus on qualitative data, but also include a ranking exercise that facilitates a more quantitative comparison.

The survey tackled the Marina of Acre and it aimed to unveil how different communities disaggregated by various themes (age, sex, religion, mother tongue, employment...) use these areas, their vision and the challenges they perceive about the areas. Altogether, resulting in useful data to feed into the overall evaluation tool.

Research Questions addressed

The methods carried out in this chapter, such as interviews and surveys, support in the understanding of the multiplicity of narratives and perceptions about Acre's urban heritage, as well as, providing a more extensive understanding about change in values related to urban heritage in Acre. These aspects tackle research sub-questions SQ 1 and SQ 2.

- **SQ1** | *How can we arrive at a shared or common understanding of Urban Heritage by different stakeholders in and out of Acre?*
- **SQ2** | *How can conflicting values be included in the processes of the Adaptive Reuse of Urban Heritage?*

On a similar note, the vision for the city of Acre in a hypothetical case of sea level raising is directly related to SQ 3. As it highlights the relevance of integrating a cultural resilience approach into adaptive reuse processes, while providing adaptive reuse alternatives to be considered prior to a possible natural or human disaster.

- **SQ3** | *How can a 'cultural resilience' approach be integrated into processes of Adaptive Reuse of Urban Heritage?*

6.1 Social media analysis

6.1.1 Method

The following tables show the variety of views from different actors in Acre:

- Table 6.1 focuses on the public, private and the civil society
- Table 6.2 delves into tourists' perceptions

In the first one we can appreciate how the stakeholders, grouped by their role in society (public, private, or civil society) base their interests and values on past narratives, and are mainly concerned by certain issues (divided in economic, cultural, social, religious, or World Heritage Nomination status). The aim of this exercise is to acquire a holistic understanding of Acre's actors' perceptions, to extract each one's interests and incentives. The following table shows how these intertwine:

TABLE 6.1 Narratives by the stakeholders. By the Author.

STAKEHOLDERS	TIME NARRATIVES				CURRENT ISSUES					SOURCES
	Crusader	Ottoman	British	S. of Israel	Economic dev.	Conservation	Social Inclusion	Religious	World Heritage	
PUBLIC										
Municipality										http://akko.muni.il/
Dev. Company										https://www.akko.org.il/en/Acre-Tourism-Development-Strategy
IAA										http://www.iaa-archives.org.il/
AMIDAR										https://www.amidar.co.il/
PRIVATE										
Muslim WAQF										Interview with WAQF member
Jews										Data provided by the IAA
Christian										Data provided by the IAA
Baha'i										Data provided by the IAA
Hotels										Data provided by the Dev. Co.
Investors										Data provided by the Dev. Co.
CIVIL SOCIETY										
Entrepreneurs										Entrepreneur Whatsapp group
Women's group										Women's group Leaflet
Old city settlers										Interview to Johayna Saifi (Saifi and Chávez 2019)
New city settlers										

Not found

Main narrative

Secondary narrative

Residual narrative

□ Not found ■ Main narrative ■ Secondary narrative ■ Residual narrative

The narratives by the current stakeholders share the following points:

- The Ottoman period is relevant for most of the stakeholders.
- The economic development is a priority, and heritage conservation is also important for some. Mainly, the preservation of the Old City and the harbour.
- The Crusader remnants are only valued by the IAA and the international tourists.
- The British expansion and the New city are valued for their development potential, but do not generate touristic or cultural interest.
- The port city attributes relevant to the city settlers and tourists are narrowed to the Old City as a whole, the Ottoman heritage such as Al-Jazzer mosque and the Hammam, the port and the market.
- By contrast, the investors value the built heritage in the Old city depending on its potential for touristic accommodation (ex: transformation of buildings into hotels)

An analysis of Instagram posts is the main source to develop the following Table 6.2. In order to get an understanding of different tourists' perceptions on the city the posts under three different hashtags were analysed. The Hebrew and Arabic versions of “#Acre” (#עכו and #عكا) aim to understand Jewish and Arab perspectives, while #acreisrael intends to grasp the international tourist perceptions.

TABLE 6.2 Narratives by tourists. By the Author.

STAKEHOLDERS	TIME NARRATIVES				URB. HERITAGE / PORT ATTRIBUTES					SOURCES
	Crusader	Ottoman	British	S. of Israel	Sea / Harbour	Old City	Market	Food	Religion	
Jewish Tourists										#עכו on Instagram 'Akko'
Arab Tourists									M	#عكا on Instagram 'Akka'
International Tourists									B	#acreisrael on Instagram

□ Not found ■ Main narrative ■ Secondary narrative ■ Residual narrative

The studied elements are related to the four periods (Crusader, Ottoman, British and State of Israel), and the port city attributes. After a first scan of the posts (Figure 6.1), these were narrowed down to the harbour and the sea, the Old city, the market and the food as part of the intangible cultural heritage.

6.1.2 Results

The analysis shows how all tourists focus on the Old City, the food and the sea; and how little difference is found among the Jewish and Arab hashtags regarding religious elements. It should be noted the reduced importance given to the historic layers by the Jewish and Arab, in contrast to the medium appearance in the international posts. This clashes with the current political narrative in the country, which shows both communities deeply attached to their past history, and the analysis shows how both Jewish and Arab communities (as tourists in Acre) see the city in a similar way and value the same elements.

It should also be highlighted, how the international tourists share a similar perception with the “local” Jewish and Arab vision, with the small alteration around religion and/or World Heritage. The Bahai sites are mainly visited by the international, probably due to them being a pilgrim site and UNESCO WH sites, while the Arab tourists focus more on Muslim buildings.

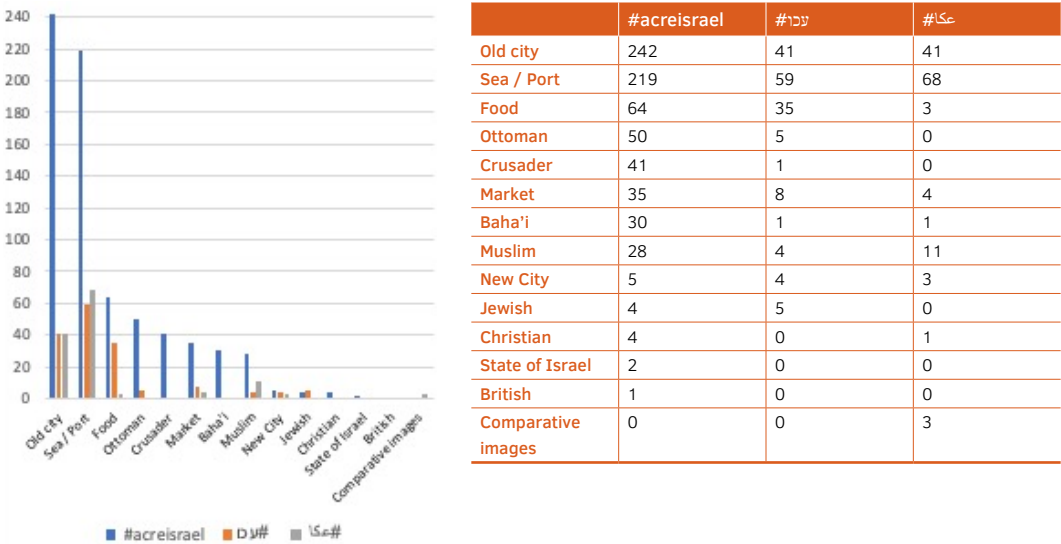


FIG. 6.1 Tourist perceptions on Instagram (24/08/2020). By the Author.

6.2 Key Stakeholder Interviews

Participatory processes are not generally included in Israeli Urban planning and design, therefore, to assess how different design projects are perceived by the diversity of communities it is key to understand the views by some of their representatives. The selected method is *Semi-structured* interviews, where the common questions are used as guidance to promote a conversation on the topic.

6.2.1 Method

Participant Selection

The interviewees were selected according to two main principles to guarantee **representativeness: diversity** (in terms of sector, age, mother tongue, gender...), and **availability and accessibility**. Nevertheless, it must be noted that there were some **limitations** with regards to the selection. On the one hand, the mobility restrictions generated by the COVID-19 pandemic meant most interviews had to be done remotely (on Zoom), therefore, the participants needed to be acquainted with this technology. On the other, the remote interview format demanded a straightforward communication strategy, so the language barrier, usually solved through a translator, was sorted out by narrowing the participants to those who spoke English. Yet, in the case of the representative of Acre Women's Association a translator was used.

To guarantee that a variety of sectors are represented first, the **agencies with management authority** in Acre were considered:

- Acre Municipality: The municipal authority entrusted with the everyday maintenance of the city (taxes, sanitation, health, water, waste disposal and electricity). The municipality is also entrusted with approving all plans regarding the city. In effect beginning of September 25, part of the everyday maintenance will be transferred to the Old Acre Development company LTD.
- Old Acre Development company LTD: Entrusted with a mandate from the ministry of tourism to develop and advance the city as a tourist attraction. Inside the old city the company can build hotels, museums, shops and restaurants, with authorized plans, and rent out any property it so wishes. The company also enhances the infrastructure of the city, and develops new touristic routes in the city. Beginning

of September 25, the company will be responsible for most of the everyday maintenance in the old city, after a successful two-year trial period.

- Israeli Land Administration: The major owner in the old city of Acre (85% of the houses in the city), it is also responsible for a part of the budget for the city mainly for the removal danger.
- National Housing Company (AMIDAR): The company is the representative of the owner (the land administration) in some of houses in the old city of Acre. The major part of AMIDAR is to collect the rent fees from the tenants and pass it on to the land administration, and to deal with the renting contracts. AMIDAR is also responsible for the structural maintenance of the houses, which is carried out by surveying and treatment according to the Antiquities Authority Specification Demands.
- Israeli Antiquities Authority: The Antiquities Authority is responsible for enforcing the Antiquities law with regards to archaeological excavations and conservation.
- District Planning Bureau: The District Planning Bureau deals with all the issues related to planning, regulation, and monitoring. Its main tasks include initiating and promoting national, regional, and local master plans, developing and overseeing national planning projects, handling detailed plans, promulgating planning regulations, and providing professional guidance to district planners and district planning employees.

Representatives from most of the above, as well as other members of the civil society and private sector, like the following:

- The Society for Preservation of Israel Heritage Sites (SPIHS): An independent non-profit organization established in 1984 that works to locate, restore and preserve heritage sites across Israel. Its main objective is to raise public awareness of historic sites, restore and preserve them, and develop and operate visitor centres throughout Israel.
- Acre Women's Association: This non-profit, unaffiliated community-based organization was registered in 1976 with the vision to help Palestinian women in Israel to develop their own perspectives on life and on themselves, so that they may become emotionally and psychologically confident, socially involved and economically independent to enter the field of work and education. To do so, they support Palestinian women in Israel in the transition from a traditional society to a modern one; they support their skills development so that they can become independent and confident members of society. In a similar way, they promote the development of early childhood education structures and programs within the

Palestinian community, they also invest in services aimed at improving the living conditions of Acre's Palestinian community; and they ensure that the imagery and positive practice of Palestinian Arab culture is transferred to future generations.

TABLE 6.3 Participant profile

Participant Code	Institution / Job Position	Sector	Age range	Sex	Mother tongue
#01	District Planning Bureau Representative of the North Galilee, Golan, and Western Galilee	PUBLIC / PLANNING	35-50	Male	Hebrew
#02	The Society for Preservation of Israel Heritage Sites (SPIHS) Regional Director of Haifa and Western Galilee District and Council for Conservation of Heritage Sites in Israel	CIVIL SOCIETY / HERITAGE	50-65	Female	Hebrew
#03	Israeli Antiquities Authority City Architect (until March 2022)	PUBLIC / HERITAGE	35-50	Female	Hebrew
#04	Architect and teacher at university born in Acre	ACADEMIC / LOCAL	20-35	Male	Arabic
#05	Acre Women's Association Representative	CIVIL SOCIETY / LOCAL	>80	Female	Arabic
#06	ICOMOS / Technion University / IAA Board member / Professor / Northern Region Architect	ACADEMIC / HERITAGE	50 - 65	Male	Hebrew
#07	Israeli Antiquities Authority (IAA) Chief architect of Jerusalem	HERITAGE	50 - 65	Male	Hebrew
#08	Western Galilee College / UNESCO Professor / Committee member	ACADEMIC / HERITAGE	65 - 80	Male	Hebrew
#09	Old Acre Development company LTD CEO	PRIVATE / HERITAGE	65 - 80	Male	Hebrew
#10	Israeli Antiquities Authority City Architect	PUBLIC / HERITAGE	35-50	Male	Hebrew
#11	Lewinsky College / Bezalel Academy of Arts and Design Head of the Dept. of art and Arabic languages / Teacher	ACADEMIC	50 - 65	Male	Arabic
#12	Acre Municipality Deputy Mayor of Acre	PUBLIC	50 - 65	Male	Arabic

These all meet on a monthly basis in the **Akko Conservation Committee**, a working group which is responsible for accepting and declining the projects to be executed in the Old City. Therefore, this was the main group addressed to volunteer for the interviews. After the first sorting, the **least represented sectors** were reached out to guarantee diversity within the aforementioned limitations. These included other members of the civil society, like a local NGO (Acre Women's Association). The final participant list was the following:

Interview Structure

Pre-interview work was carried out regarding the content, length, accessibility, and visuals. The interviews were carried out in Zoom due to the global pandemic COVID-19 which occurred during most of the timeline of this thesis (January 2020 – May 20223 (World Health Organization, 2023)).

Carrying the interviews out in Zoom had a huge impact on the presentation of the questions. The visuals had to be readable by non-architects, and the language of the questions simplified to be understood by non-native English speakers. Finally, the meetings were set up with the participants, and the questionnaire shared in advance.

The actual interview consisted of 4 parts: (PART 0) a short presentation about the research and aims of the interview, (PART 1) the main questions on the perceptions on Acre, information about the represented institution, (PART 2) presentation and rating of the scenarios, and (PART 3) feedback for the researcher (See Appendix).

The main goal of PART 1 is to produce **qualitative data about the vision and interest** of each institution: their perceptions about heritage, and what elements of heritage they consider relevant, problematic, or irrelevant.

PART 2, by contrast, is more specific as it uses the scenarios to portray diverse situations for the city. This part aims to obtain **qualitative data on the interviewees understanding about the scenarios**, the relatability to their institutions, and obtain feedback to improve the scenarios. Moreover, the scenario evaluation provides **quantitative data to facilitate the comparison** between stakeholders' responses.

Post-interview work included the transcription of the interviews, compilation of answers through a matrix building, and a comparison between the responses to extract conclusions.

The results from the interviews can be found in 8.2.2 as they are most relevant as part of the scenario building exercise.

6.3 The Survey: Evaluating the perceptions and future vision for the port

A survey was carried out in the Marina of Acre aiming to study the citizens' perceptions, current uses, and future visions of the areas. These are then used as the starting point to imagine hypothetical future scenarios and propose alternative uses based on the Deep Adaptation Agenda and the cultural resilience approach, as part of the integrated evaluation tool the research intends to develop.

The study includes a questionnaire created for and administered at the two sites.²⁵ The survey is divided into three parts: the first considers the data to be disaggregated (sex, age, religion...) (See questions 1 – 10); the second addresses the use of the area and perceptions of it (See questions 11 – 18); the third is linked to future visions for the areas and proposes a hypothetical disaster in the area, sea level rise, to obtain the citizens' reactions (See question 19).

The questionnaire includes the Deep Adaptation Agenda's four main points: resilience (R1), relinquishment (R2), restoration (R3), and reconciliation (R4). Points R1 and R2 (what to keep and what to let go of) are considered by collecting perceptions and future visions of the areas. The reactions to the hypothetical sea level rise indirectly include R3, as the elements that should be brought back can be gleaned from the responses on how to respond to the crisis.

²⁵ See these links:

Survey in Acre

<https://docs.google.com/document/d/1WiYF0C5Nialk7sa3jGjVh5g-anoGnsNn/edit?usp=sharing&ouid=114847424061444816799&rtpof=true&sd=true>

Survey in Jaffa

<https://docs.google.com/document/d/1ooDs9IOJme9GnMF6psuIgRnimzyFwt2x/edit?usp=sharing&ouid=114847424061444816799&rtpof=true&sd=true>

Moreover, reconciliation (R4) is directly linked to the multiplicity of dissonant voices. Their differences are included in the first part, in which traditional factors such as age and sex are integrated, along with native language (Hebrew, Arab, etc.), religion, place of birth, place of residence, and profession. Thus, we aim to understand perceptions from all viewpoints. With a similar intention, the survey is also carried out digitally, targeting workers from both public institutions and other societal sectors such as youth and students.

6.3.1 Method

Time / Place considerations

A questionnaire was prepared for the Marina of Acre and the survey was carried out on several days, at different times, and different days of the week to include as many different voices as possible. In addition, the spatial component is included by georeferencing each surveyed person, their place of birth, and residence.

The Sample

The sample for relevant results requires a statistical deviation of less than 5%. The standard deviation (σ) is inversely proportional to the square root of the sample size (n):

$$\sigma = \frac{1}{\sqrt{n}}$$

Children did not participate in the surveys due to extraordinary circumstances. The parents were reluctant to let their children participate, afraid of being exposed. Children constitute 36% of the population in Acre. Therefore, for this study, the planned sample for Acre is 380 people, assuming a deviation of 5% and a confidence of 95%.

So far, the number of surveys collected remains below the needed sample due to the COVID-19 global pandemic. The collected surveys currently have a 7% deviation, so the research remains open to ensure that enough surveys are collected to provide relevant findings.

COVID-19: challenges, pros, and cons

It should be noted that carrying out the physical survey during the first months of 2021 (January, February, and March) was highly challenging due to the ongoing COVID-19 health crisis. Some of the people approached during the survey were reluctant to engage in conversation, and the reduced number of foreign and national tourists due to mobility restrictions creates a 'COVID-19 bias'. On the one hand, this provides an opportunity to get the locals' understanding of their area. However, on the other hand, it reduces both the number of people surveyed and the diversity of views due to the lack of tourism. Therefore, considering that both sites are highly tourism dependant, we should analyse the survey results with a grain of salt while appreciating the benefit that the extraordinary times provide a 'locals only' perspective.

6.3.2 Result analysis: General and Disaggregated

The results obtained from the survey can be found in this link. The aim is to first acquire a general understanding of perceptions and future visions of the area, following the Deep Adaptation Agenda guidelines, aiming to respond to R1 and R2. Following that, the results have been disaggregated by sex, age, religion, and profession. The purpose of this step is to compile the multiplicity of voices in the area and map the points of consensus and conflict about point R4, reconciliation.

The general results of the survey show the majority's perception, which in this case can be expressed as the following profile. For the Marina of Acre: A Jewish man, between 19 and 34 years old, employed, working in the business sector. He was born and currently lives in Israel, but outside of Acre. This person visits the area once or twice a month, and he usually walks, engages in tourism, and spends time with friends. The elements of the port that he likes the most are the views, the food, and the buildings. However, he finds the area not nice, difficult to access, and he does not like the location. He would like the port to be a fishing port in the mornings and a local market in the evening, yet boat tours would be undesirable. In the hypothetical case of sea level rise that would flood the marina, the most common reaction is to believe it would be a high disruption requiring a new port nearby, and the least common reaction is to call for the port's reconstruction.

The general analysis of the results also shows the values linked to the marina and the city of Acre, represented in these two tag clouds. In the first, the three most repeated words are place, sea, and beautiful. In the second, these are dust, culture/s, and city.

It shows how the Marina of Acre is mostly valued for its aesthetic value and location near the sea. Regarding Acre, while its cultural value is acknowledged, it is seen as a dusty city. We find these values back in response to the most (R1 – Resilience) and least (R2 – Relinquishment) valued elements.

The results extracted from the survey offer a wide range of perspectives on the port. We can understand the multiplicity of perceptions the citizens and visitors have about this public area, the cultural values linked to it, and the vision for a hypothetical disastrous scenario.

Decisions on urban resilience could benefit from these general results, though they are shallow. At first glance, the preferred option in the case of a disaster is to be prepared for or respond to sea level rise by relocating the marina to a safer area of the city so that the economic activities are not jeopardised. This also aligns with the importance of economic activities for the respondents and with the fact that reconstruction is the least-selected alternative.



FIG. 6.2 Map of Acre with respondents' religion



FIG. 6.3 Acre's Tag Clouds – Marina (on the left) and City of Acre (on the right) _Generated With Wordclouds.Com

In the hypothetical case of sea level rise that would flood the port, the most common reaction was to believe it would be a considerable disruption and to construct a new port, while the least common option was to reconstruct it.

The values linked to the port are sea, food, and promenade, whereas Jaffa's values are related to community, market, and history. Altogether, the tag clouds show that the sea and the community are the most valued assets. Consequently, if the sea level were to rise and flood the port, the generally preferred option would be to build a new port, as reconstructing the area is not a priority.

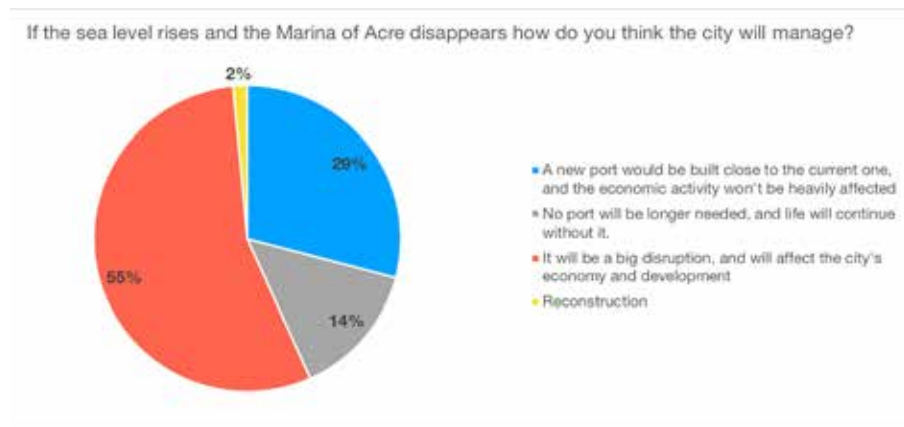


FIG. 6.4 Survey results on the question regarding sea level rise

Regarding the management of the port if the sea level rises, fixed answers were provided as responses to the hypothetical question about what would happen if the sea level rose and the port flooded. The most common answer is that it would be an enormous disruption that would affect the economy, the second answer was to build a new port close to the original one, and the third option was that no port would be needed.

6.4 Final Remarks

The various methods utilized to study the communities' and stakeholders' behaviours result in a better understanding of how the urban heritage in Acre is utilized, the potential uses for it and the actual needs and vision of the places. Each method brings different type of data into the equation, so that the next steps involving adaptive reuse proposals are better informed.

On the one hand, the social media analysis offers a general view of the old city of Acre by locals and tourists; and the institutional interests for the city (SQ 1). The interviews, by contrast, provide an in depth understanding of the stakeholder's interests, thematic areas, and potential areas of intervention. These are essential to identify the specific challenges institutions and other stakeholders face locally (SQ2).

On the other, the survey offers a wider range of data, as it includes more participants in the process. The survey not only serves as a way to identify needs by sector or social group, but it also gives insight around their understanding about heritage (SQ1) and the elements valued by different communities and groups (SQ 2).

The combination of these three methods is crucial to propose coherent adaptive reuse proposals that address actual challenges in the area, as well as tackling the thematic areas of interest by the stakeholders, local citizens, and overall users of the city of Acre. Altogether, providing the third step in the evaluation tool:

C_Understanding how various communities use the place: Survey and interview the people on their habits, use, and vision of the city; and social media analysis.

Regarding the research sub-questions, this chapter broadens the understanding about the multiplicity of voices found in Acre (SQ 1), and it highlights how this

variety of perceptions are included in *the processes of the Adaptive Reuse of Urban Heritage (SQ 2)*, through the compilation of insights about Acre's urban heritage resulted from social-media analysis, interviews and a survey. Moreover, incorporating a cultural resilience aspect in the scheme, empirically proves *how a 'cultural resilience' approach can be integrated into processes of Adaptive Reuse of Urban Heritage (SQ 3)*, and sets a precedent for the coming field-studies.

7 Unravelling the city through three urban dimensions (historic center, buffer zone, and the city as a whole)

Cultural mapping of the city of Acre

Chapter Goals

This chapter studies the challenges and needs found in the city of Acre by carrying out a diagnosis of the city. For this aim, a series of maps is created, based on the data previously collected, in order to assess the challenges, needs and assets (Duxbury et al., 2015). These maps focus on data beyond the physical and natural attributes, including socio-economic, environmental, and cultural elements of the entire city of Acre.

In addition to the maps, a series of documents and databases are studied. In the case of Acre, the World Heritage Cities data base and the State of Conservation (SOC) reports are analysed. Studying these sources is highly relevant to understand the specific challenges faced by World Heritage cities like Acre, and obtain a broader vision of the city's evolution and how it relates to other similar cities in the Mediterranean.

The maps and data from other sources are then combined and overlaid in order to unveil underlying information. This tool enables urban planners and other stakeholders to easily grasp information usually imperceptible.

Three dimensions of the city are diagnosed:

- Historic center
- Buffer Zone
- City as a whole

This means that for each dimension the maps need to be overlaid and focus on specific areas of the city. So that the results are aligned to the dimension, and are useful to identify issues and challenges.

Research Questions addressed

In this chapter research sub-questions SQ 2 and SQ 4 are addressed:

- **SQ2** | *How can conflicting values be included in the processes of the Adaptive Reuse of Urban Heritage?*
- **SQ4** | *How can processes of Adaptive Reuse support Urban Heritage values?*

Conflicting values found in the city are included in the adaptive reuse process by specifically tackling three urban dimensions: the city center, buffer zone, and the city as a whole.

In the same line, the cultural mapping method visualizes and unveils hidden layers of the city, resulting in a more extensive understanding of the urban heritage elements and their values. The new information stemmed from the mapping, is key to design adaptive reuse alternatives that activate the urban heritage elements' potential, and which serve as urban heritage catalysers for the city.

7.1 Dimensions of the city

The three dimensions to be studied are highly relevant when addressing the city of Acre from an urban planning and heritage point of view. Before delving into the cultural mapping, it is critical to define these and their relevance in the implementation of the integrative evaluation tool.

7.1.1 Historic center

The Old City of Acre is the area located in the peninsula, which has been continuously inhabited since Hellenistic times. Currently its boundaries are determined by the UNESCO World Heritage Nomination, which use the Ottoman walls as the delimitation. This area is extremely relevant as it is a living city where the locals' interests clash those of other institutions and sectors, as it is undergoing a process of gentrification and touristification.

Identifying and understanding the actual issues, needs and challenges of the area, its inhabitants, and the local stakeholders is key to outline the future of the historic centre and, consequently, the rest of the city. The fact that the main economic engine of the city is linked to the tourism in this area implies that most of the urban heritage interventions happen here and their impact is higher than in other areas of the city. Moreover, the area is highly protected by the Conservation Law, therefore, the processes carried out in the area are highly sensitive and entail the adequate management of its urban heritage. An effective and accurate diagnosis of the area is key to better decision making in the historic area and the city as a whole.

7.1.2 Buffer Zone

The definition of Buffer Zone is a complex matter as it varies depending on the context where it is used (Bandarin, Mürner, and Turner 2008; ICCROM 2008). This creates confusion among practitioners and site managers (UNEP 2020a). To address this confusion and antagonism, a re-conceptualization of Buffer Zones is proposed in this chapter, moving into a broader concept. With this new vision of Buffer Zones, these become drivers of transformation, thresholds between the historic centre and the city beyond.

In the case of Acre, the buffer zone can be determined by various factors, yet, the boundary established by the World Heritage Nomination is the one usually employed. In this chapter the broader concept of buffer zone as a threshold is tested, expanding the notion of buffer beyond the traditional boundaries, through the identification of identity areas instead (areas with similar features, including physical, morphological, demographic, intangible, social, or economic) (See Map 7.11).

The proposed approach is used to address the challenges and urban needs in the identity areas (the buffer zone and beyond). As it has been repeatedly explained, this multi-layered and heterogeneous city showcases the lifestyle, history and culture of Mediterranean port cities. The latest expansion of the city has proven to jeopardize the adequate conservation of the Old City (a UNESCO World Heritage site), and at the same time, its buffer zone (the one established by the WH Nomination) faces various issues ranging from management to urban pressure. This situation is not new or surprising, as it is shared among other World Heritage port cities (Corfu, Kotor, Dubrovnik, Split, Naples...).

The role of Buffer Zones, hence, focuses on how these areas can support and protect identity areas and enhance their values. Yet, the way that these buffer areas impact and inter-relate with other identity areas, beyond the historic centres, has not been extensively researched. This is why addressing the buffer zone of Acre, through the lens of the broader concept of buffer zone, is relevant. This way the challenges of this area, and how it interrelates with the historic centre and the rest of the city can be tackled. And similarly, testing this new approach towards buffer zones is significant to be replicated in other similar cases.

7.1.3 City as a whole

The current municipality boundaries of Acre were defined after the establishment of the State of Israel in 1948, along with the city's Master Plan (continuously updated, see Map 7.9). Being the largest portion of the city new (less than 100 years old), it is underrepresented in the bibliography related to Acre, which usually mentions the city before 1948 (See 4.3.1 Past Narratives). This means that on the one side, fewer examples of urban heritage are found in this area, and on the other, that most of the interventions in the city do not include this area but they occur in the old city or its buffer zone. Altogether, in order to aim for sustainable development of the city as a whole it is essential to include all the areas within the municipal boundary and consider the abandoned and neglected areas as places with adaptive reuse potential, as the definition of adaptive reuse highlights (Pereira Roders and van Oers 2011).

Therefore, including the city of Acre as a whole as one of the main dimensions to study is systematically considered in the development of this thesis. This is highly relevant for an adequate use of the integrative tool, which aims to serve the institutions working in Acre (in both the Old City and beyond it). Moreover, the study proves how a wider and broader vision of city and its inter-relations can uncover hidden issues, bring light into blurred problems, and highlight overlooked challenges. Altogether, providing a more comprehensive understanding of the city and its citizens.

7.2 Methodology: Diagnosis of Acre

7.2.1 Cultural Mapping: Urban and Socio-Economic Diagnosis

In the following maps various features have been mapped to visualize the historic layering of cultural and natural values and attributes (UNESCO, 2011). The aim is to gather the available data and facilitate the diagnosis of the city: the citizens needs, geographically locate the areas and elements with potential to be adapted, and Acre's urban heritage and any other relevant elements.

Natural Features

In Map A it can be observed how the city of Acre and its surroundings are mostly flat except for Tel Akko, a small prominence where the original city was located. The most prominent water body is the sea, which has a strong presence and is part of Acre's identity. Yet, the Na'aman river, in the south of Acre that brings water from the 'Kurkar'²⁶(Beerli, 2008), plays a major role at dividing the residential city from the southern area left for industrial use. The green areas are also mapped, showing an unbalanced distribution of these all over the city (See Map 7.1), and specifically in the Old City's buffer zone, where greenery is only found in the Muslim cemetery.

Urban Features

In Map 04 the built area, divided by neighbourhoods, presents the urban organization of Acre. Map 7.2 shows how the road and transportation systems serve as the skeleton of the city, having the railway and North-South Avenue as the main axis dividing the city, and the highway on the East as the main connector with the rest of the country.

²⁶ Artificial freshwater ponds constructed along the Israeli coast utilizing the natural lowering of the land and the soil impermeable properties.

In addition, the urban heritage²⁷ is identified (See Map 7.3). In this case, the wider context and urban elements are mapped (UNESCO World Heritage Centre, 2020a). It must be noted how the two WH sites, the Old City and the Baha'I Shrine area, represent the most prevalent elements of urban heritage in the city, yet, the Mandate area, where we find the Buffer Zone, is also significant as it includes historical layers, a market, characteristic urban patterns and is an added layer of protection for the Old City.

Socio-Economic Data

The distribution of public services is indicated in Map 7.4, including educational, health centres, sport facilities, touristic accommodation, police stations, pharmacies, gas stations, and commercial. It can be observed how most of the services are gathered in the Old City and Mandate area, the latter having more public services, and the historic area more tourism related uses. This distribution of uses follows the pattern shown in previous maps, as we move away from the historic centre, the services diminish and disperse.

In Map 7.5 special emphasis is given to the religious buildings, as the distribution of Muslim and Christian buildings is concentrated in the Old City, while the Jewish ones are in the rest of the city. The presence of the Baha'i is specific to the World Heritage Baha'i shrine, a tomb near the Tel and a building in the Old City.

The Real Estate data, extracted from Madlan (Madlan, 2021) is mapped in Map 7.6, it shows the size and price of the households all over Acre. In this case, the pattern is the opposite to the previous maps, as the most expensive households are found at the outskirts of Acre, whereas the historic centre and buffer zone area remain more affordable. In terms of surface, the size of housing is relatively homogeneous, having

²⁷ As a concept, **urban heritage** is global and has a worldwide scope. Usually, it is defined as the historic and physical layers constituting the contemporary urban area. These include the built heritage with architectural and historical value, the urban plan and the land utilization. However, the current views on heritage, like The Historic Urban Landscape approach, published by UNESCO in 2011, go beyond the notion of historic centre and traditional layering to include the broader urban context and its geographical setting (UNESCO, 2011). This approach includes a wider range of elements, comprising not only the tangible but also the intangible components. The framework developed during the "Heritage in Urban Contexts" meeting held in Fukuoka in 2020, **classifies Urban Heritage into four categories: the wider context, the urban elements, the architectural elements, and the intangible cultural elements** (UNESCO World Heritage Centre, 2020b). All of these capture their local and regional identity, and therefore, this framework needs to be adapted to the context accordingly.

a couple of exceptions in every neighbourhood. Regarding the electoral results from the 2020 Election, which are mapped by electoral house (approximately one or two per neighbourhood), the most and second most voted party is represented, being The Likud and the Joint List the most present all over the city.

Historic

Map 7.7 presents historic layers unveiling the past urban evolution of the city. The change in the boundaries shows how Acre expanded and shrank continuously, maintaining the peninsula, where the Old city is located, a constant centre of the city (except during the Bronze Age). Also, the aerial photos on the right show the expansion of the city during the British Mandate (years 1917, 1923, and 1945), and after the establishment of the state of Israel (years 1963, 1966, and 1994).

Legal

The next set of maps presents the legal theme: conservation layers and the change of land uses according to the Master Plans from 1958, 1988, and 2017. Map 7.8 highlights the fact that the Old City is a conservation area. This extends towards the Mandate area in the form of protected buildings, and beyond, including Tel Akko, and the remains of the Ottoman aqueduct.

In Map 7.9 the plots that changed their land use are identified. The selected Master Plans are the ones from 1958, 1988, and 2017 as in these years the Master Plans covered the entire city of Acre, and the major land use changes.

It can be observed how most of the land uses are related to public services, public spaces, and public buildings. Over time, these uses tend to become mixed and housing, while public use fades away.

Regarding the regulations in the Buffer Zone (See Map 7.10), these are limited to building height. As it can be observed, as we move away from the Old City the permitted building height increases from up to 2 floors in the adjacent area, up to 7 floors in the further Buffer Zone area, and beyond this sector the height is augmented up to 10 floors.

Cultural

Following the definition of identity area²⁸, Map 7.11 shows the identity areas of Acre and their buffer zones. The combination of these results in a map highlighting the areas of the city which are considered of higher identity value, and those of lower. The latter embody areas of the city which are usually disregarded, while the identity areas are usually paid attention. The overlap of these identity and buffer areas creates a multiple buffer effect where diverse approaches can be found linked to various interests. The areas contained in more buffer zones or identity areas are located in the Old City, the Mandate area, and the west and south promenades. Leaving the Old City aside, the Mandate includes a large number of buildings of interest, mostly along the Weizmann Avenue. By contrast, the farther we move beyond the Old City, the least identity areas, buffer zone, or protected elements are found.

Therefore, the areas where buffer zones overlap provide an opportunity to create thresholds between the higher and lower areas of interest, as well as to scatter uses commonly present in identity areas, such as economic activities; and to fill the urban gaps, like the lack of public services, public buildings or connectivity elements.

Finally, a layer with ongoing and future projects is mapped to understand the future vision for the city (See Map 7.12). The projects help to clarify the past-present-future conception of the city; and how the stakeholders involved imagine the city. Currently, the pipeline projects are three: two proposals in the Old city led by the private sector, a rooftop hotel in Khan A-Shawarda, and a hotel on the walls of the Citadel; the third proposal is managed by multiple stakeholders, including the Municipality of Acre, the Israeli Antiquities Authority, the Planning District Bureau, and local NGOs. Their idea is to have a bicycle and pedestrian pathway along the Ottoman aqueduct (its remnants and virtual trail), connecting the Cabri mountains with the city of Acre. Again, the projects mostly focus on the historic area, showcasing the same trend previously observed, yet, the third proposal goes beyond the Old City and the city, showing an alternative and broader vision for the city.

²⁸ Identity areas: areas with similar features, including physical, morphological, demographic, intangible, social, or economic.



FIG. 7.1 Natural Features





FIG. 7.2 Urban Features - Structure of Acre



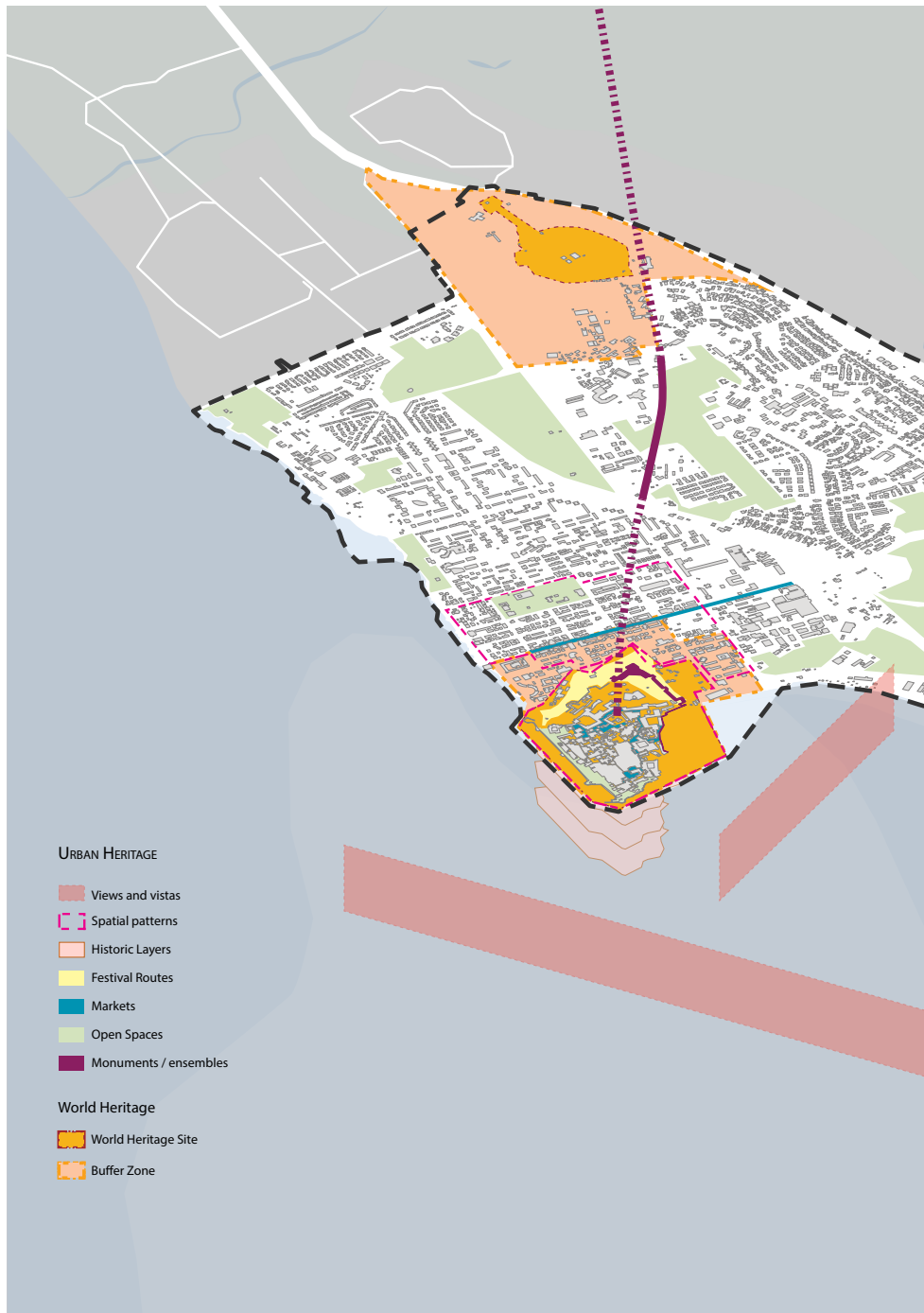


FIG. 7.3 Urban Features - Urban Heritage of Acre



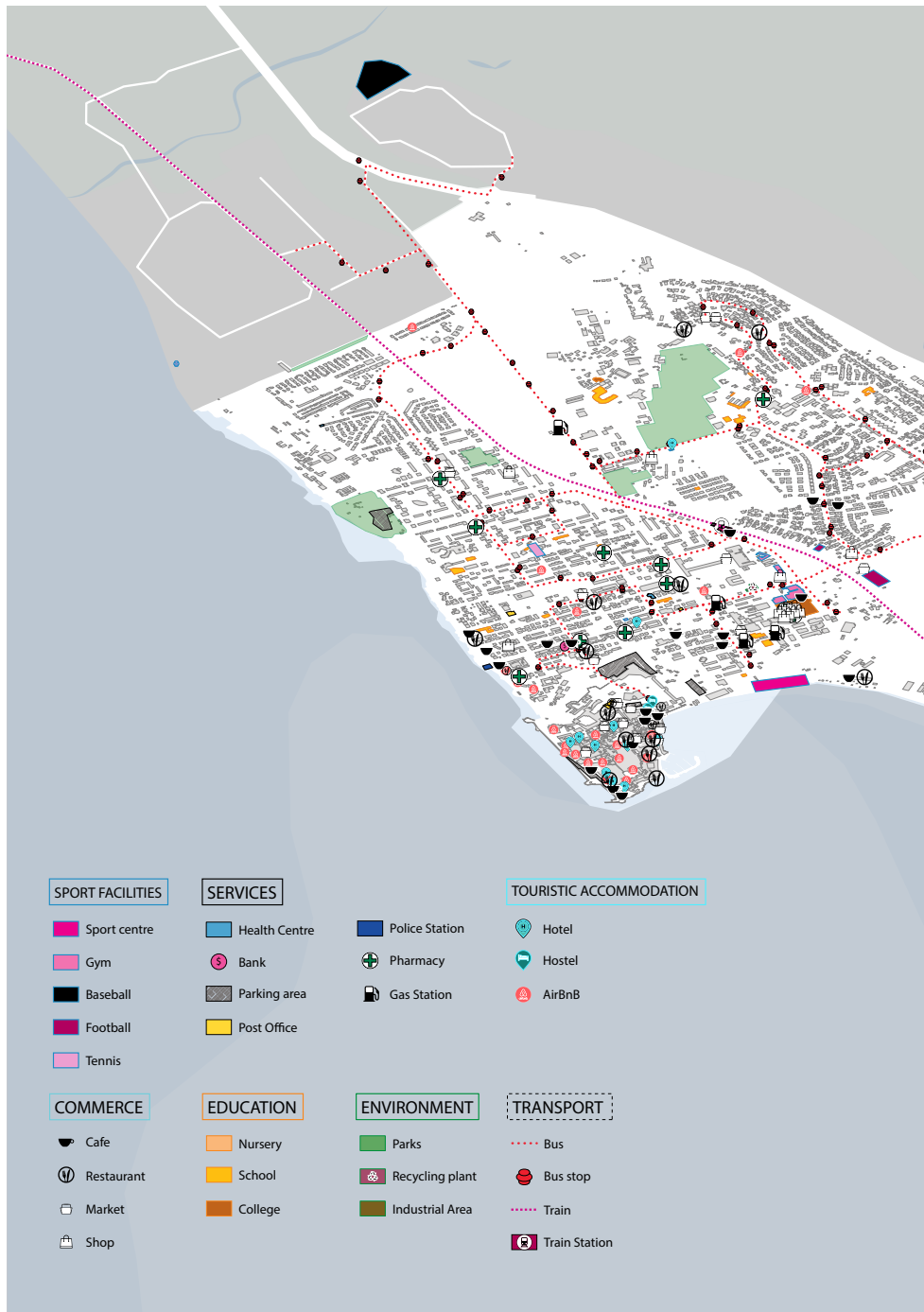


FIG. 7.4 Socio-Economic Data - Land use and public services



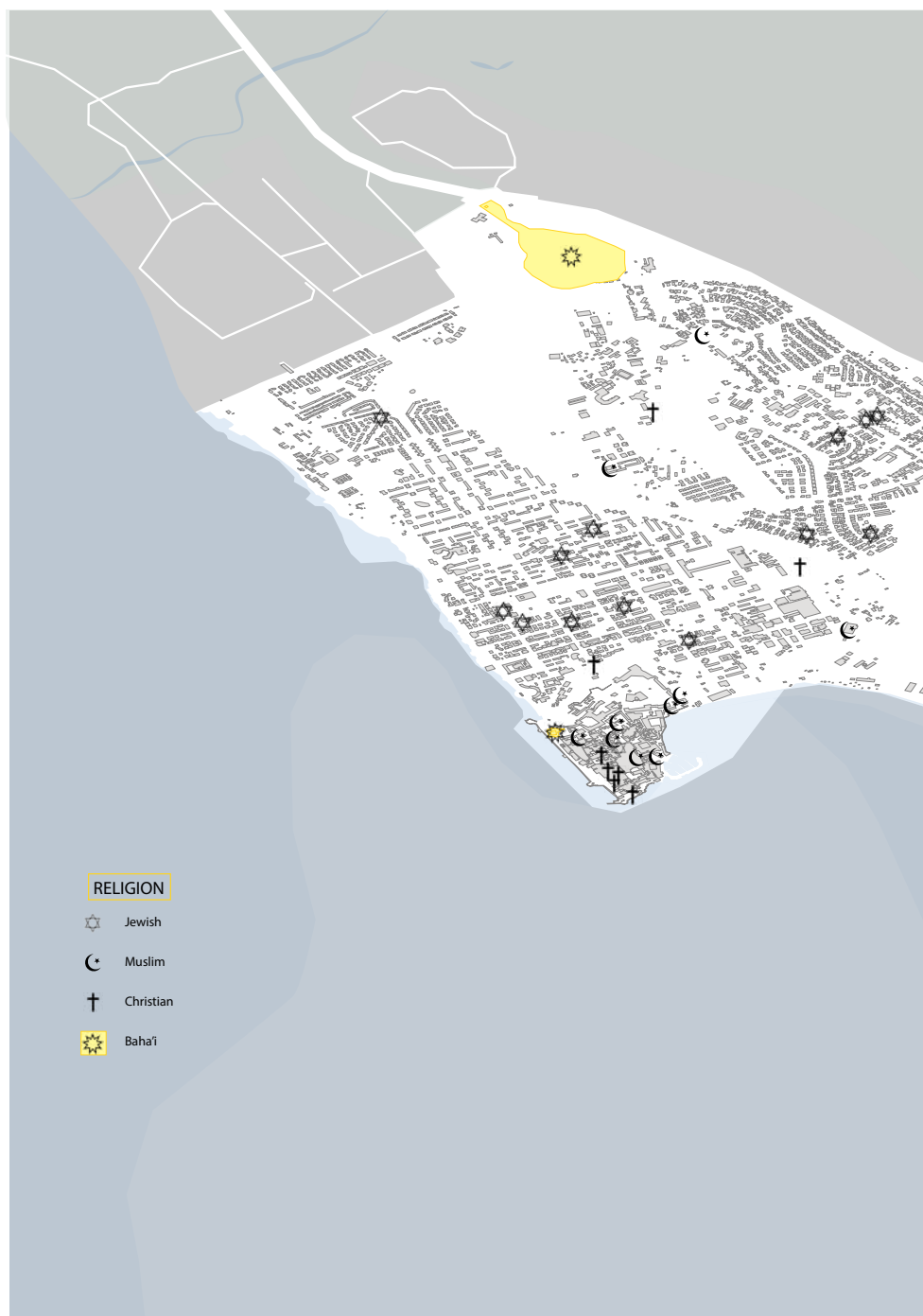


FIG. 7.5 Socio-Economic Data – Religion



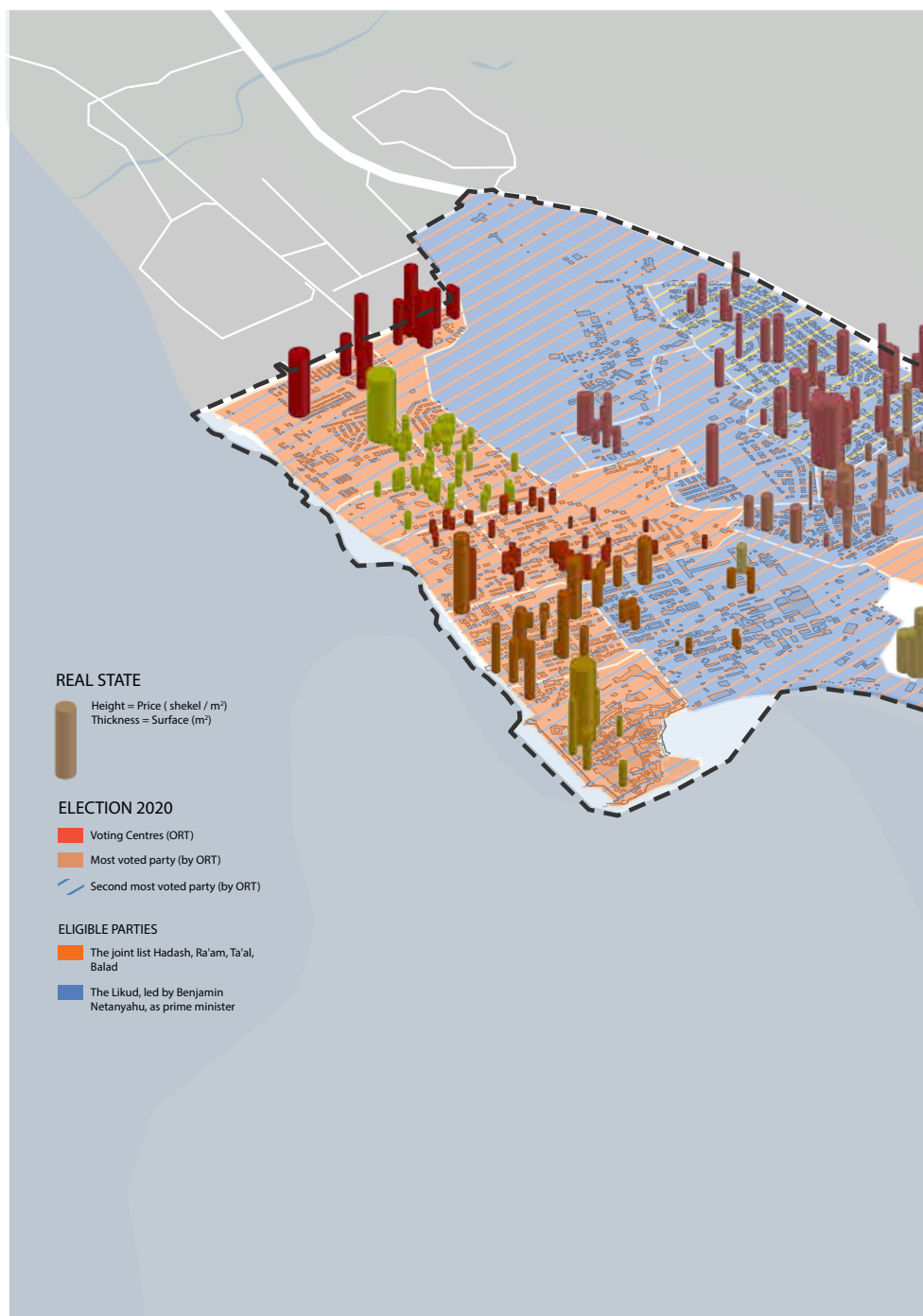
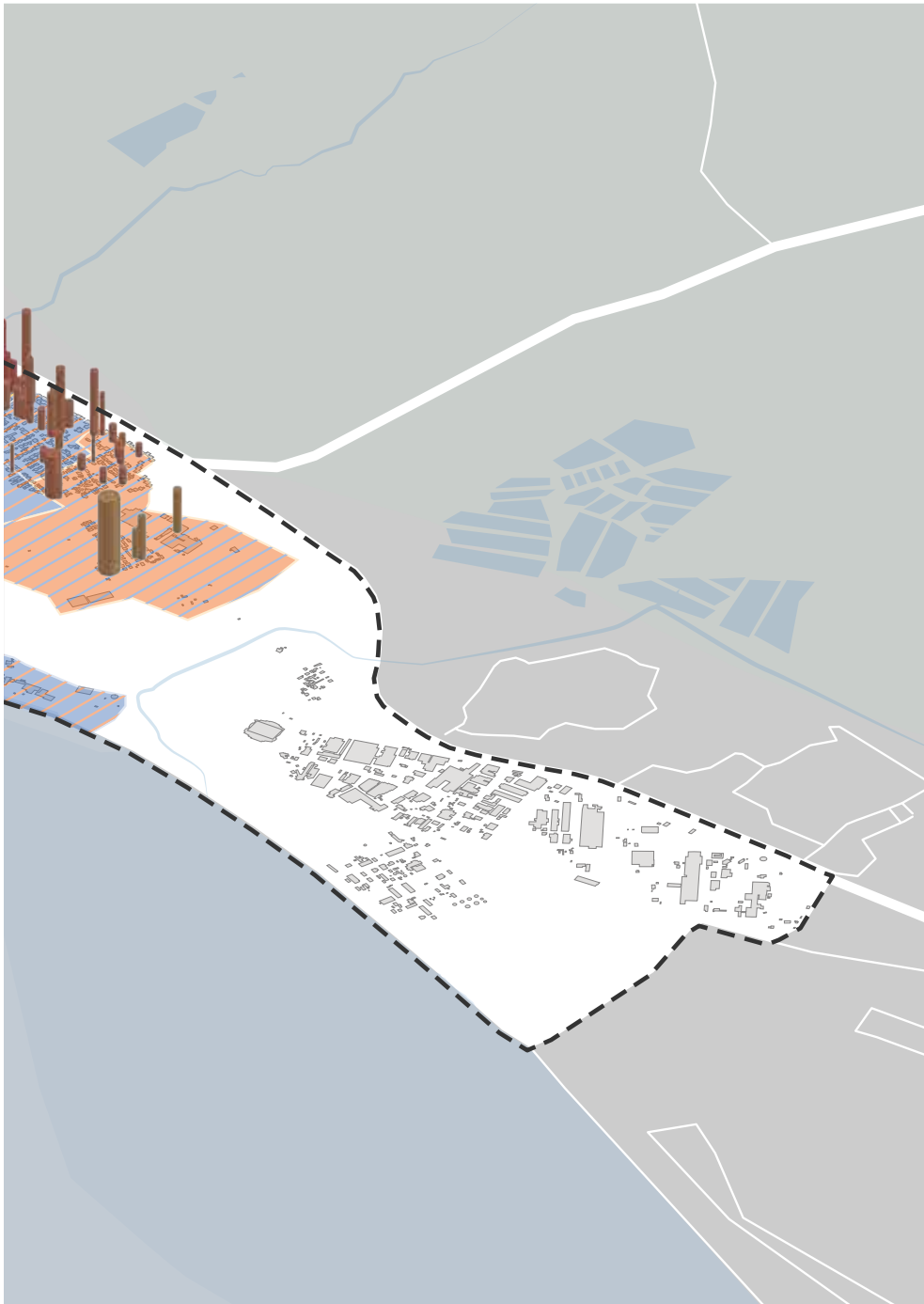
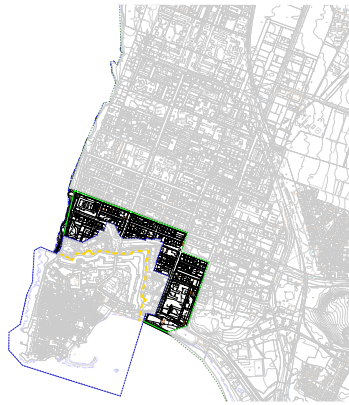


FIG. 7.6 Socio-Economic Data - Real State and Election 2020

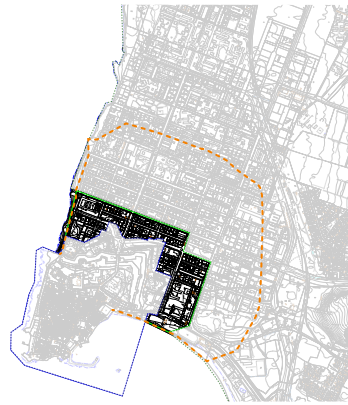


CITY BOUNDARY HISTORIC EVOLUTION

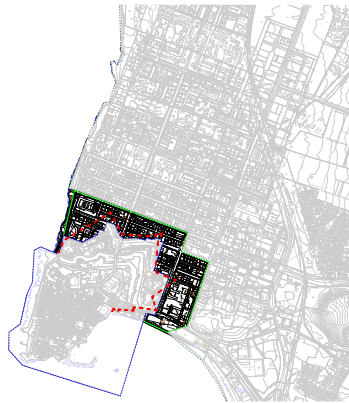
YOLLENITHIC



Early Arab



OTTOMAN



British

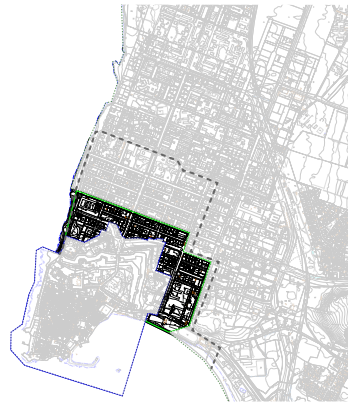
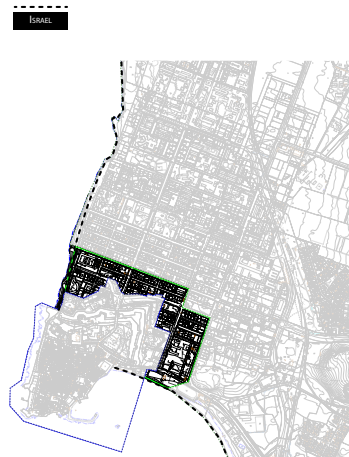
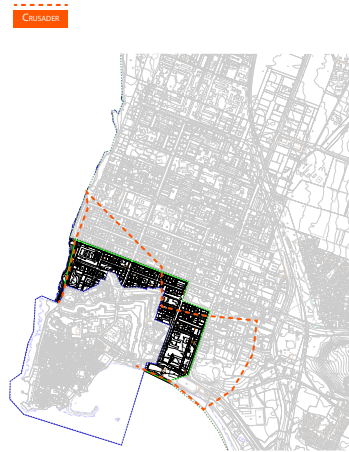


FIG. 7.7 Historic - City's boundary changes (left) and aerial photos (right) of Acre_IAA



CITY HISTORIC EVOLUTION since 1917

Barrage
1917



1923



1945



Isotopes
1963



1966



1994



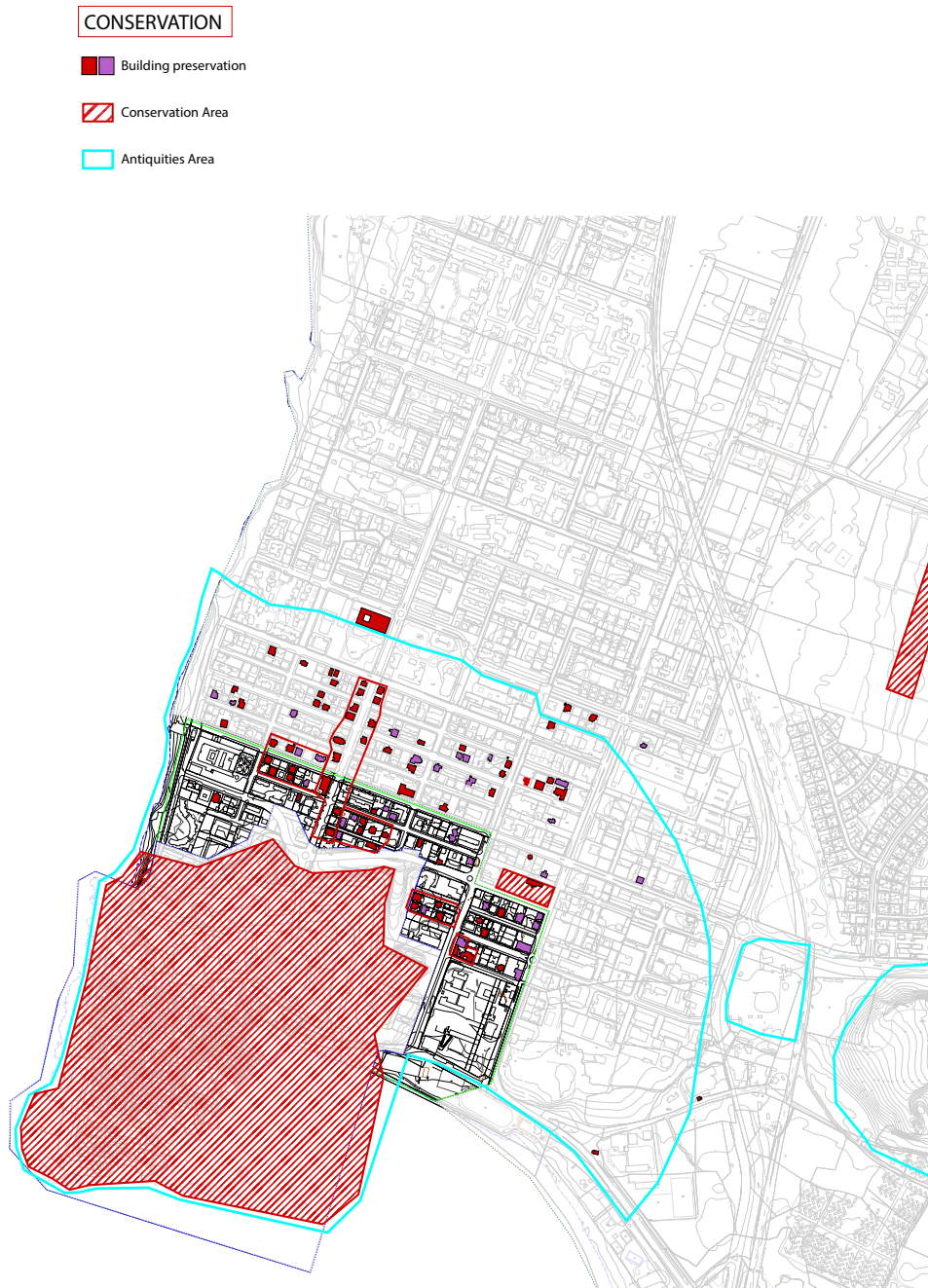


FIG. 7.8 Legal - Conservation elements of Acre_IAA

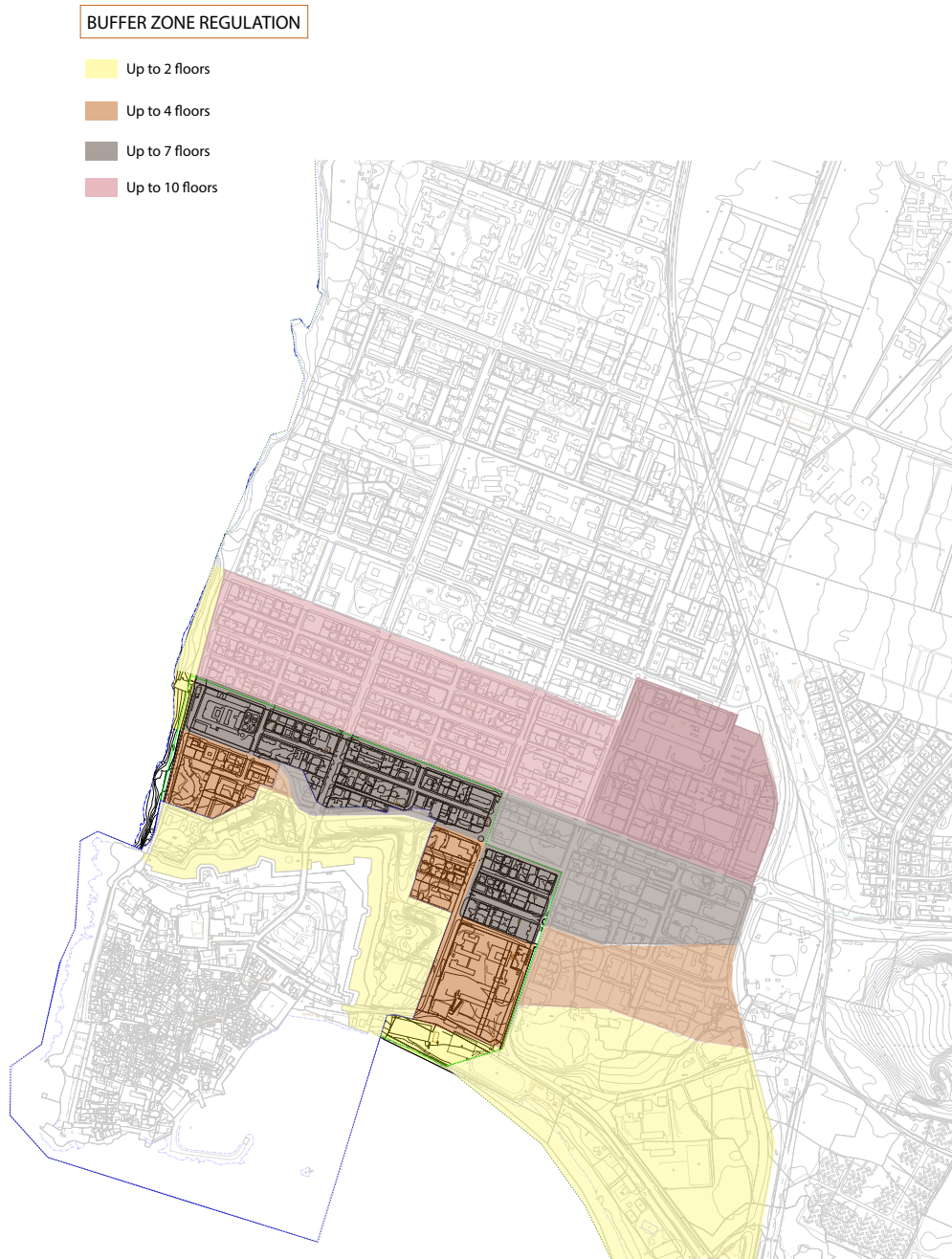
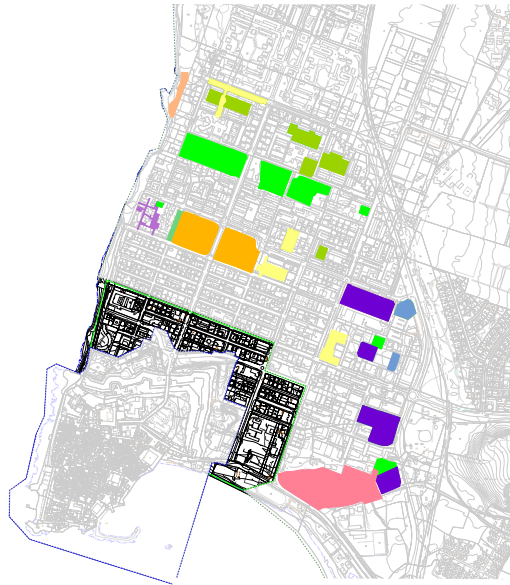


FIG. 7.9 Legal - Acre's Buffer Zone Building Height Regulation_IIA

LAND USE Master Plan 1958



LAND USE Master Plan 1988

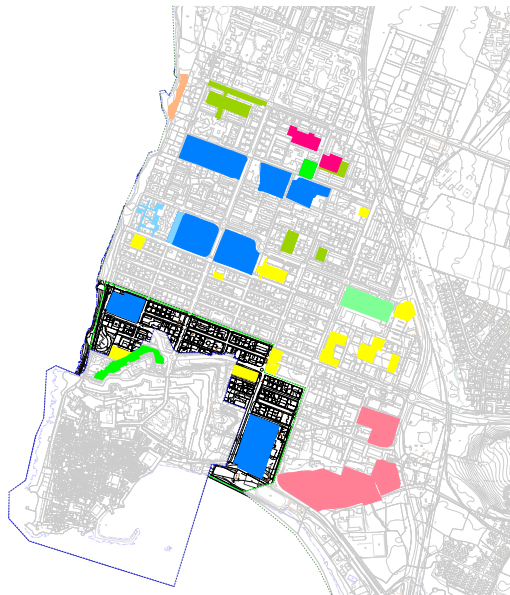
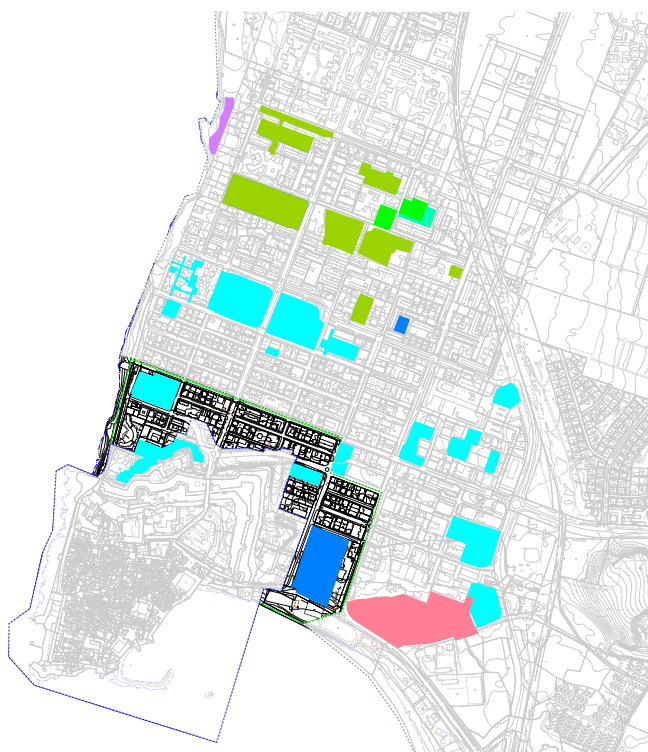


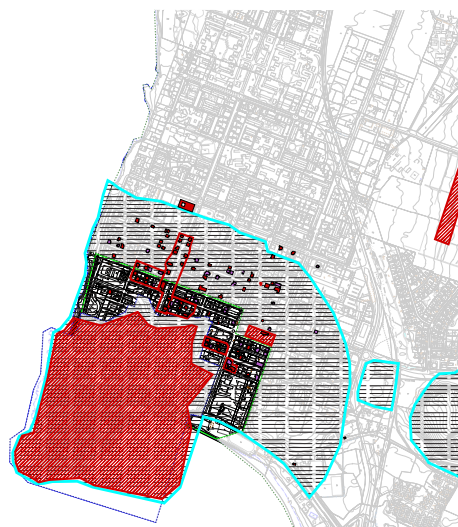
FIG. 7.10 Legal - Change in Land Use in Acre's Mandate_ Master Plans of 1958, 1988, and 2017_Municipality of Acre



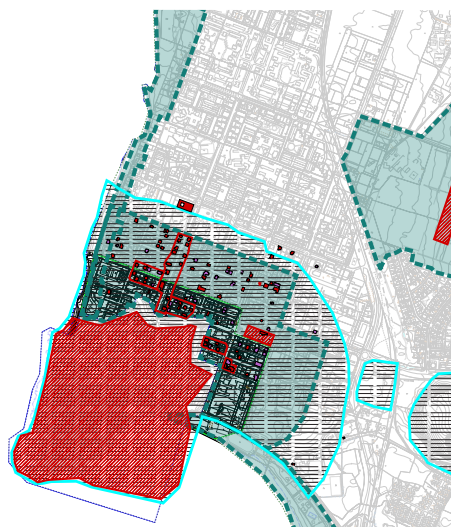
- | | |
|---|--|
| <div></div> Civic center | <div></div> Housing |
| <div></div> Commerce and Housing | <div></div> Beach |
| <div></div> Public open space + Area for a public building | <div></div> Area for a public building |
| <div></div> Public open space + Wholesale center + Workshop | <div></div> Neighborhood public area |
| <div></div> Wholesale center | <div></div> Business center |
| <div></div> Driveway | <div></div> Hotels |
| <div></div> Cemetery | <div></div> Area for a public building |
| <div></div> Public open space | <div></div> Mix use |

IDENTITY AREAS

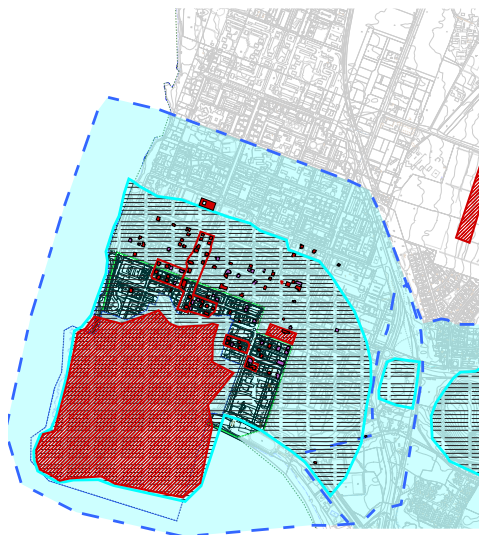
CONSERVATION AREA, ANTIQUITIES AREA AND BUILDING PRESERVATION



IDENTIFIED IDENTITY AREAS



INFLUENCE AREAS OF CONSERVATION, ANTIQUITIES AND PRESERVATION AREAS



INFLUENCE AREAS OF THE IDENTITY AREAS

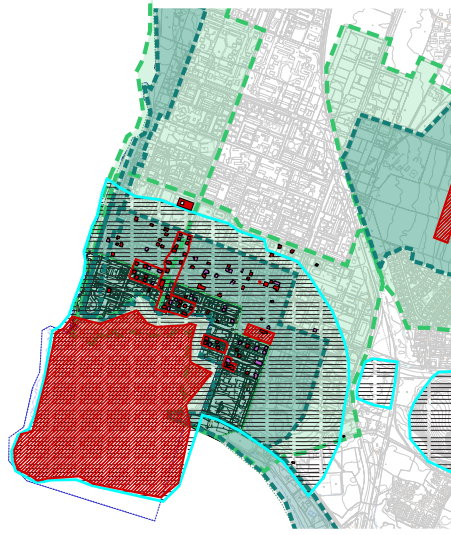
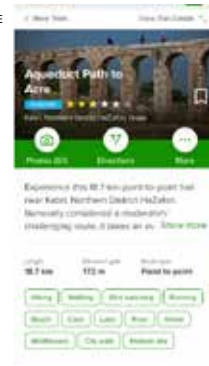


FIG. 7.11 Cultural - Identity Areas and their Areas of Influence (Buffer Zones)

FUTURE PROJECTS

KABRI_AQUEDUCT PATH TO ACRE



CITADEL AREA_HOTEL ON THE WALLS



depositphotos_154355852-stock-photo-citadel-in-akko-akre-acre_ Photo by ventdusud

KHAN A-SHAWARDA_HOTEL ON THE ROOFTOP



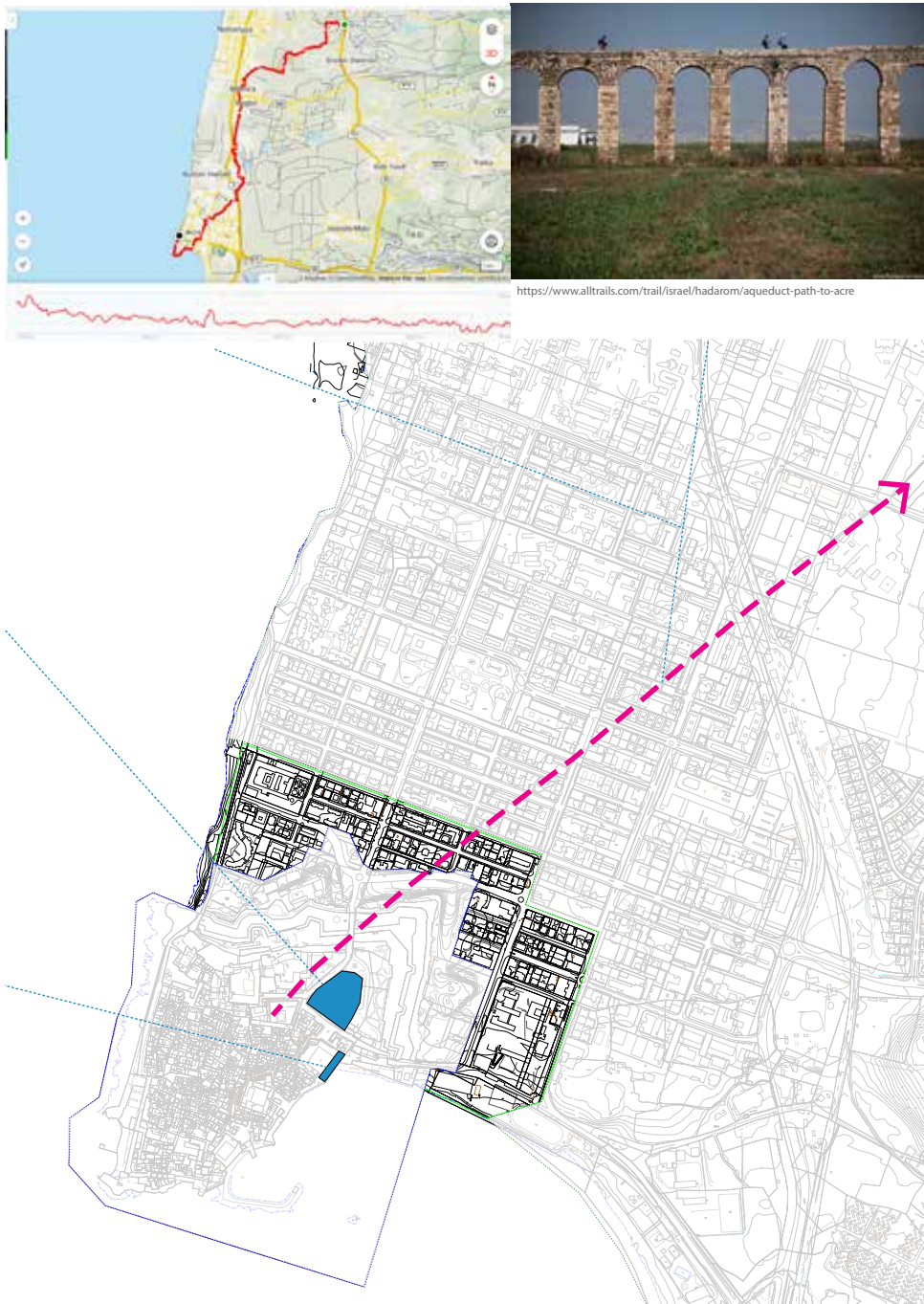
akko_khan-esh-shawarda01_(c) 2012 www.theologische-links.de



akko_khan-esh-shawarda03_(c) 2012 www.theologische-links.de

- Private Sector
- Multi-stakeholder:
Public and Civil Society

FIG. 7.12 Cultural - Future projects in Acre, and the stakeholders involved



7.2.2 Analysis of other sources: World Heritage Cities and Buffer Zones Diagnosis

The **World Heritage Cities data base** is a main data source to distil the main challenges faced by World Heritage Cities (WHC), specifically by their buffer zones. The data is based on the existing WHC database combined with the data extracted from the UNESCO World Heritage website, World Heritage Periodic Reporting and State of Conservation reports. This data compilation includes a big percentage of the urban World Heritage sites at a global scale, serving as an adequate baseline to run a **diagnosis about the challenges these cities face related to their buffer zone**. The addition of extra layers to the UNESCO WHC database is key to focus on the data related to buffer zone, and narrow down the research approach.

The analysis of **the State of Conservation (SOC) reports** unveils the specific challenges found in each of the WHC with buffer zone, as well as the evolution of these over time. On the one hand, we can see the **most common threats in WHC with BUFFER ZONE**. These range from Management to Housing or Legal Framework, being these three the most common threats. Ground transportation, Commercial activities and Management Activities are also in the top 10 threats. Therefore, it is clear that most of the problems derive from **development activities** (Housing, ground transportation, commercial activities) and **managerial issues** (Management, Legal framework and Management activities). The least common threats are related to: Changes in traditional ways of life and knowledge system, Military training, and Low impact research / monitoring activities. This means that this type of activities is usually under control or their impact is low. Also, storms and landslides are on the lower part of the chart, implying that natural disasters are not the biggest threat for the WHC, good news taking into account that this type of threat is not controllable and entails disaster mitigation procedures that usually take long periods of time to be implemented. Altogether, we can conclude that the most impactful threats are related to development activities and management, two aspects that fall under legislative and institutional control, this is, two aspects that are manageable and can be directly modified.

TABLE 7.1 State of Conservation Reports_Evolution of threats (reported last 4 years)_ <https://whc.unesco.org/en/soc/>

State Of Conservation Reports – Threat evolution (reported last 4 years)					
	Year 1	Year2	Year3	Year4	TYPE OF THREAT
Most common threat	Management	Management	Management	Management	Management and institutional factors
	Housing	Housing	Housing	Housing	Buildings and Development
	Legal framework	Ground Transport.	Legal framework	Legal framework	Transportation Infra.
	Management Activs.	Legal framework	Ground Transport.	Ground Transport.	Social/cultural uses of heritage
	Commerce	Commerce	Tourism	Management Activs.	Other human activities
	Ground Transportation	Management Activities	Accommodation	Tourism	Climate change
	Tourism	Tourism	Management Activs.	Accommodation	
	Human Resources	Accommodation	Deliberate destruction of heritage	Deliberate destruction of heritage	
	Accommodation	Climate Change	Commerce	Financial Resources	
	Financial Resources	Financial Resources	Financial Resources	Human Resources	
Least common threat	Illegal activities	Changes in traditional ways	Changes in traditional ways	Changes in traditional ways	Management and institutional factors
	Cracks	Military training	Military training	Military training	Buildings and Development
	Changes in traditional ways	Low Impact Research	Low Impact Research	Low Impact Research	Transportation Infra.
	Military training	Storm	Storm	Landslide	Social/cultural uses of heritage
	Low Impact Research	Illegal activities	Landslide	Interpretative and visitation facilities	Other human activities
	Erosion	Cracks	Interpretative and visitation facilities	Governance	Climate change
	Storm	Transportation infra.	Governance	High Impact Research	Sudden ecological or geological events
	Underground Transportation	Landslide	High Impact Research	Illegal activities	
	War	Fire	Climate Change	Cracks	
	Transportation infra.	Interpretative and visitation facilities	Illegal activities	Fire	

■ Matching threat – same rank ■ Matching threat - different rank ■ Non-matching threat

The analysis of the **World Heritage Cities data base** shows the multiple **challenges WHC and their buffer zone** face, which follow certain trends. On the one hand, two thirds of the WHC list (66%) have got a buffer zone (See Figure 7.13). These buffer zones usually cover a bigger area compared to the WH sites, the ratio between the buffer zone area and the property is, in half of the cases, of more than an 80%, and in 30% of the cases it ranges between 20 to 80% (See Figure 7.14). This means that the buffer zone areas expand much more than the WH sites, and therefore, the adequacy and quality of their management is subject to be more complex and have more issues than the WH sites. It also has a positive side, as there are more opportunities to intervene, the area is larger, and the planning laws are less restrictive than in the property.

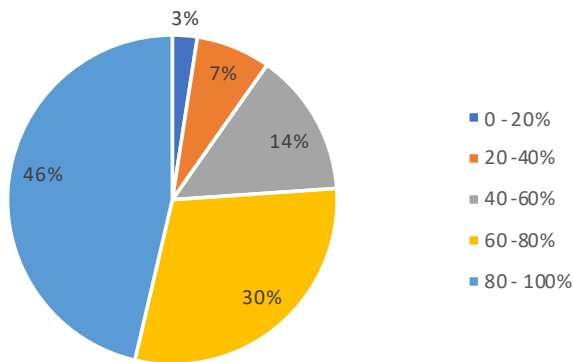


FIG. 7.13 Percentage of World Heritage Cities with a Buffer Zone

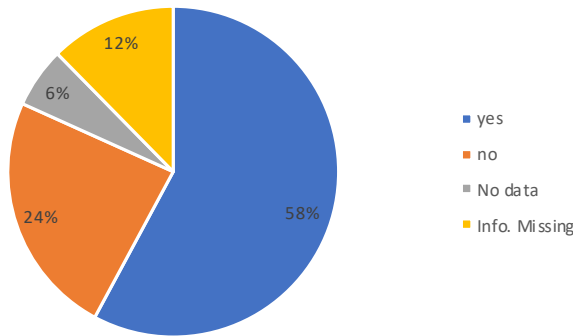


FIG. 7.14 Ratio of Buffer Zone is larger compared to the Total area (core zone + buffer zone)

On the other hand, the regulations around the WH sites are usually clearer, and issues arise as we move away from the core towards the buffer zone. Nevertheless, if we focus on the **data extracted from the Periodic Reporting Cycle 2 reports**, we can observe how most of the sites (71%) have an adequate buffer zone to maintain the property's Outstanding Universal Value (OUV), yet, the buffer zones face specific challenges: In 35% of the cases, the buffer zone boundaries are not known by the local communities (4.1.5.); regarding the existing legal frameworks, these are adequate in the buffer zone for maintaining the OUV of the property (4.2.3.) in just 62% of the cases, and adequate in the area surrounding the World Heritage property and buffer zone (4.2.4.) in 69% of the cases (See Figure 7.15). Therefore, understanding the implications these factors have in the adequate functioning of the WHC is fundamental, in order to improve the role of buffer zones and turn them into a threshold connecting the WH site with its buffer zone and with the rest of the city seamlessly.

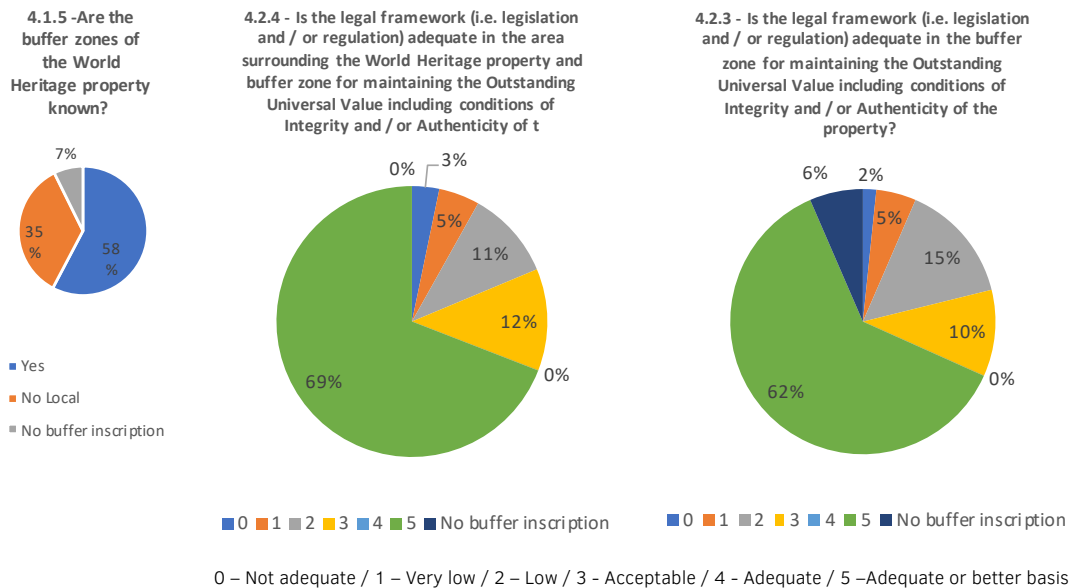


FIG. 7.15 Response to the questions 4.1.5; 4.2.4; and 4.2.3 of the Periodic Reporting Cycle 2 (left to right)

7.3 Results from the Map and Source Analysis

The combination of the cultural maps and information from the WHC database and SOC reports results in a series of more comprehensible maps, which include layers which are traditionally not visualized (legal or socio-economic data). This overlaying supports a more adequate understanding of urban inequalities, gentrification, or religious conflicts, among other; ultimately including and highlighting the conflicting aspects (SQ 2). All of this is key to design the scenarios that link disconnected layers in the city, and also address Acre's main issues.

Cultural Mapping results

The combination of the diagnosis maps (See Diagnosis of Acre) results in a series of more comprehensible maps, key to identify Acre's main issues and design scenarios for the Buffer Zone and beyond.

In Figure 7.16 the Natural Features, the Urban Elements and the Land Use are combined; and in Figure 7.20 the socio-economic data is presented with the road hierarchy and the religious buildings. Furthermore, zooms into the key areas are provided to observe the details (Figures 7.17, 7.18 and 7.19). The conclusions extracted from these maps provide the gaps, problematic, and conflict of interests in the city of Acre.

Natural Features, the Urban Elements, and the Land Use of Acre

Figure 7.16 combines the elements from Figures 7.1, 7.2, 7.3, and 7.4, expressing the structure of the city, its neighbourhoods, natural features, connectivity, and urban heritage elements. Most importantly, it shows the complexity of the city of Acre, overlapping multiple layers, with a very defined structure, originating from the Old City and moving towards the hinterland, this contrasts with the organic urban fabric of its Old City, that looks towards the sea. In this context, the Buffer Zone represents the main connection to the rest of the city, as well as being an identity area in itself, well connected to the transportation nodes and axis, and with a visible architectural style, social tissue, and sense of place. However, the lack of greenery and public spaces is significant in these two main identity areas, which is compensated with the prominence of the sea, in the form of sea walks, and the port.

It can be observed that there is a lack of public services in the Old City (See Figure 7.17), almost none in the south (as it is mainly industrial) (see Figure 7.18), and the rest of the neighbourhoods have a balanced distribution of these. There is a physical disconnection between the East and the West due to the railway, and between the North and South as the latter is least developed and has many vacant or industrial areas (See Figure 7.19).

Socio-Economic Data, Religious Use, and Road Hierarchy of Acre

Figure 7.20 refers to the socio-economic data, showing ideological differences between the East and West areas; the unequal distribution of religious buildings, displaying how the Old City is mainly inhabited by Muslim, with Christian buildings aimed for tourism, and the rest of the city is mainly inhabited by Jews²⁹ (Central Bureau of Statistics, Government of Israel, 2018).

In the same way, the real estate information shows lower-income households in the Old City, which gradually increase as we move towards the north and east, where the households have a higher income (See Figures 7.21 and 7.22). Therefore, there are clear social inequalities between areas of the city, and religious beliefs. The Old city is mainly inhabited by Muslim, which live in lower-priced households; and Jews live in the new city, being the neighbourhoods in the northeast higher in price.

Natural Features, Urban Elements, and the Urban Heritage of Acre

In a similar way, but also with the addition of heritage and legal layers, which include the city Master Plan and buffer zone regulatory norms, Figure 7.23 portrays the urban, socio-economic, heritage, and legal status of the area of focus.

The aforementioned social inequalities are observed in the clear division created by the railway, which separates the west from the east, being the latter of higher income, more residential, mostly Jewish and with direct access to the main roads (probably due to having jobs in main cities like Haifa or Tel Aviv). Whereas the citizens in the western side of the railway are less connected, the housing prices become lower as we approach the old city, where we find less services, although public transportation is present.

²⁹ The population distribution disaggregated by religion is the following: Total citizens - 49,380; Jews - 29,369 (59.5%); Muslim - 15,829 (32%); Others - 4,182 (8.5%). Out of the 15,829 Muslim, 15,038 (95%) live in the Old City.

It should be highlighted how the urban heritage identified by the authorised discourse is located mainly in the old city and the Baha'i area in the north, but these are not connected or easily accessible. This disconnection of the heritage with the rest of the city is visible in the small presence of public transportation arriving to the old city or the Baha' shrine. Nevertheless, there is a "virtual" connection between these two World Heritage sites through the original trace of the Ottoman Aqueduct that would have linked them when it was in total use and not in ruins.

Legal, Religious, and Socio-Economic Data of Acre

Figure 7.24 and Figure 7.25 present trends in the real state sector³⁰, and politics³¹. These show that both sectors are stable, and that the ideology in the city is relatively homogeneous.

Again, the division created by the railway is clear in the political beliefs by the western and eastern sides of Acre. Most of those who live in the higher-income area vote for the Likud party (led by Netanyahu), whereas the western side of the railways is lower-income and they vote for the joint list.

Legal, Religious, and Socio-Economic Data of Acr

Figure 7.26 shows a similar trend to the previous maps, where most of activities are concentrated in the Old City and the Mandate. As we move north and east, to the other side of the railways, the services decrease, which highlights the fact that these areas are mainly residential. With a similar logic, the buffer zone regulations, which only address building heights, propose an in crescendo cityscape where the buildings increase in height as long as they move further from the Old City. This policy has a high impact in the way real estate is managed in the old city and surroundings, as the height limitations increase urban pressure and gentrification.

The fact that tourism is currently concentrated in the old city and that the housing availability is limited (no new buildings due to the Conservation Law), produces acute gentrification. The old buildings, many in need of repair, are being purchased by wealthy developers (mostly Jews) increasing tensions between the old city's local inhabitants and these new owners.

³⁰ Madlan: data from March 2020, and May 2022

³¹ Elections in Israel 2020 and 2021



FIG. 7.16 Natural Features, the Urban Elements, and the Land Use of Acre



SPORT FACILITIES

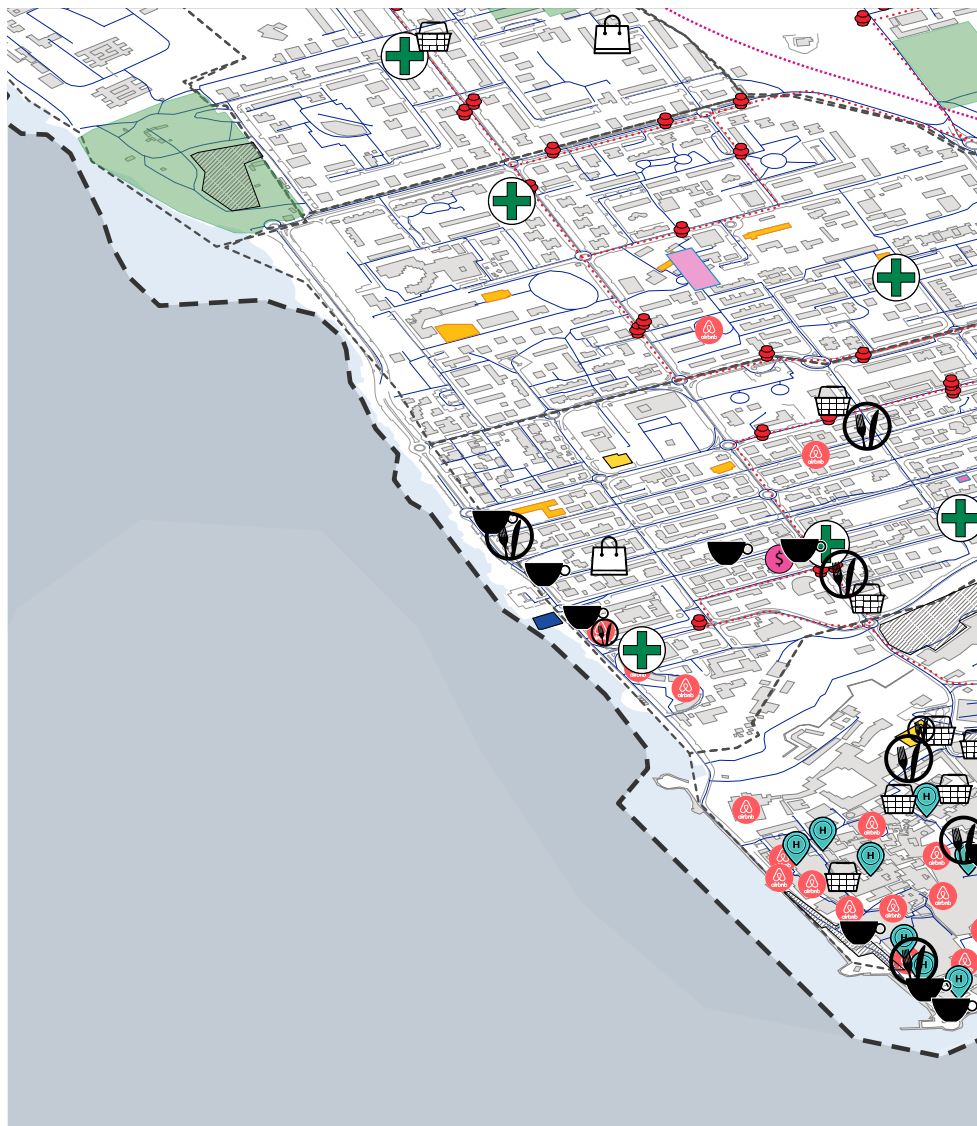
- Sport centre
- Gym
- Baseball
- Football
- Tennis

TOURISTIC ACCOMMODATION

- Hotel
- Hostel
- AirBnB

SERVICES

- Health Centre
- Police Station
- Bank
- Pharmacy
- Parking area
- Gas Station
- Post Office






















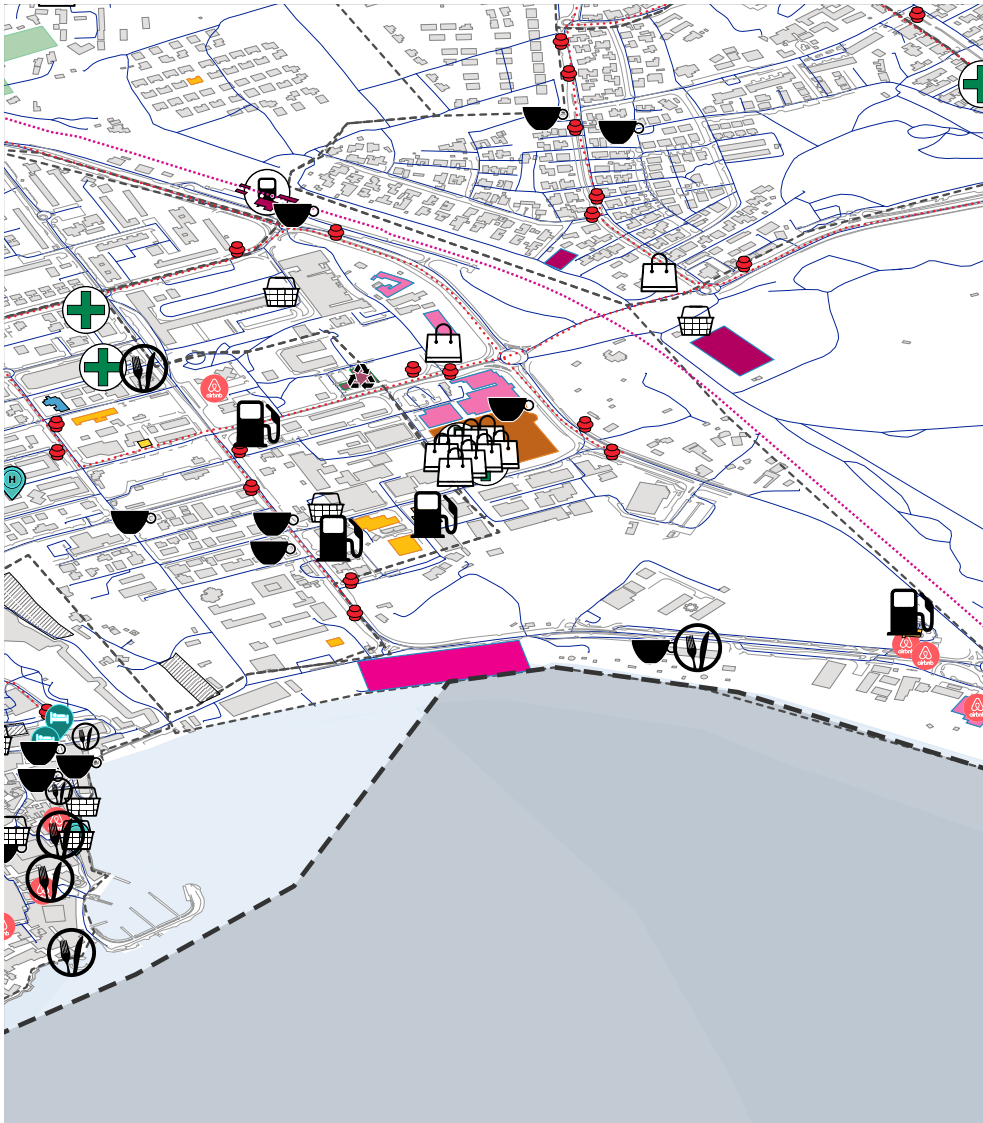



COMMERCE	EDUCATION	ENVIRONMENT	TRANSPORT	SPORT FACILITIES	
 Cafe	 Nursery	 Parks	 Bus	 Sport centre	 Tennis
 Restaurant	 School	 Recycling plant	 Bus stop	 Gym	
 Market	 College	 Industrial Area	 Train	 Baseball	
 Shop			 Train Station	 Football	

FIG. 7.17 Zoom into the Old City and adjacent areas of Acre



TOURISTIC ACCOMMODATION

-  Hotel
-  Hostel
-  AirBnB

SERVICES






-  Health Centre
-  Bank
-  Parking area
-  Post Office
-  Police Station
-  Pharmacy
-  Gas Station










FIG. 7.18 Zoom into the South industrial area of Acre



TOURISTIC ACCOMMODATION

-  Hotel
-  Hostel
-  AirBnB

SERVICES

-  Health Centre
-  Bank
-  Parking area
-  Post Office
-  Police Station
-  Pharmacy
-  Gas Station

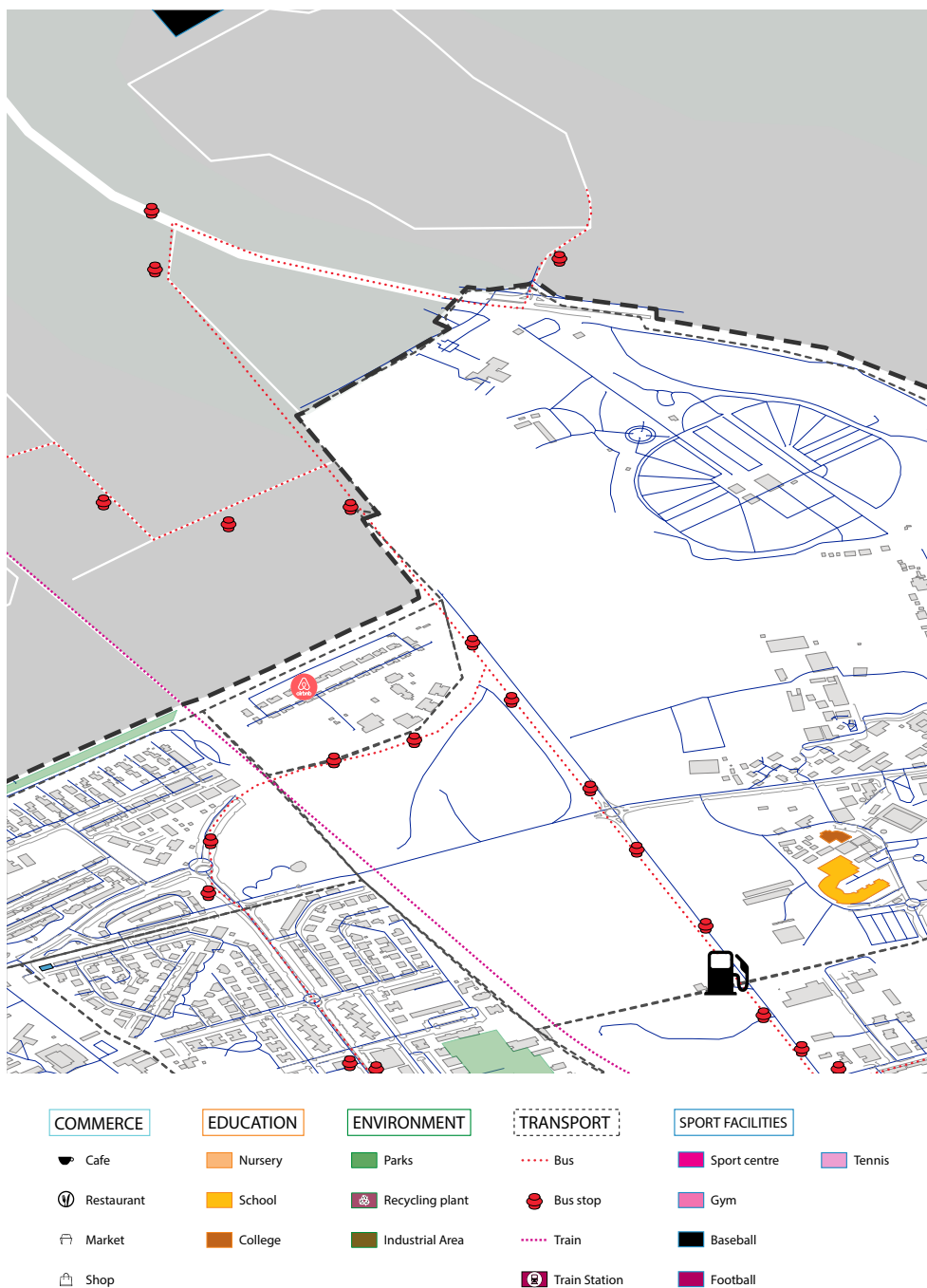
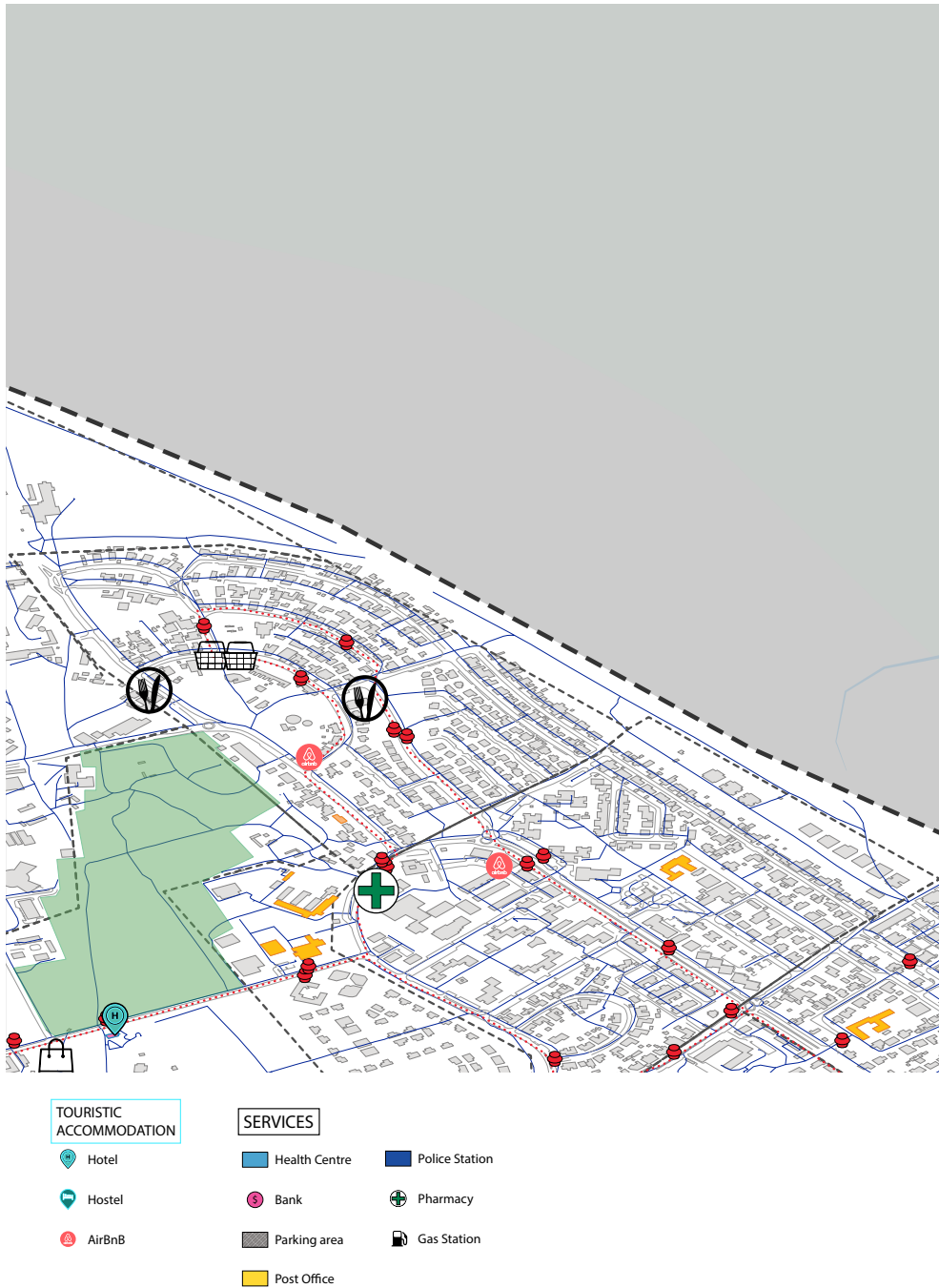


FIG. 7.19 Zoom into the North east and Baha'i area of Acre



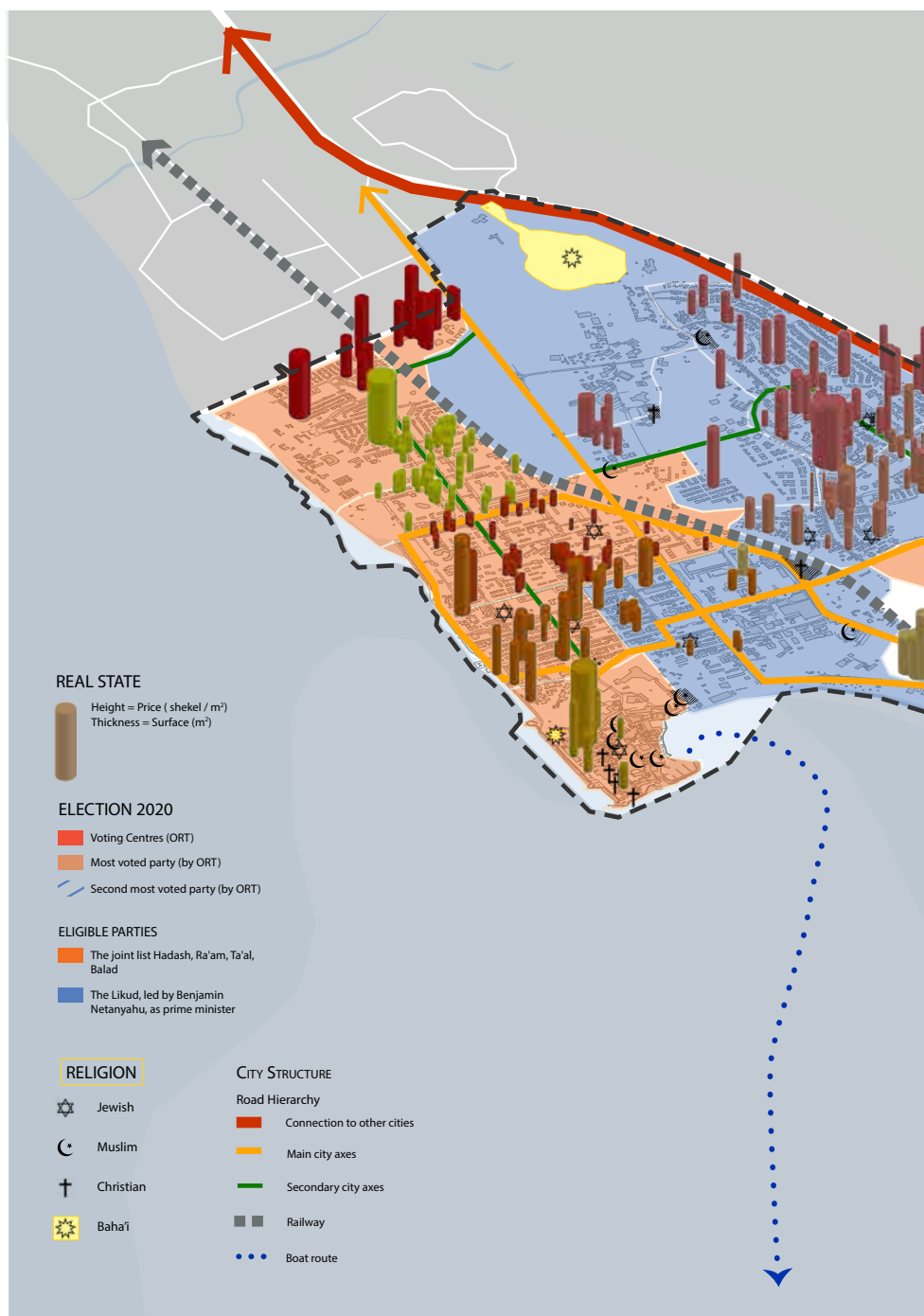


FIG. 7.20 Socio-Economic Data, Religious use, and road hierarchy of Acre



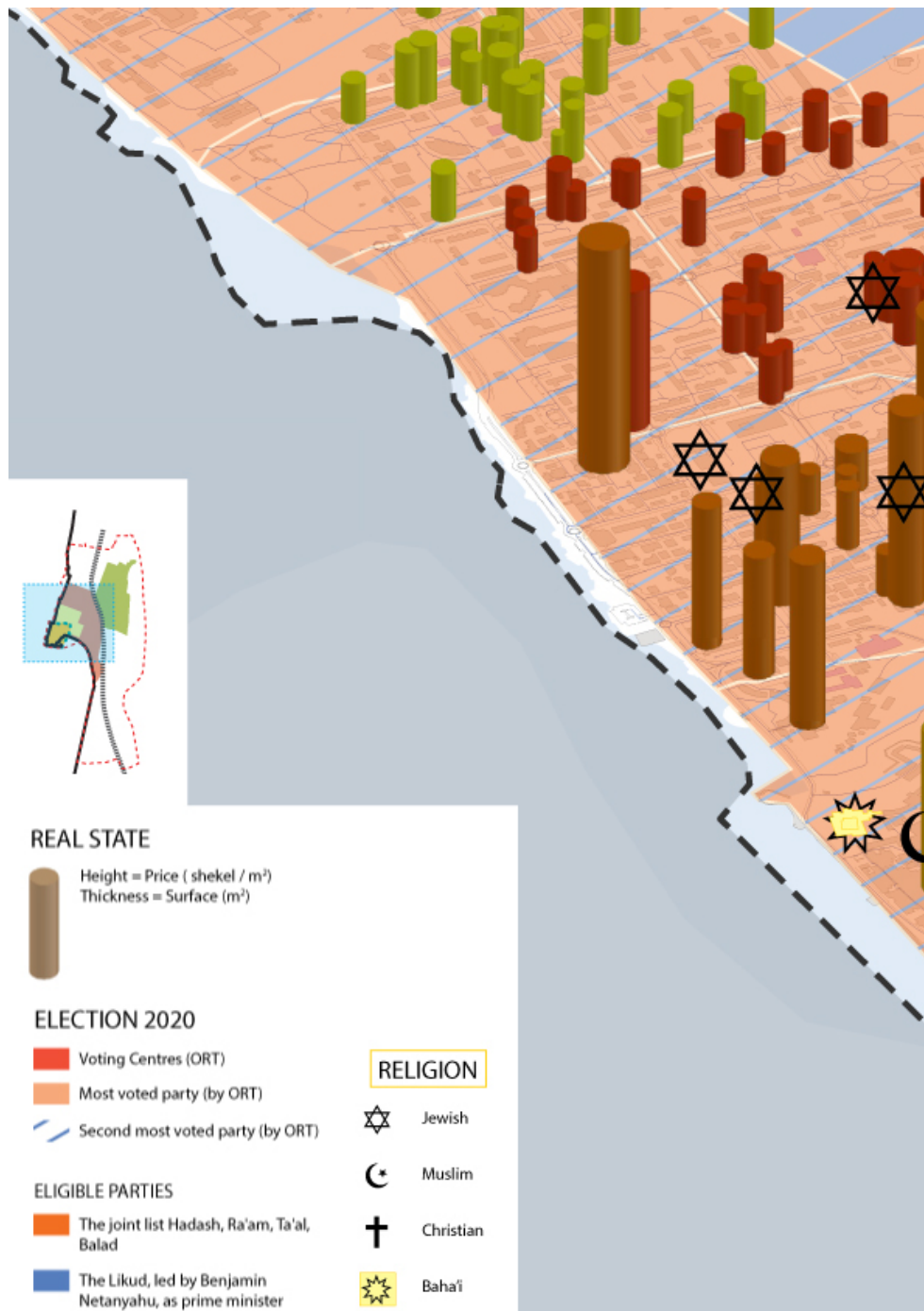
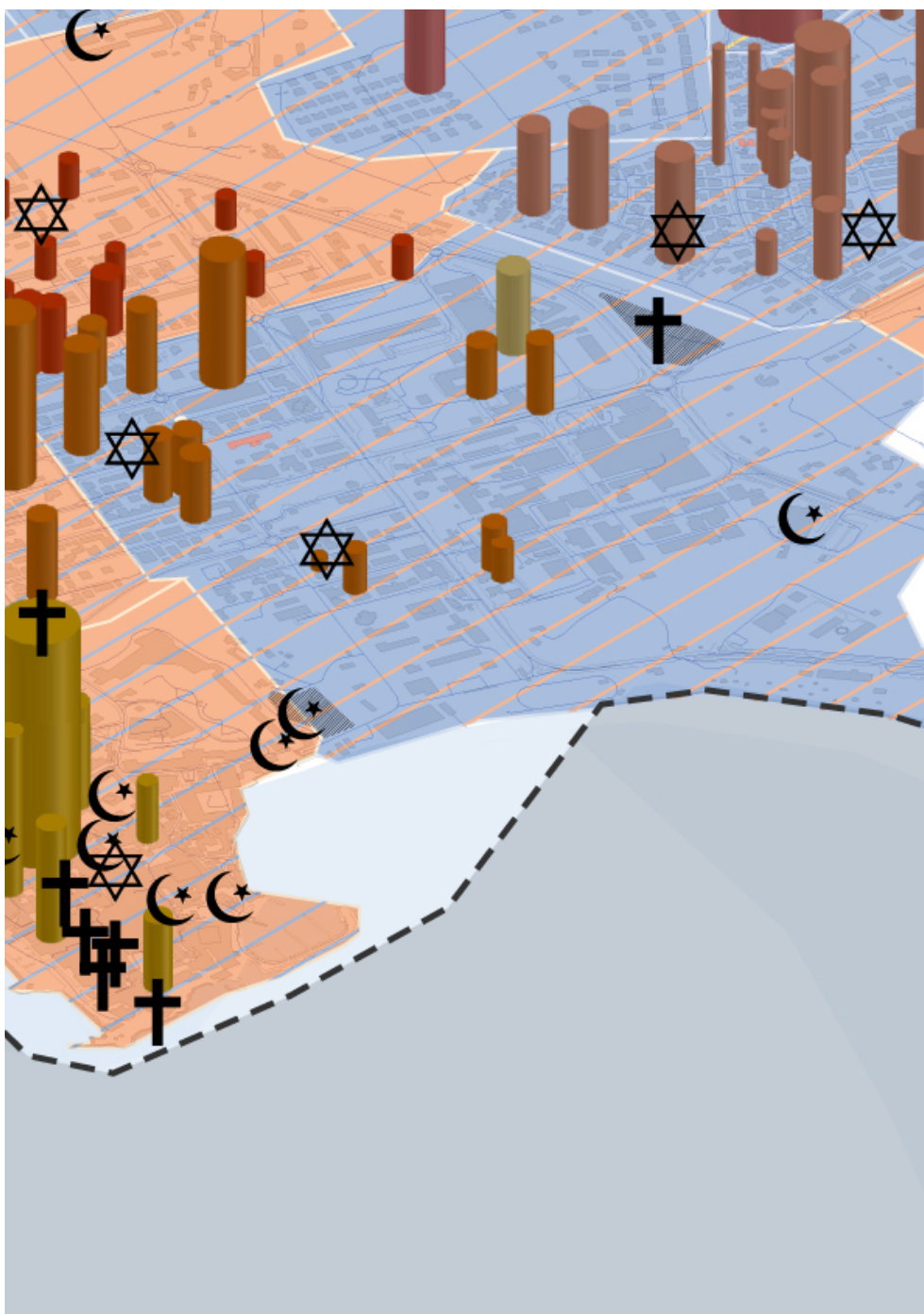


FIG. 7.21 Zoom into the Old City and adjacent areas of Acre



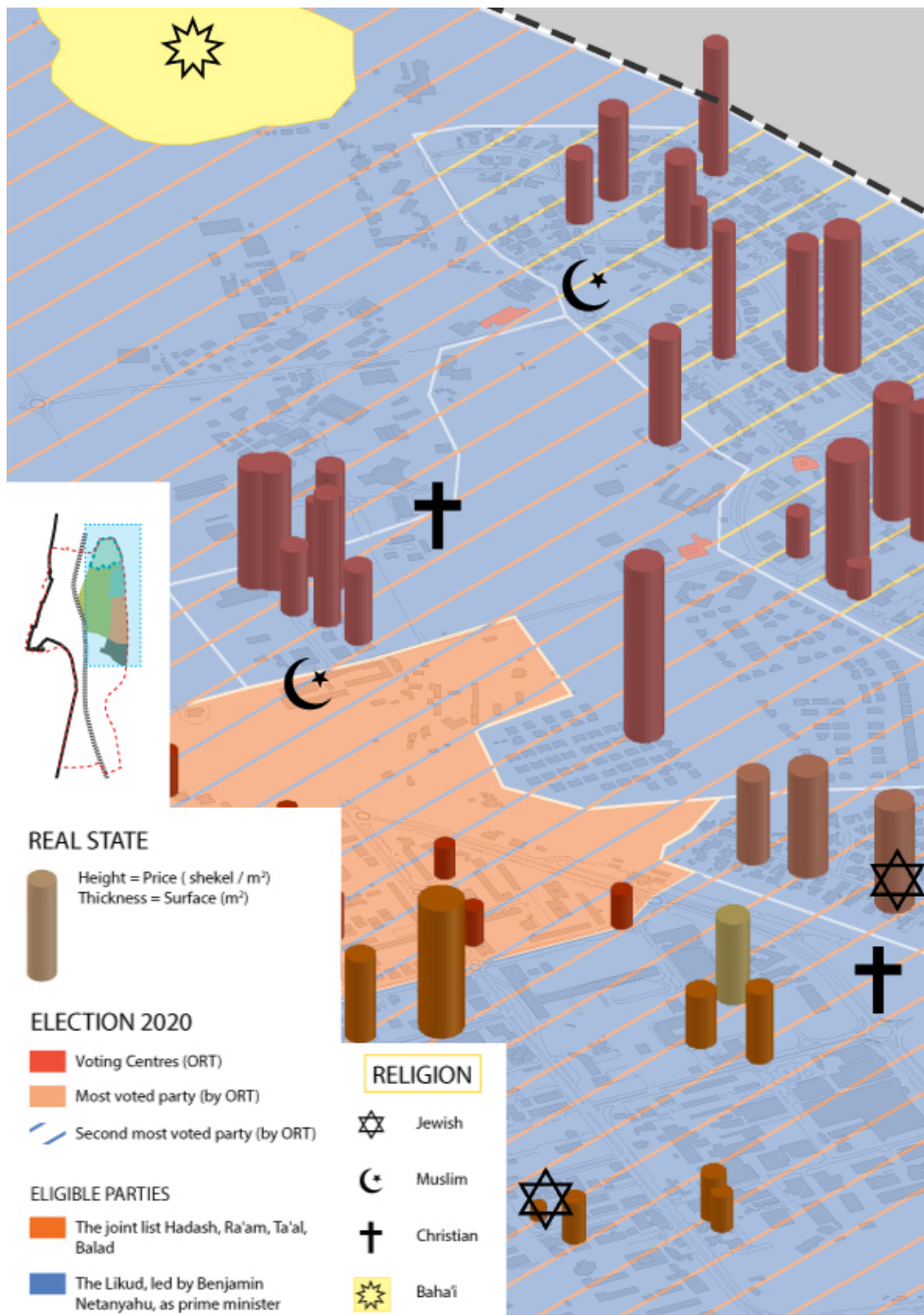


FIG. 7.22 Zoom into the West part of Acre, south to the Baha'i shrine

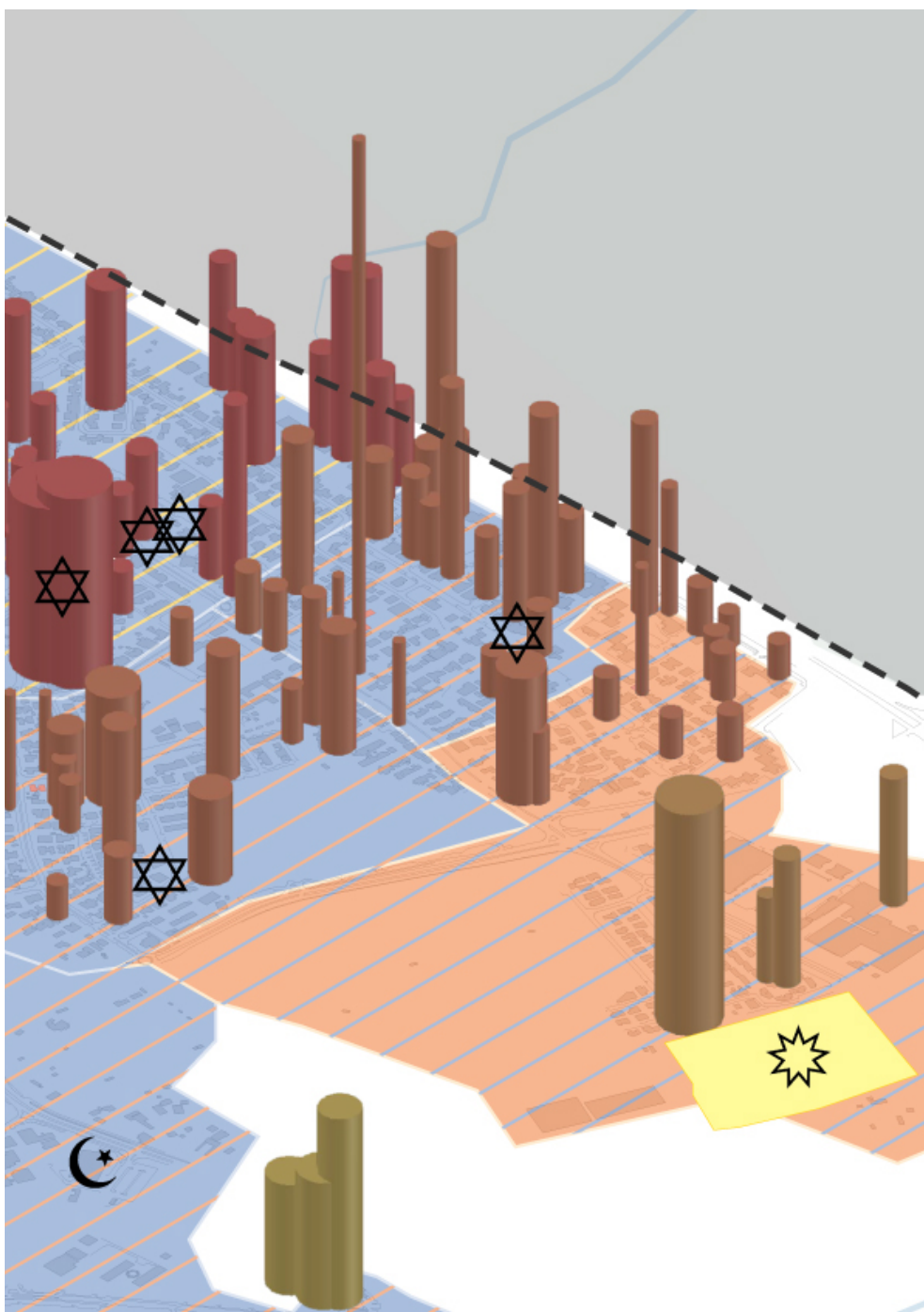




FIG. 7.23 Natural Features, the Urban Elements, and the Urban Heritage of Acre



URBAN HERITAGE

re Yoni Netanyahu

re Sapir

ith of Acre

Views and vistas

Spatial patterns

Historic Layers

Festival Routes

Markets

Open Spaces

Monuments / ensembles

World Heritage

World Heritage Site

Buffer Zone

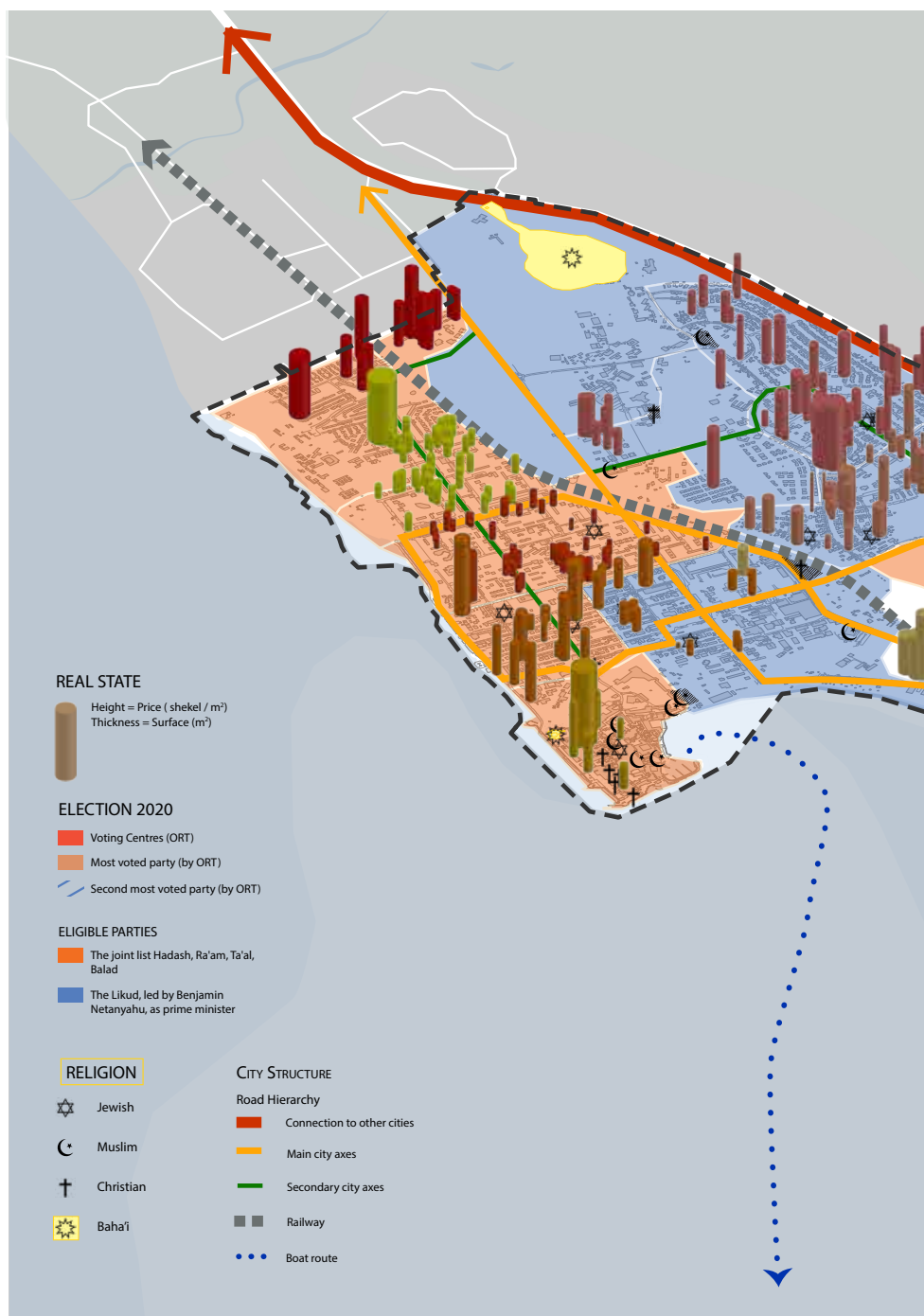


FIG. 7.24 Socio-Economic Data, Religious use, and road hierarchy of Acre



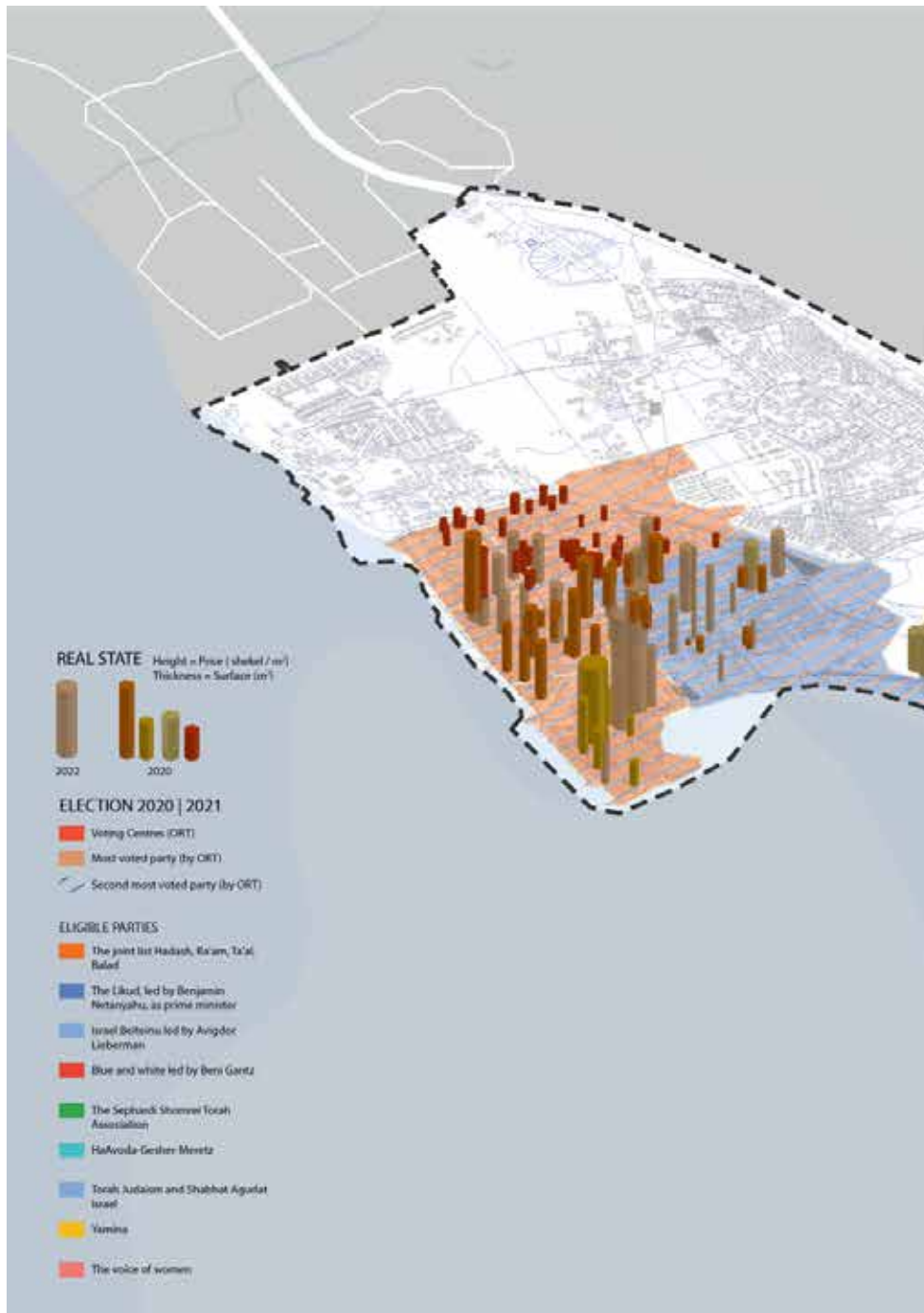


FIG. 7.25 Socio-Economic_ Real State and 20_21 Election Data of Acre

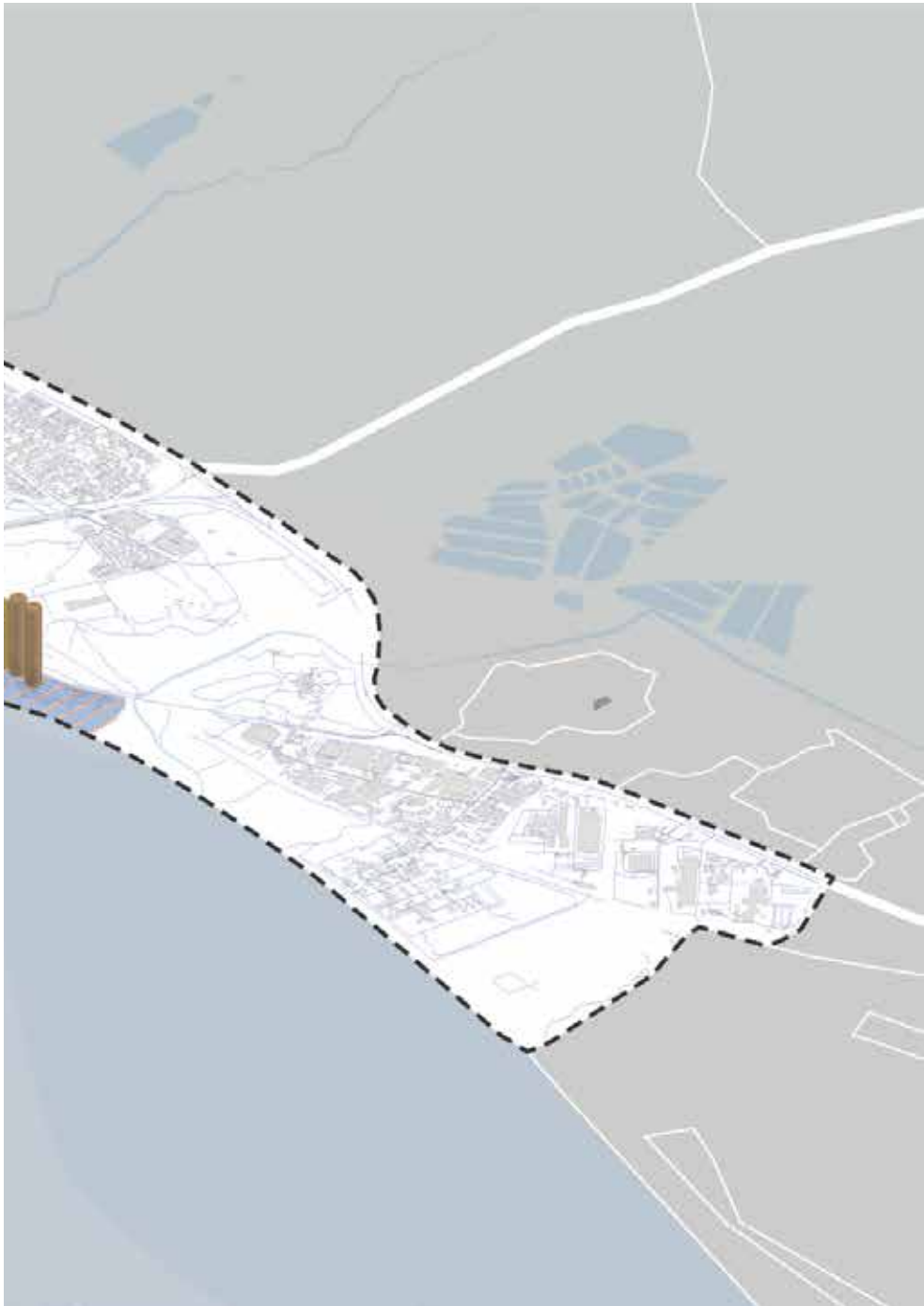




FIG. 7.26 Legal, Religious, and Socio-Economic Data of Acre

BUFFER ZONE REGULATION

-  Up to 3 floors
-  Up to 4 floors
-  Up to 7 floors
-  Up to 10 floors

COMMERCE

-  Cafe
-  Restaurant
-  Market
-  Shop

EDUCATION

-  Nursery
-  School
-  College

ENVIRONMENT

-  Parks
-  Recycling plant
-  Industrial Area

RELIGION

-  Jewish
-  Muslim
-  Christian
-  Bani

TRANSPORT

-  Bus
-  Bus stop
-  Train
-  Train Station

SPORT FACILITIES

-  Sport center
-  Gym
-  Baseball
-  Football
-  Tennis

TOURISTIC ACCOMMODATION

-  Hotel
-  Hostel
-  AirBnB
-  Place of interest

SERVICES

-  Health Center
-  Bank
-  Vacant area
-  Post Office
-  Police Station
-  Pharmacy
-  Gas Station
-  Administration

7.4 Final Remarks

The method applied in this chapter intends to respond to Research Task D. *Unravelling the city through three urban dimensions (Historic center, Buffer Zone, and the City as a whole: Cultural mapping of the city of Acre*. This method involves cultural mapping and the analysis of other sources like databases and is key to obtain a deep understanding of the issues, challenges and needs of the city analysed. Although traditional mapping provides useful data for planning, it only gets so far and it can sometimes be shallow or tend to address the same issues repeatedly.

Therefore, the proposed method results in a more comprehensive understanding of the situation of Acre, as it combines different types of layers, which include not only the standard urban planning ones but also socio-economic data, legal, cultural and so on. Also, the visualization of traditionally non-visual data like socio-economic or that from databases adds value to the overall work, and it offers a spatial dimension to the data.

Altogether, creating a set of maps that unveils hidden and less obvious pieces of information, as well as translating raw data into geospatial visuals contribute: on the one side, to a broader and deeper understanding of the city; and on the other, to a better informed and more systematized way of approaching socio-spatial conflicts of interest and other urban challenges.

The unveiling of layers, and visualization of traditionally non-visual data provides an additional data set that shows more points of conflict and consensus, *previously not identified values and relevant information to be included in the processes of the Adaptive Reuse of Urban Heritage (SQ 2)*.

Similarly, this dataset can highlight urban planning and design lacunae, as well as urgent urban and heritage issues that can be tackled through *processes of Adaptive Reuse, which ultimately support the identified urban heritage values (SQ 4)*.

8 Stress-testing the three urban dimensions (historic center, buffer zone, and the city as a whole) through specific scenarios

Research by design through scenario building and evaluation by stakeholders

Chapter Goals

This chapter studies research by design through the design of scenarios. These are then presented to specific people, and through the analysis of their reactions, extract conclusions.

The topic being researched is the *Adaptive Reuse of Urban Heritage in Contested Urban Contexts*, therefore, the scenarios follow the following principles:

- 1 they are based on the process of adaptive reuse
- 2 they intervene the urban heritage previously identified
- 3 to address this topic they utilize the information about heterogeneity and the conflicts of interests in the city, also extracted from the mapping step (See 7.3 Results from the Map and Source Analysis) and the prior-knowledge on the region.

Similar to the previous chapter three dimensions of the city are explored:

- Historic center
- Buffer Zone
- City as a whole

And, the way in which the scenarios are built can be divided into two categories: a general approach, or addressing predefined specific themes.

This way of approaching the scenarios is linked to the integrative evaluation tool. As an urban planner or stakeholder, you can approach an adaptive reuse process in two ways:

- 1 Your aim is to come up with a plan or projects for the city, so you analyse the city as a whole and confront the problems with a broad perspective to then focus on the areas identified throughout the diagnose and analysis.
- 2 Your aim is to address specific issues, areas, or elements already identified, so you already have a focus theme and the diagnose and analysis required needs to be linked to the predefined topic/s.

In this chapter, the two approaches are showcased. Some scenarios result from a general approach to the cities issues, while others address specific themes like coastal flood risk, and buffer zones. For the latter, the scenario building method differs, and it requires background material and an introduction to the topic (See 8.3 Scenario Building Method – Specific themes).

Research Questions addressed

The method carried out in this chapter, research by design through scenario building, is crucial to answer research sub-questions SQ 3 and SQ 4:

- **SQ3** | *How can a 'cultural resilience' approach be integrated into processes of Adaptive Reuse of Urban Heritage?*
- **SQ4** | *How can processes of Adaptive Reuse support Urban Heritage values?*

On the one hand, the scenarios are built according to sustainable development parameters, to which cultural resilience is inherent. Therefore, especial focus is given to the way the adaptive reuse alternatives integrate the spheres of sustainability (social, economic, environmental and cultural).

On the other, considering the data and information collected in the previous chapters, the scenarios are specifically built to integrate the multiple voices, values and layers previously identified in the city of Acre. The resulting proposals, and their evaluation by stakeholders provide empirical data on the extent to which the alternatives support the urban heritage values in Acre.

8.1 Proposed Scenarios

The proposed scenarios (FIG. 8.1) are based on the results distilled from the cultural mapping. They compile identified urban issues, cultural dissonance, challenges posed by gentrification and national dynamics, such as rapid demographic growth.


- Three elements in the **Historic Centre**:
 - I Khan El Umdan
 - II Marina of Acre
 - III Al-Jazzar Mosque Area
- The **Buffer Zone**
- Two elements in **the city as a whole**:
 - I The Aqueduct
 - II North and South Acre development

PROPOSED SCENARIOS




ELEMENTS IN THE HISTORIC CENTRE

-  Khan el-Umdan
-  Marina of Acre
-  Al-Jazzer Mosque

THE BUFFER ZONE

-  Buffer Zone

ELEMENTS IN THE CITY AS A WHOLE

-  Ottoman Aqueduct
-  Underground water system (approx.)
-  North and South Acre development

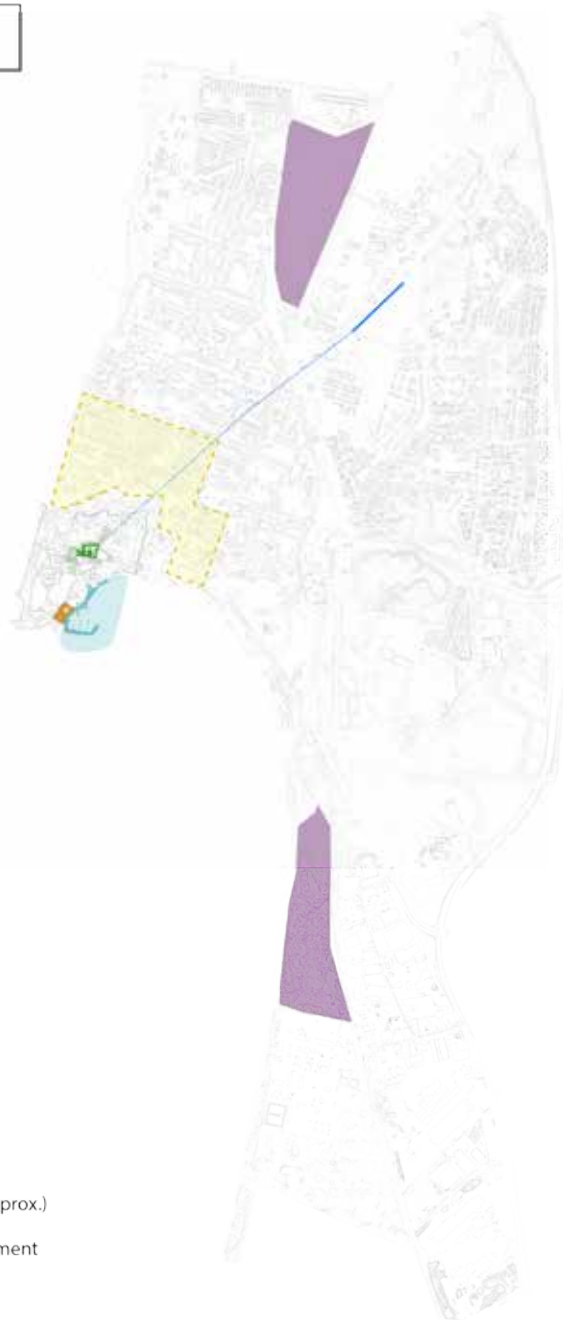


FIG. 8.1 Proposed Scenarios in the city of Acre

I KHAN EL-UMDAN

Option A: Boutique Hotel

Option B: By Stakeholders' interest

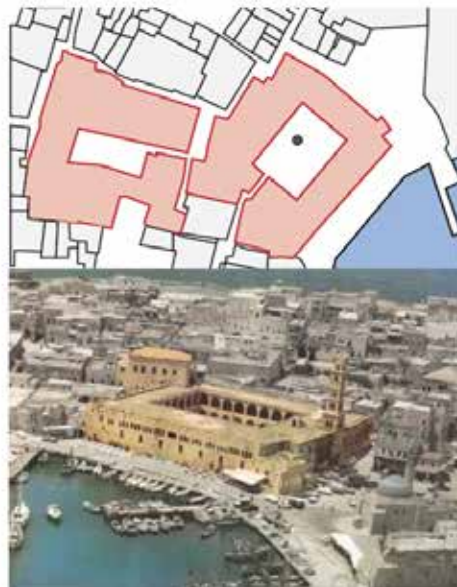
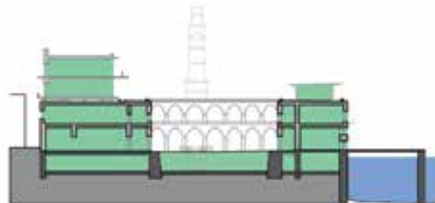
The first scenario uses the actual plan for Khan El-Umdan, a luxury hotel, to do a comparison with other alternatives aligned with the interests of different stakeholders, based on the data extracted in the previous chapters.

The historical evolution of the Khan shows some trends that serve as the basis for a possible adaptive reuse scenario. First, the use for accommodation continued until 1948; the pattern of use of the Khan was also consistent until 2013: giving service to the public (Acre citizens, traders, and visitors). As previously mentioned, the physical attributes of the buildings are non-changeable, and their location neither. Therefore, the proposed alternative is a combination of the planned use, a luxury hotel, but combined with other uses that have been a constant to the Khan: public use and commerce, which at the same time are more aligned with sustainable development (See Figure 8.2).

In the following table (See Figure 8.3), a comparison between the different alternatives is carried out, focusing on the users that would benefit from the planned and the proposed alternatives, how the Khan would be managed, and the issues that the alternative addresses.

This exercise showcases on the one hand, how the most significant conflict derives from Private management and Real State use (marked in red). And on the other, how the proposed alternatives, aligned with the different stakeholders, address the current issues and, and contrary to the luxury hotel option, which is unilateral, the proposed alternatives have points in common, like the conservation and WH principles.

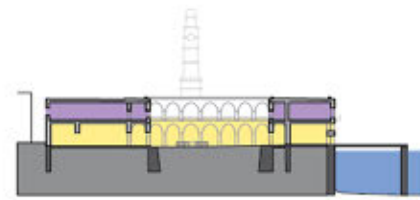
Planned Use Hotel



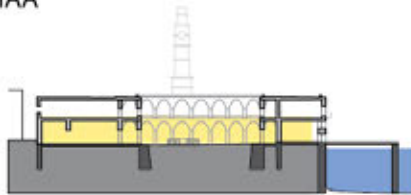
- USE OF THE BUILDING
- Accomodation
 - Market
 - Public / Tourism
 - Museum
 - Community centre

FIG. 8.2 Scenario 1_ Alternative uses of Khan El-Umdan according to different stakeholders. . Image: <https://msarchts.com/wp-content/uploads/2014/09/WebsiteKhan-1-COVER-707x500.jpg>

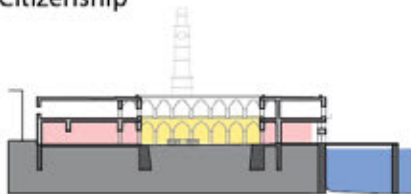
Proposed Use by Stakeholders



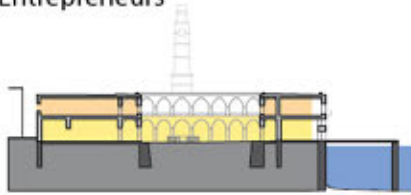
IAA



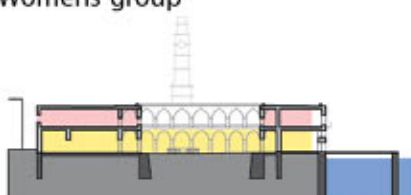
Citizenship



Entrepreneurs

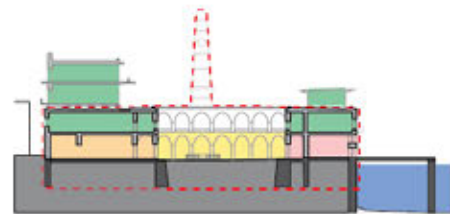


Womens' group

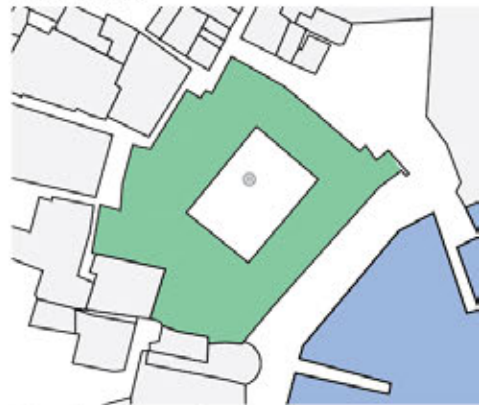


Tourists

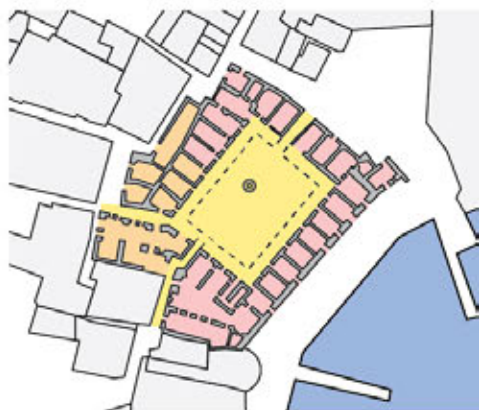
Final Proposal



Use section



First Floor use plan



Ground floor use plan

	ALTERNATIVE USE FOR KHAN EL-UMDAN	MANAGEMENT	USERS WHO BENEFIT	ISSUES ADDRESSED BY THE ALTERNATIVE			
				ECONOMIC DEVELOPMENT	CONSERVATION	SOCIAL	WORLD HERITAGE
Old Akko Development Co. Municipality of Acre Investors	Planned Luxury Hotel	PRIVATE 	VISITORS High socio-economic status	 Real state			
Israel Antiquities Auth.	Proposed Museum	PUBLIC 	VISITORS All	 Tourism			
Citizenship	 Public Space	PUBLIC 	CITIZENS All				
Entrepreneurs	 Handcraft Market	PRIVATE 	CITIZENS Vendors	VISITORS All	 Local commerce		
Akko Women's Assoc.	 Community Centre	PUBLIC 	CITIZENS All				
Tourists / Visitors	 Handcraft Market	PRIVATE 	CITIZENS Vendors	VISITORS All	 Local commerce Tourism		

FIG. 8.3 Alternative uses for Khan El-Umdan. .

II MARINA/PORT OF ACRE

Option A: Local oriented

Option B: Tourism oriented

In this scenario the focus is set in the Marina of Acre, one of the most visited areas of the Old City (a hotspot). The area is tackled with both the general and the specific theme approaches.

1 General approach

For the general, the identified issues in the area related to the dissonance between the locals' and developers and tourism-oriented entities' interest are addressed. For this matter, two options are proposed, which address the issue of lack of public spaces and the mass tourism trend.

Option A aims for a local port, where fishing is encouraged, leaving market space for the fishermen to sell their fish, a car-free promenade for the families to enjoy, and a leisure park for children, as the city lacks areas for this section of the population.

Option B, by contrast, enhances tourist related activities by promoting restaurants and hotels along it, a night market where souvenirs would be sold, and as fishing is in decadence, turning this activity into boat tours.

Scenario 2 has a public space as its area of intervention, and the adaptation of it is the key. In option A, the environmental, local, and social values are prioritised; while option B goes for tourism, and maintains some of the local and cultural aspects to it.

2 Specific theme approach: Coastal flood risk

For the specific theme approach see 8.3.1. In that section an extensive description of the issue regarding coastal flood risk is provided, as well as various adaptive reuse alternatives for the port in the hypothetical catastrophic future of sea level rise. These alternatives are specifically proposed not only for the Marina of Acre, but also the Port of Jaffa. As both share similarities and would risk disappearing in the hypothetical catastrophic future of sea level rise.

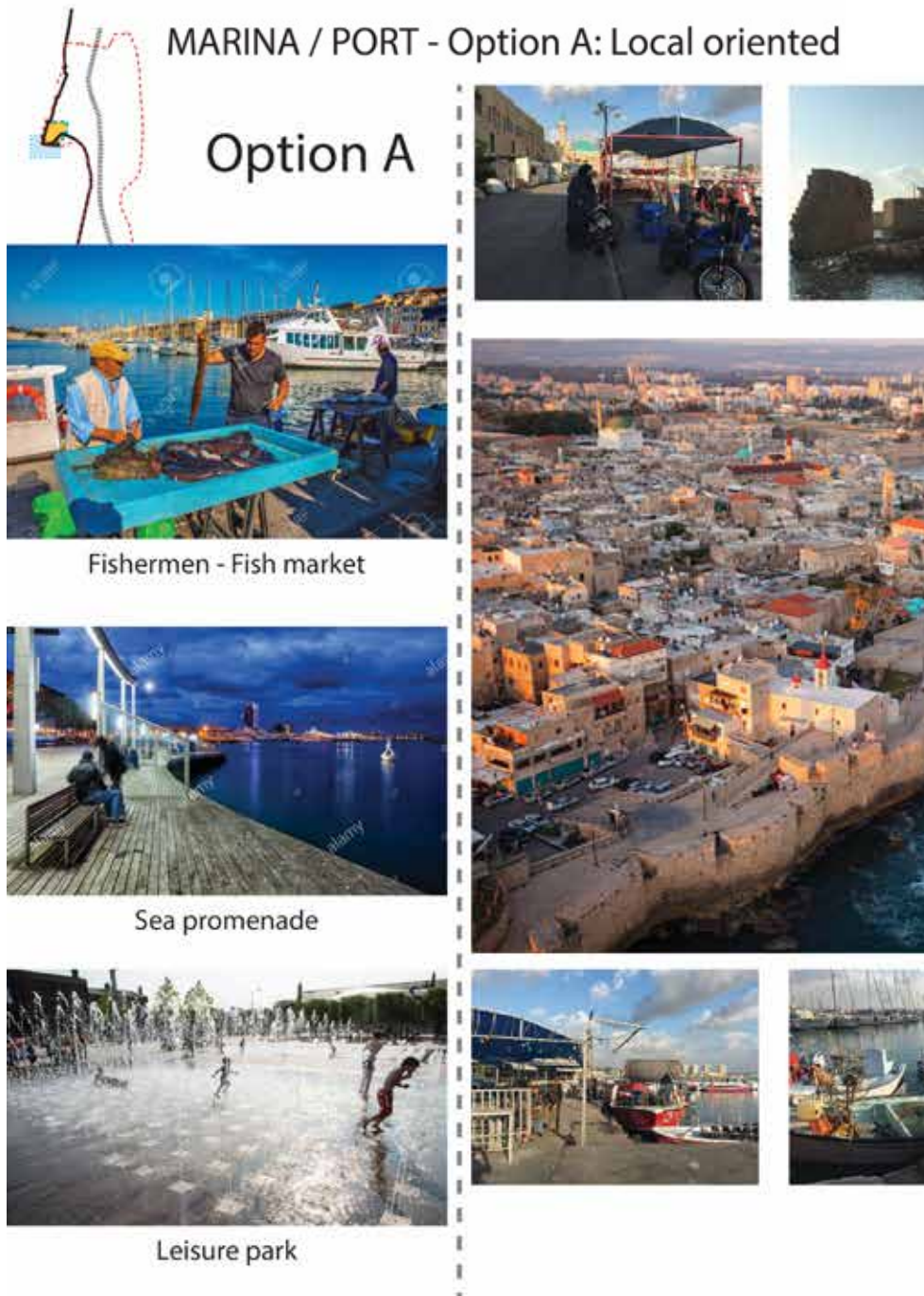
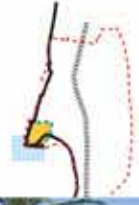


FIG. 8.4 Scenario 2 – Port/Marina: Local or tourism oriented

Option B: Tourism oriented



Option B



Restaurants



Boat tours



Night market

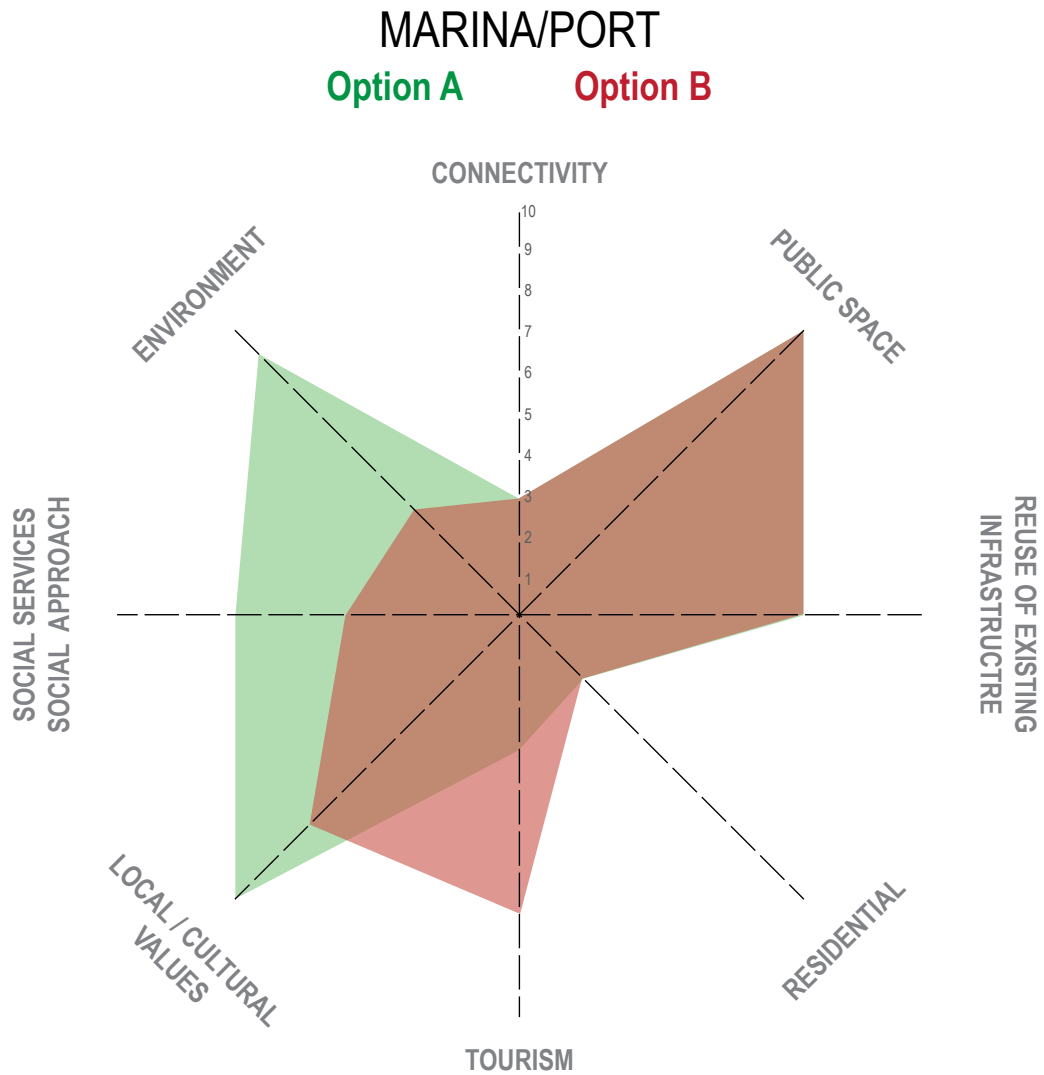


FIG. 8.5 Scenario 2 - Radar Plot showing the weight of diverse socio-economic, environmental, and urban criteria

III AL-JAZZER MOSQUE AREA

Option A: Local needs

Option B: Mass tourism

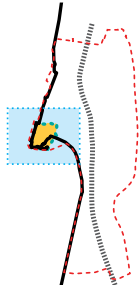
The third scenario is more complex than the Khan, as we deal with one of the most representative elements of the Old City of Acre. The Great Mosque is part of the cityscape and provides the image of the Old City. Changing its physical attributes would create severe debate and opposition. Therefore, the proposed scenarios focus on the area surrounding the Mosque. On the one hand, the main building's religious use is active, and there is no need to change it; on the other hand, the surrounding area provides the opportunity to improve and enhance the site to align it better with the vision for Acre.

For these reasons, two extreme options are proposed as a way to discuss their positive and negative impact and find a midway. The options address the issues of lack of services in the Old City, and the mass tourism trend in the area.

Option A proposes the restoration of these buildings so that the needed services can be included. For example, there is a lack of health centres, cultural places and social housing; so, these buildings would be adapted for these uses, and being placed in the centre of the Old City, accessibility would be guaranteed.

Option B addresses the existing conflict between local inhabitants and tourism interests by homogenizing the Old City and transforming it into a tourism pole, and removing the existing tensions with the locals. This means moving the local inhabitants to the New City and converting the households into touristic accommodation, promoting monuments, heritage buildings and tours. The conservation of the Old City would be guaranteed as it would be managed through the economic revenue from the economic activities in the area.

Therefore, in Scenario number 3, option A aims for the social development, focusing on the local needs, and the adaptation of deteriorated buildings into residential use. Option B, by contrast, focuses on the economic side, mainly tourism, while it also uses adaptive reuse as the main strategy.



AL-JAZZER MOSQUE AREA

Option A - Support local economy and needs



Al-Jazzer Mosque

PROPOSED USES



Social Housing



Health Centre



Cultural Centre



Public square

FIG. 8.6 Scenario 3 – Old City: Local economy or Mass tourism

Option B - Prioritize mass tourism



Al-Jazzer Mosque

PROPOSED USES



Hotel



Hostel



AirBnB



Relocate locals

AL JAZZER MOSQUE AREA

Option A

Option B

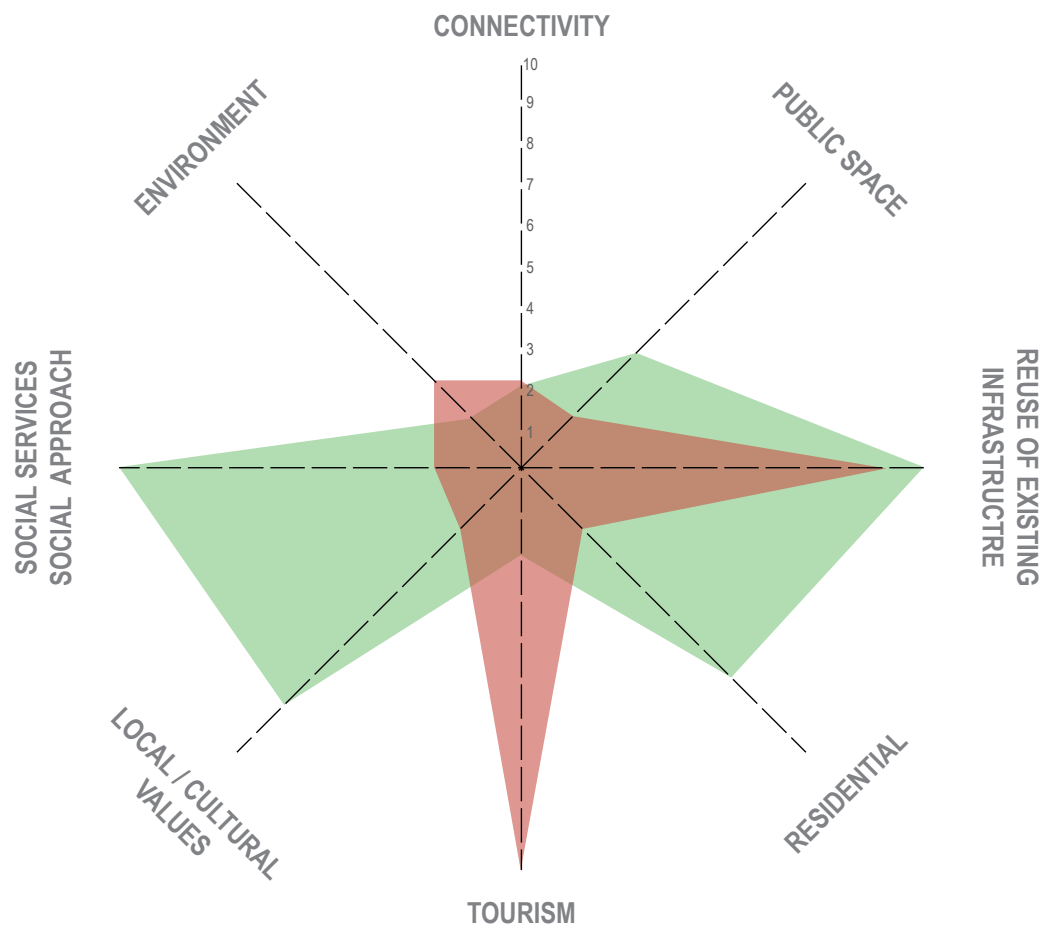


FIG. 8.7 Scenario 3 - Radar Plot showing the weight of diverse socio-economic, environmental, and urban criteria

8.1.2 Buffer Zone

The scenarios built for the buffer zone in Acre are addressed through the specific theme approach. Testing how adaptive reuse can serve as a strategy to enhance the potential of buffer zones is the main aim, and it is attained through the following three thematic areas:

- Mass tourism
- Housing and affordability boost
- Administrative Hub

Please see 8.3.2 | T.2. Testing Adaptive Reuse as a Strategy to Enhance the Potential of Buffer Zones for a more extensive description.

8.1.3 City as a whole

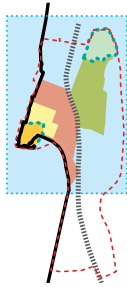
I AQUEDUCT

Bike and pedestrian trail from World Heritage to World Heritage

The second scenario proposes the reactivation of the Ottoman Aqueduct trace with a public trail connecting the Old City with the Baha'i Shrine area. This strategy aims to utilize an already existing, yet neglected, infrastructure, the Aqueduct, as this is an element of urban heritage which creates no conflict (See Figure 8.13), and uses its physical and virtual trace for a public space and improve the city's connectivity. This way, two of the issues identified in the city are addressed: the disconnection in the city, and the unequal distribution of public spaces (See 7.3 Results from the Map and Source Analysis).

This new trail would target pedestrians and non-motorized vehicles, such as bikes, in order to compensate the lack of public spaces in the city. It would include bike parking spaces for the citizens, and the tourists to rent, creating new active nodes where economic activities such as commerce, restaurants and cafes could be placed; and regarding tourism, alternative accommodation could be placed along the route.

One of the scenario's main features is the connection between the city's two sides. These are currently separated by the railway. The scenario provides an opportunity to explore the design of the connection spots and the creation of new public and green areas in the City Mandate, where no traces of the aqueduct are found, and a virtual line is needed.



AQUEDUCT - Bike and pedestrian trail from WH to WH

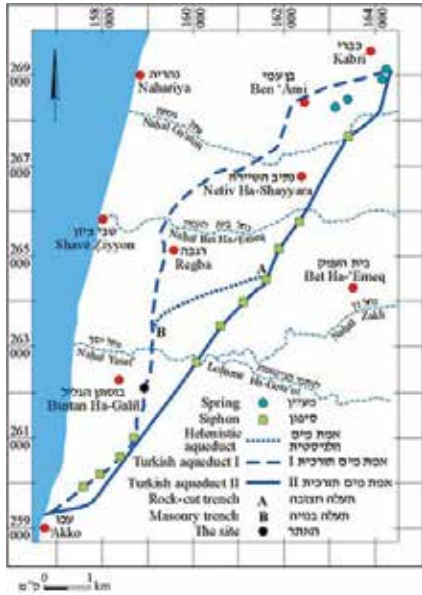
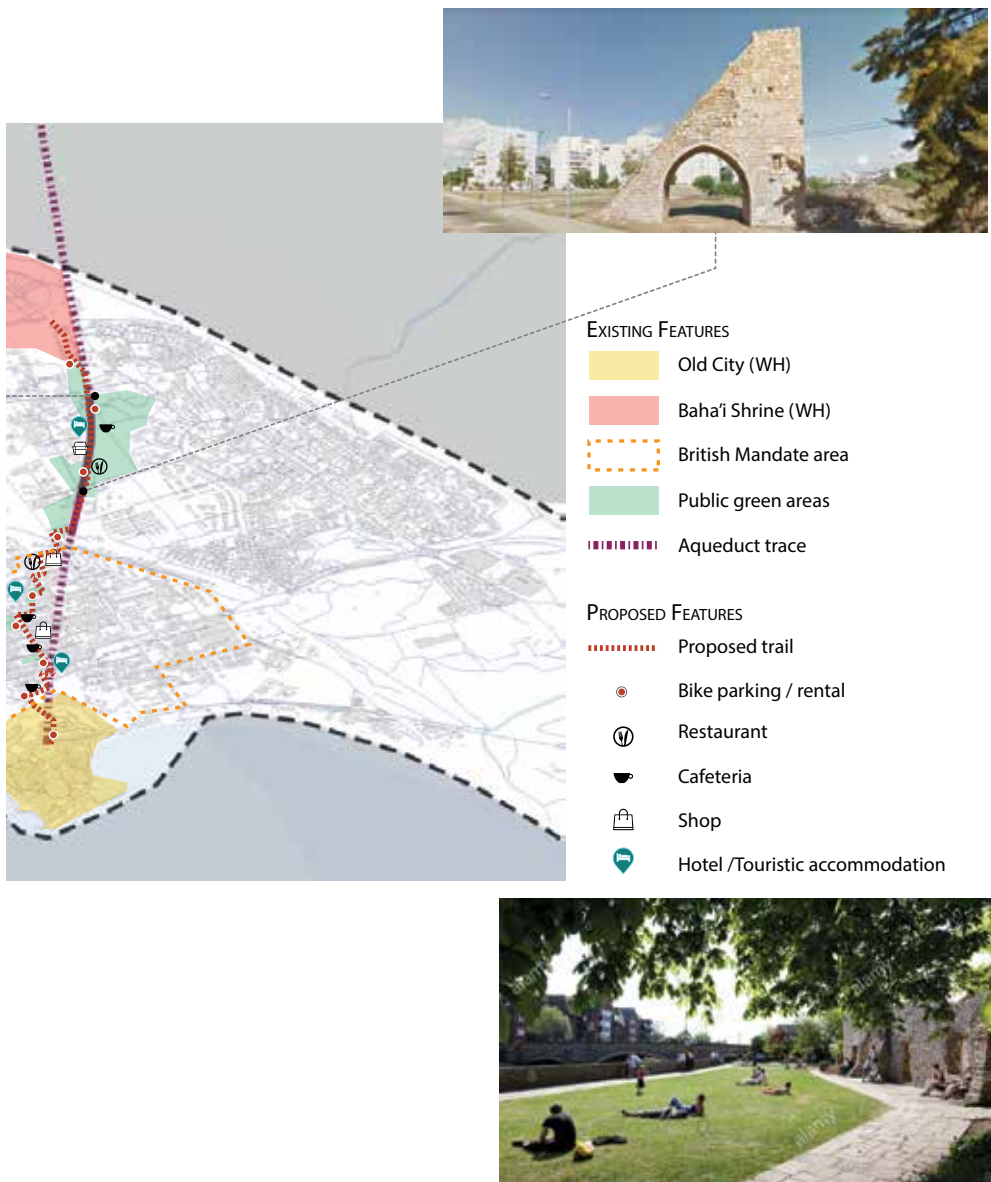


FIG. 8.8 Scenario 4 - Aqueduct: Bike and pedestrian trail between World Heritage sites



AQUEDUCT

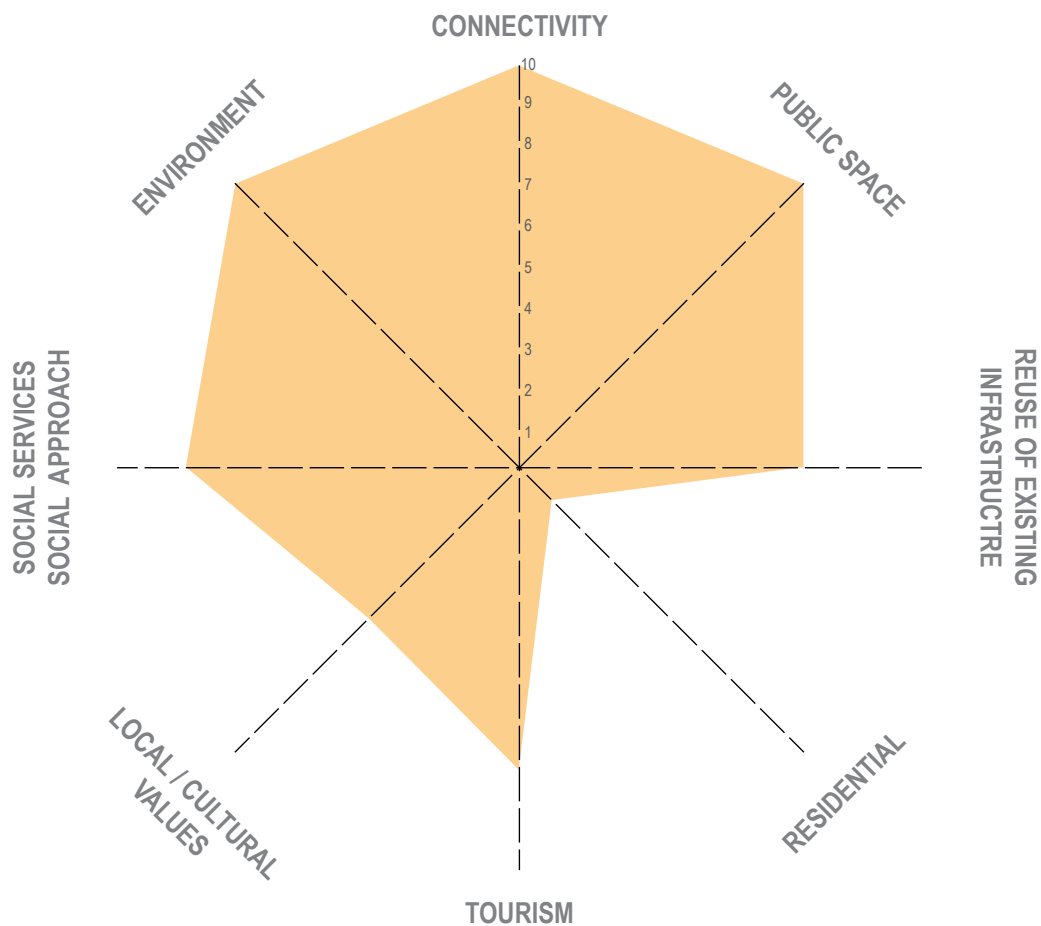


FIG. 8.9 Scenario 4 - Radar Plot showing the weight of diverse socio-economic, environmental, and urban criteria

Finally, using the existing World Heritage sites as the trail extremes incentivises the cultural value of the city, highlighting the richness of the city. These two sites serve as poles of attraction for tourists, while the areas in between are reactivated for the citizenship.

This scenario presents a new direction for Acre, with a clear emphasis in the social aspect and a city-wide public space, focusing on the connectivity. The reuse of a heritage infrastructure, and the enhancement of the two WH sites by its connection is fundamental. Other aspects, like tourism activation and the valorisation of local traditions are subjacent to this project, while adding residential use is out of the question.

II NORTH AND SOUTH ACRE DEVELOPMENT

Option A: Current high-rise building plan

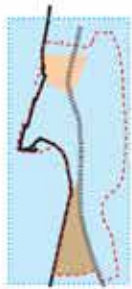
Option B: High-rise, public connecting park and refurbished industry

The fifth scenario is based on the ongoing works in the North and South of the city (low and mild conflict areas correspondingly), where residential high-rise buildings are planned.

Option A presents this reality, and shows how specifically the new buildings in the South would disrupt the views of the city significantly. The first view people have from the road and train when approaching Acre is the Old City cityscape, with its prominent elements, such as the mosque. Hence, this is a main element of urban heritage considered a hot element as per its visual importance.

Option B keeps the residential high-rise buildings in the North, but it encourages the developers to promote mixed uses rather than just residential. The southern area, though, being currently an empty area between the industrial zone, Tel Akko, the beach and the western part of the city is proposed as a public park, emphasizing the connectivity between the north, the Old City and the southern areas. In addition, the factories in the south could be renovated and turned into housing, reactivating this zone and integrating it with the rest of the city. Also, tourism would be enhanced as the park would include Tel Akko, currently underused, promoting the tours around this archaeological element, and a Baha'i tomb next to it.

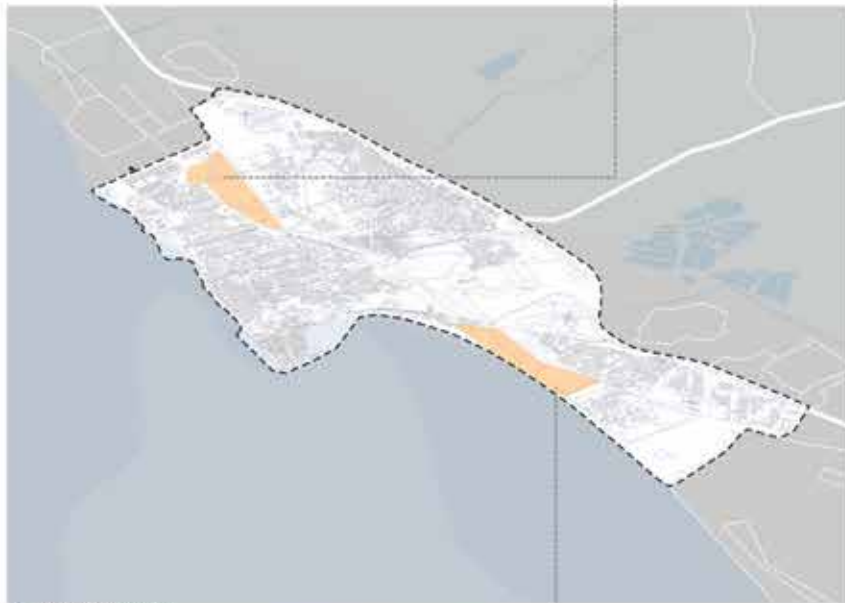
In the last scenario, option A shows an extremely narrow approach, where the building of residential use is the main goal. Option B, alternatively, adds other components to the proposal. The use of existing heritage elements as the cornerstone for a connecting public space brings the social, environmental, cultural and economic values into the project, and it also highlights the public space component.



NORTH AND SOUTH ACRE DEVELOPMENT

Option A

North Development



South Development



City-scape
Views from the southern beach



FIG. 8.10 Scenario 5 – North and South Acre: Two approaches to residential development

North Development



Option B



Tel Akko



Sea promenade
Old City - South



Fluvial park



Industrial area - Adaptive reuse: RESIDENTIAL



NORTH/SOUTH DEVELOPMENT

Option A

Option B

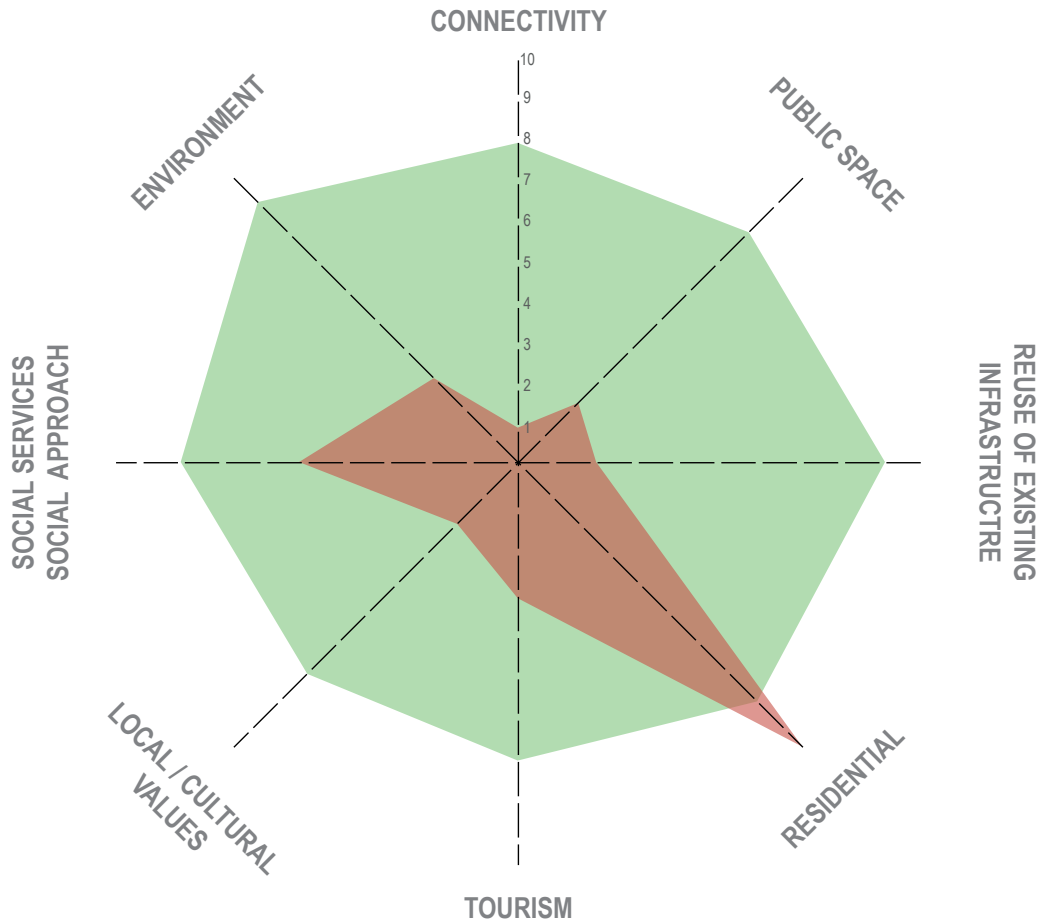


FIG. 8.11 Scenario 5 – Radar Plot showing the weight of diverse socio-economic, environmental, and urban criteria

8.2 Scenario Building Method – General approach

8.2.1 Design Criteria

A Themes

The tackled thematic areas comprise the spheres of sustainable development (social, economic, environmental and cultural), and urban design principles (connectivity, inclusiveness, and land use), aiming to propose scenarios which address real problems with an integrated approach. These show in some cases extreme options, where themes are highlighted or lack, to intentionally provoke a reaction and explore the possibility of middle ground options.

To better visualize how each scenario addresses these points, a radar plot is attached to each scenario. The plot measures 8 criteria based on:

- **urban design principles:** connectivity, public space, reuse of existing infrastructure, residential
- **the spheres of sustainable development:** tourism, local/cultural values, social services/approach, and environment.

Each theme is rated from 1 to 10 (being 1 the lowest) depending on how much the scenario influences the theme, if it is one of the main objectives aimed by the scenario, and if it is indirectly tackled by it. The rating is the following:

- 8–10 Main aim, the scenario directly influences the theme
- 5–7 The theme is indirectly addressed
- 3–4 The theme is not addressed by the scenario
- 1–2 The theme is purposely avoided / neglected (not related to the institution's interests)

EXAMPLE OF SCENARIO RADAR PLOT

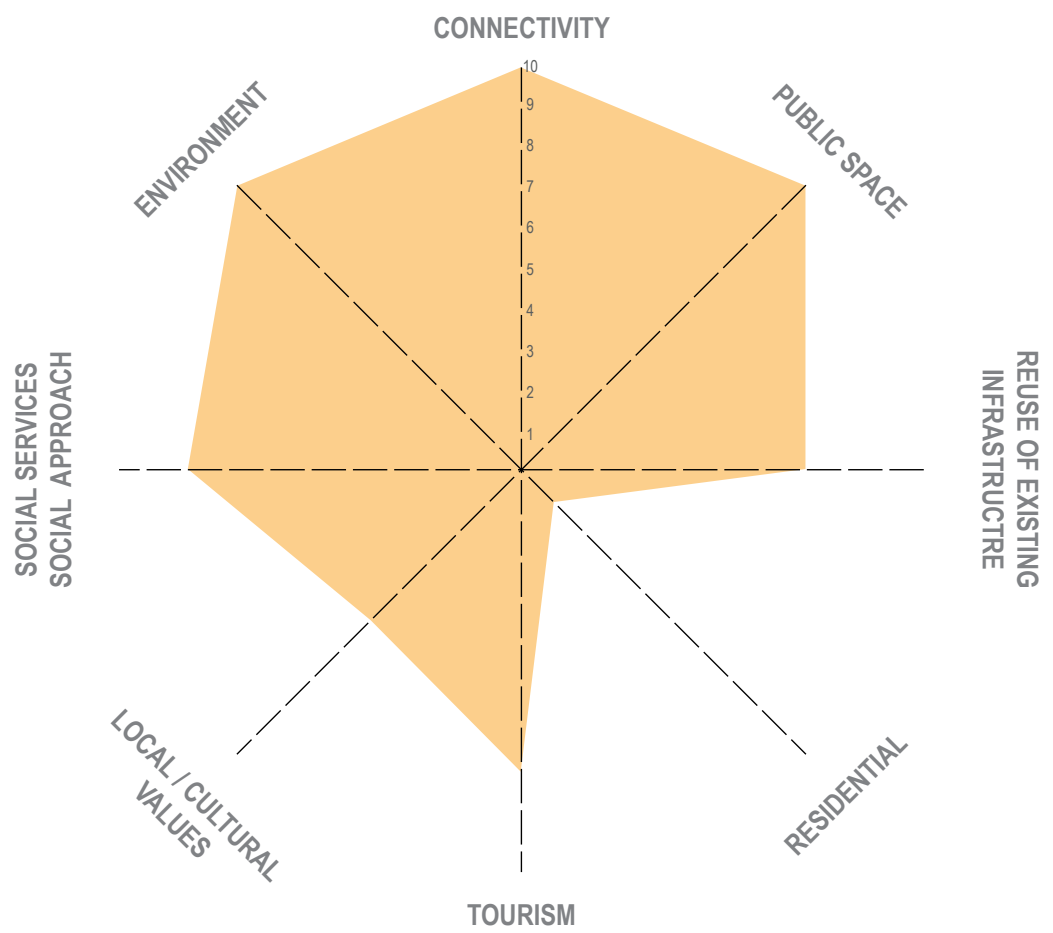


FIG. 8.12 Example of Radar Plot

B Scale

One of the main challenges in Acre, is the diverse perception on what Acre is. Some people consider the Old City of Acre, as Acre; and other people understand it as the area inside the municipal boundary. Therefore, in order to cover this gap both scales are tackled, some scenarios focus on the Old City and other the entire municipality.

C Number of scenarios

The identified issues are the following: the disconnection between the West and East, and North and South areas; the lack of services in the Old City; mass tourism trend in the Old City; and the unequal and disproportioned distribution of public spaces all over the city (See 7.3 Results from the Map and Source Analysis). Each scenario aims to provide a solution through the combination of these issues (ex: disconnection between East and West, lack of public space), so the number of proposed scenarios is narrowed to four, as it seems a reasonable number not to saturate the participants with excessive information, and not too limited to explore various variables.

D Urban Heritage and conflict

The criteria on the urban heritage elements to be adapted is based on the level of contest the elements suppose. To do the selection, the relevancy of the urban heritage for the different communities is mapped, showcasing the overlap in some elements, the more communities related to the element, the more contested. This heat map (See Figure 8.13) supports the selection of the elements to adapt, which include the hottest and coldest to compare the perceptions.

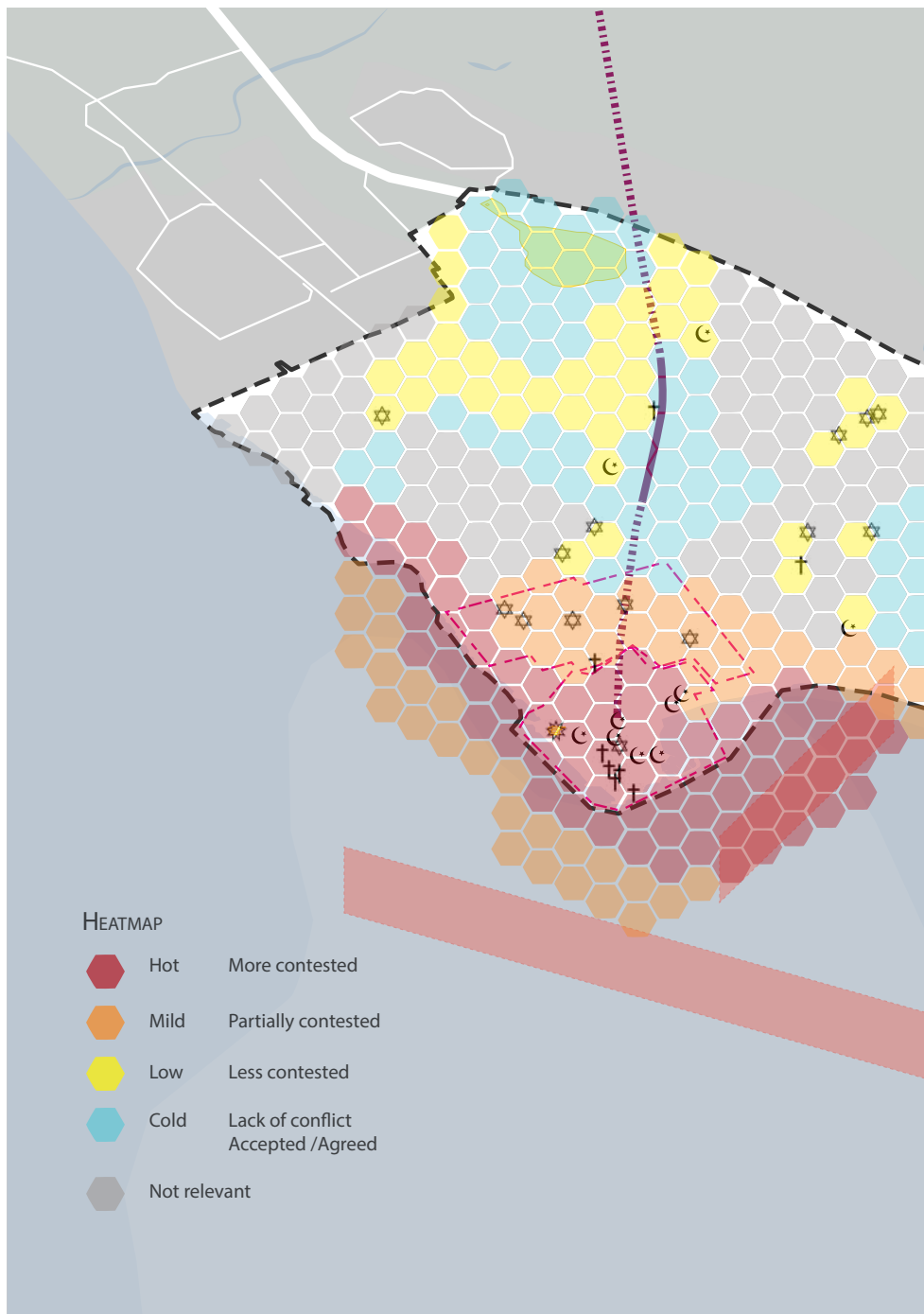
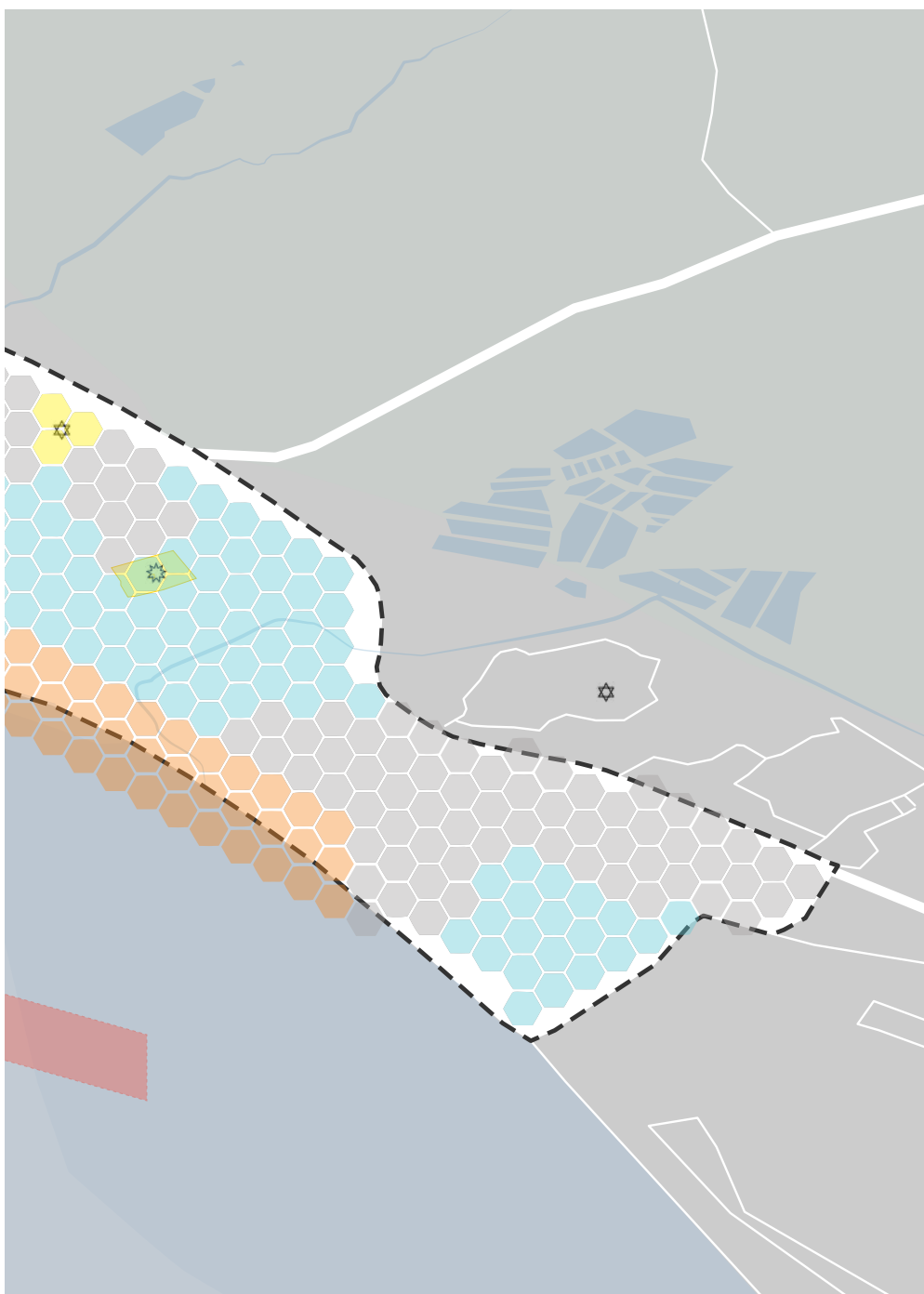


FIG. 8.13 Heatmap _ Levels of conflict



E **Visualizing the scenarios**

It is fundamental to consider the groups of people who will be reacting to the different scenarios, so that these are adequate, clear, and simple enough to be understood by the interviewees. In our case, most of the participants have a background on sectors related to architecture or conservation, so reading a map is not an issue. Nevertheless, members of the civil society and laypeople are also included, so a decision on simplicity in visuals, and the use of reference images was made. Moreover, the scenarios show a conceptual design, not delving into constructive details or materials, leaving room for interpretation, the addition of improvements by the participants, and giving flexibility.

8.2.2 **Results from the Scenario Analysis**

The results from the interviews about the scenarios aspire to offer a better understanding about the potential of adaptive reuse of urban heritage as a planning tool to support inclusiveness and heterogeneity, and manage conflicts of interest. These offer a deeper grasp on how different actors perceive Acre's functioning, their idea and materialization of inclusiveness, and other aspects related to urban planning and design. In order to extract relevant conclusions, firstly, the quantitative evaluation provided by each participant is analysed separately, focusing on the commonalities and differences between the participants regarding the following criteria:

- Relevancy of the project for the city,
- Relevancy of the project for your institutional vision,
- Inclusiveness of the project, and
- Feasibility

Secondly, the overall answers are observed to find the points of agreement and disagreement, showcasing where the conflict of interest and priorities lay.

KHAN EL-UMDAN

Option A: Boutique Hotel

Option B: By Stakeholders' interest

A combination of the proposed alternatives would be ideal as it would result in a more consensual final proposal (See Table 8.1, Figure 8.14). To do so, the building could be differently used and managed by floor, as it was done during the Ottoman period. The upper floor could be reserved for the Luxury Hotel. In contrast, the ground floor could be open to the public, including areas for the community, tourist-oriented and a handcraft market. This alternative use aims to combine the past narratives, highlighting the separated use of the Khan by floor during the Ottoman period, with the current stakeholder narratives.

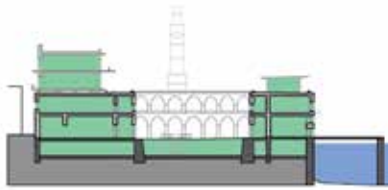
TABLE 8.1 Combination of alternative uses for Khan El-Umdan.

ALTERNATIVE USE FOR THE KHAN COMBINATION		MANAGEMENT		USERS		CURRENT ISSUES			
		Public	Private	Citizens	Visitors	Economic dev.	Conservation	Social inclusion	World Heritage
First Floor	Luxury Hotel				High socio-economic status	Real State			
Ground Floor	Public Space / Tourist visit / Hand-crafts market / Community centre					Tourism / Local commerce			

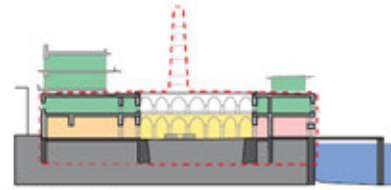
■ Main Issue ■ Secondary issue

Therefore, the design derived from a combination of all would be the following: The upper floor is reserved for the Luxury Hotel, while the ground floor is open for the public, including areas for the community, tourists, and a handcraft market (Figure 8.14).

Planned Use Hotel



Final Proposal



Use Section



First floor Use Plan



Ground floor Use Plan

USE OF THE BUILDING

Accommodation
Market

Public / Tourism
Museum

Community centre

FIG. 8.14 Scenario proposed for Khan EL-Umdan

AQUEDUCT

Bike and pedestrian trail from World Heritage to World Heritage

All the participants agreed that this scenario was relevant for the city, and the institutions represented by #02 (The Society for Preservation of Israel Heritage Sites (SPIHS)), #06 (ICOMOS / Technion /IAA), #07 (IAA), #11 (Lewinsky College and Bezalel) and #12 (Acre Municipality) found this project relevant for their agenda. There was also some agreement about the inclusiveness of the scenario, #01 (District Planning Bureau (DPB)) clarified that it would be much more inclusive for the beneficiaries around and linked to the proposed public space than for the users of it.

When I worked in the Israeli Antiquities Authority 15 years ago, we proposed a similar route along the Aqueduct from Cabri to Akko, because there are very interesting sites along it. [...], this is not in the Old City, it is the modern city, but it could be really fantastic. Crossing not just different neighbourhoods, but different communities. You are actually stitching it through the potential of tourism.

Extract of the Interview with #01 (DPB)

Regarding its feasibility #02 (SPIHS), #04 (local), #06, #07 (both IAA) and also #01 (DPB) were the most positive, while #03 (Israeli Antiquities Authority (IAA)), #05 (Acre Women's Association (AWA)), 09 (Development Co.), #11 (Lewinsky College and Bezalel), and #12 (Acre Municipality) remained more neutral. The main reason for this difference was the doubtfulness about the allocation of budget for its implementation, as they both think it would not be a priority for the city.

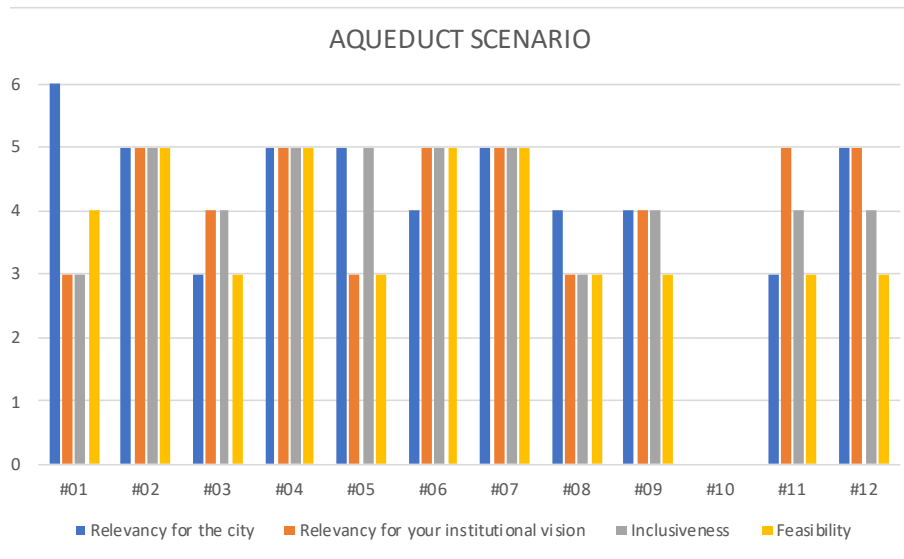


FIG. 8.15 Scenario 2 - Rating from 1 to 5 (least to most)

The enthusiasm which all the participants welcomed Scenario 2 must be highlighted, mainly for the following reasons: it would solve a long-lasting recurring issue of disconnection due to the railway, the need to seam different neighbourhoods in Acre through a common element, and the need for more public and green spaces in the city.

In this case, most participants supported the social, cultural and environmental values brought by the proposal. The conservation and readaptation of urban heritage was seen as secondary for the non-conservation participants (#04 (local), #05 (AWA)) and #12 (Acre Municipality), who by contrast emphasized the need to truly include all the residents of Acre in the project. In all the cases, tourism was seen as a by-product of the intervention and all the participants emphasized the need to have the citizenship as the target users.

AL-JAZZER MOSQUE ARE

- Option A: Local needs
- Option B: Mass tourism

Scenario number 3 generated different reactions, yet, all agreed that Option B should not be carried out, as emptying the Old City of its residents would ruin it. They all highlighted the uniqueness of the Old City of Acre as a living historic centre, and in many cases, they compared it with Jaffa, in Tel Aviv, which is being gentrified and it is losing its essence, an aspect not desired for Acre.

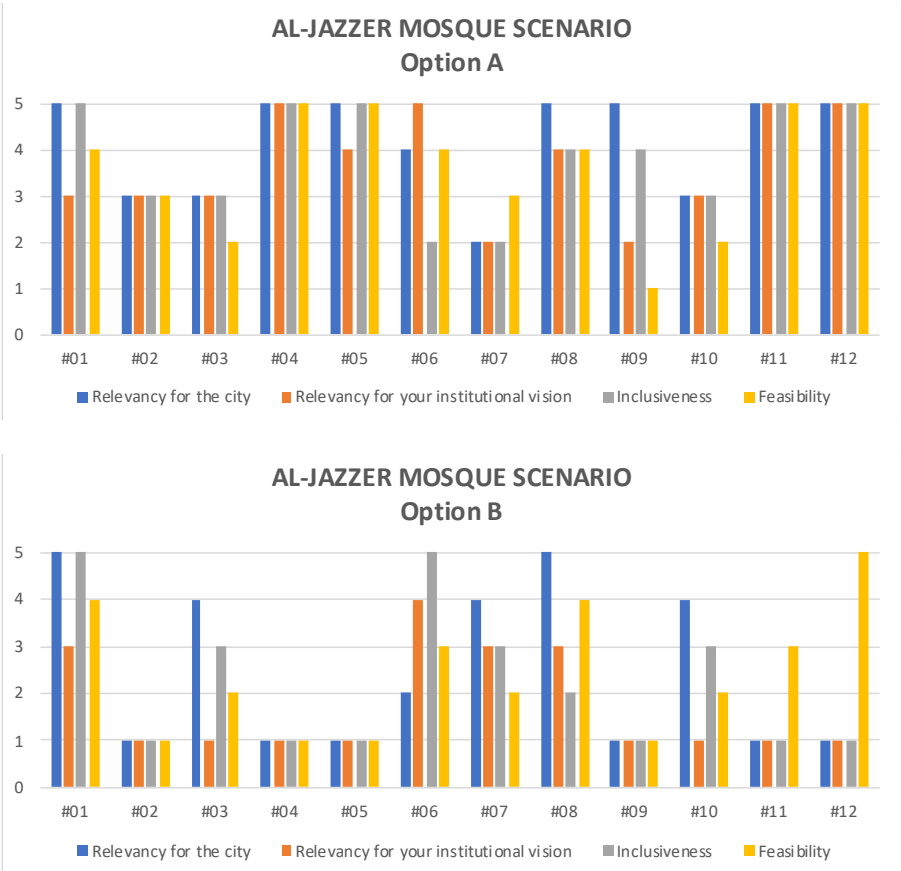


FIG. 8.16 Scenario 3 - Rating from 1 to 5 (least to most)

Option A was mostly welcome by #04 (local), #05 (AWA) and #12 (Acre Municipality), local residents, who agreed on the need for more basic services in the Old City. #02 (SPIHS), #03 and #07 (both IAA) did not find this option very relevant for the city or their institutions, as they both focus more on the conservation of the tangible elements, and less in the social needs, tackled by the Municipality. These four participants found this option relatively inclusive, but most of them agreed that the basic services should be scattered around the city instead of centralized, and doubted about its feasibility, in terms of economic resources, risk of gentrification and low-income population exclusion.

The representative for the District Planning Bureau #01 (DPB), responded differently, providing a rating for an alternative solution which would locate the basic services scattered in the place where the accommodation is proposed in Option B, while not moving the residents from the Old City. He stated that this A+B option with modifications would be the middle ground.

Option B was massively rejected, yet the conversation around the issue of tourism was fundamental to address the Old City. #02 (SPIHS), #04 (local), #05 (AWA), #09 (Development Co.), #11 (Lewinsky College and Bezalel) and #12 (Acre Municipality) rated this option really low. The representatives of the Israeli Antiquities Authority #03, #07 and #10 (IAA), by contrast, emphasized that such a project would be very relevant for the city, yet the IAA would not be involved, as they work for conservation. They found this option neutrally inclusive, in the same way as option A, as they observe that in both cases some people are and some are not included. In this case it is interesting to highlight, how #03 (IAA), #02 (SPIHS) and #11 (Lewinsky College and Bezalel), similar to #01 (DPB), provided alternatives which do not consider moving the residents out, and include the basic services in addition to the touristic approach.

Hypothetically I would take the symbols from option B and replace them with the colours of option A. I think that moving people out of Akko, and both options would create a lot of problems; although it would be very positive for the buildings, as this intervention would keep the buildings for longer time.

Extract of the Interview with #03 (IAA)

MARINA/PORT OF ACRE

- Option A: Local oriented
- Option B: Tourism oriented

The fourth scenario presented two opposite options, local and tourism oriented. Similar to Scenario 3, most participants welcomed option A, as it focuses on the local residents, it is slightly intrusive, and they found it relevant for the city, and highly feasible. The exception was #09(Development Co.) who argued that option B is much better, if the local fishermen are included, as option A would not benefit the city of Acre, in economic terms.

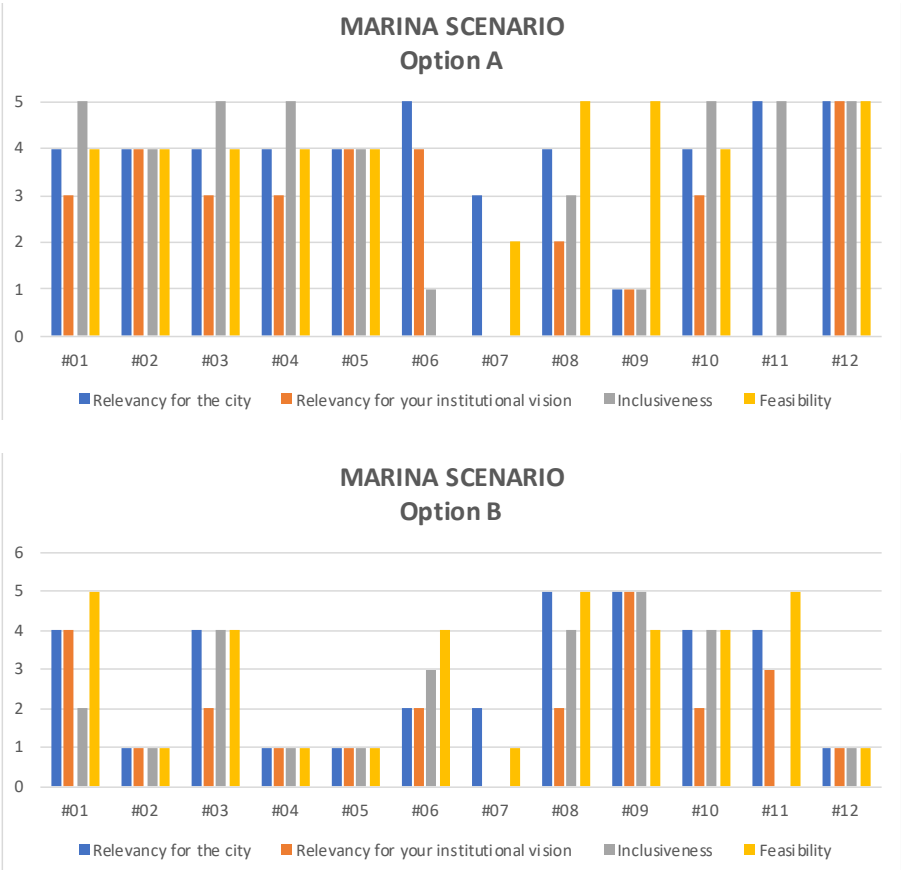


FIG. 8.17 Scenario 3 - Rating from 1 to 5 (least to most)

Option B, on the other hand, was seen as relevant for the city, due to the latest mass tourism trends (pre-COVID times), and for that same reason highly feasible for the District Planning Bureau, the IAA #03, #07 and #10, the Development Company #09, and #11 (Lewinsky College and Bezalel; but not much for #02 (SPIHS), #04 (local) or the Municipality #12 who stated how the local residents would not support it. This point is important as works in the port are being carried out since May 2022, therefore, the responses from #09 and #11 are based on the actual situation. In terms of inclusiveness, #01 (DPB), #02 (SPIHS), #04 (local) and #12 (Municipality) rated the scenario very low, while #03 (IAA), #09 (Development Co.) and #11 (Lewinsky College and Bezalel) explained that focusing on tourism would promote local employment, and residents would still use the port; so, from their observations it would also be inclusive. In any case, all the participants proposed an alternative scenario consisting on the addition of some of the touristic uses into the local oriented option B.

'Tourists are visitors, you don't let visitors to your house redecorate the living room.'

Extract of the interview with #02 (SPIHS)

NORTH AND SOUTH ACRE DEVELOPMENT

Option A: Current high-rise building plan

Option B: High-rise, public connecting park and refurbished industry

The last scenario, number 5, similar to scenario 4 option B, included the fact that Option A is an actual scenario implemented in the city. Therefore, the perceptions about it are based on real experience. This highlights the urge to assess the urban planning and design processes as almost all of the participants had a negative impression about it. #04 (local), #05 (AWA), #02 (SPIHS), #11 (Lewinsky College and Bezalel), and #12 (Municipality) found these interventions irrelevant for the city, as they were based on just economic interest; and the social, environmental or cultural impacts of it were not taken into account. Moreover, they perceived it very negatively for the city's development, as these do not integrate socially and physically in Acre. The latter is most obvious in the southern part, as the visual impact is excessive. #01 (DPB) and #03 (IAA) provided a different vision, as they see the urgency for residential use, and how the availability of space in these two zones encourages developers to proceed. They both agree that this could be done differently by including other aspects, rather than just the economic.

Option B, was positively accepted by the district #01(DPB), #02 (SPIHS), the IAA #03, #07 and #10; #08, #11 (Lewinsky College and Bezalel) and #12 (Municipality). The five agreed that it was highly relevant for the city and the institutions they work for, and they highlighted its inclusiveness. In terms of feasibility, they agreed on the fact that money allocation would be fine, but some institutions would not find it a priority and would oppose its implementation. #04 (local), by contrast, found it not too relevant, and neutrally inclusive, as he doubted about the inclusion of all the residents of Acre in such a project, clarifying that it could be easily gentrified or more Israeli and tourist oriented. Yet, he found it very feasible, as it is aligned with the municipality's interests.

I wouldn't build high-rise; I would do low fabric buildings until 5 or 6 stories maximum. And I would also include more connections to the city, instead of closing the neighbourhood, as they always do.

Extract from the interview with #04 (local)

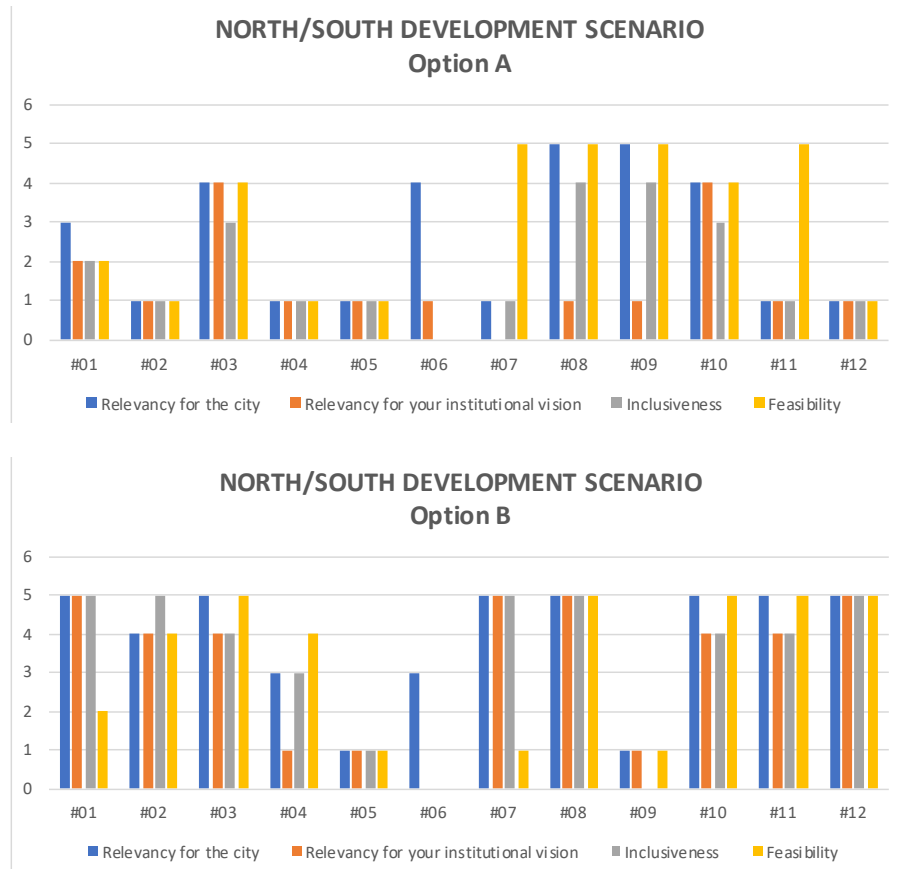


FIG. 8.18 Scenario 5 - Rating from 1 to 5 (least to most)

Interview scenario overviews

In order to identify the points of agreement and disagreement, and consequently the sources of conflict of interest, the rating is evaluated in two ways: first, the number of times the participants agreed on the rating of a scenario are counted (See Table 8.2).

TABLE 8.2 Number of times an option got the same rating.

	RELEVANCY FOR THE CITY	RELEVANCY FOR YOUR INSTITUTIONAL VISION	INCLUSIVENESS	FEASIBILITY
RATE	AQUEDUCT SCENARIO			
1	0	0	0	0
2	0	0	0	0
3	2	3	2	6
4	3	2	4	1
5	6	6	5	4
RATE	AL-JAZZER MOSQUE SCENARIO OPTION A			
1	0	0	0	1
2	1	2	2	2
3	3	4	3	2
4	1	2	2	3
5	7	4	5	4
RATE	MARINA SCENARIO OPTION A			
1	1	1	2	0
2	0	1	0	1
3	1	4	1	0
4	7	3	2	6
5	3	1	6	3
RATE	NORTH/SOUTH DEVELOPMENT SCENARIO			
1	6	8	6	4
2	0	1	1	1
3	1	0	2	0
4	3	2	2	2
5	2	0	0	4

	RELEVANCY FOR THE CITY	RELEVANCY FOR YOUR INSTITUTIONAL VISION	INCLUSIVENESS	FEASIBILITY
RATE	AL-JAZZER MOSQUE SCENARIO OPTION B			
1	6	8	6	4
2	1	0	1	3
3	0	3	3	2
4	3	1	0	2
5	2	0	2	1
RATE	MARINA SCENARIO OPTION B			
1	4	4	4	5
2	2	4	1	0
3	0	1	1	0
4	4	1	3	4
5	2	1	1	3
RATE	NORTH/SOUTH DEVELOPMENT SCENARIO			
1	2	3	1	3
2	0	0	0	1
3	2	0	1	0
4	1	4	3	2
5	7	4	5	5

■ options rated the same by the majority of stakeholders (>5)

Secondly, a radar plot is created for each participant (See Figure 8.19), following the same criteria as the previous radar plots (See 8.2.1Design Criteria

Themes). To do so, the answers provided during the interviews and the scenario rating are taken into consideration and compared to each scenario radar plot. For example, if one participant voted 5 for the four evaluation criteria, it means that they fully agree to the characteristics of the scenario, so their radar plot will be close to the Scenario 1. Yet, if they vote low for another, it means they do not agree to the characteristics of the scenario, so the radar plot will be opposite to the scenario one.

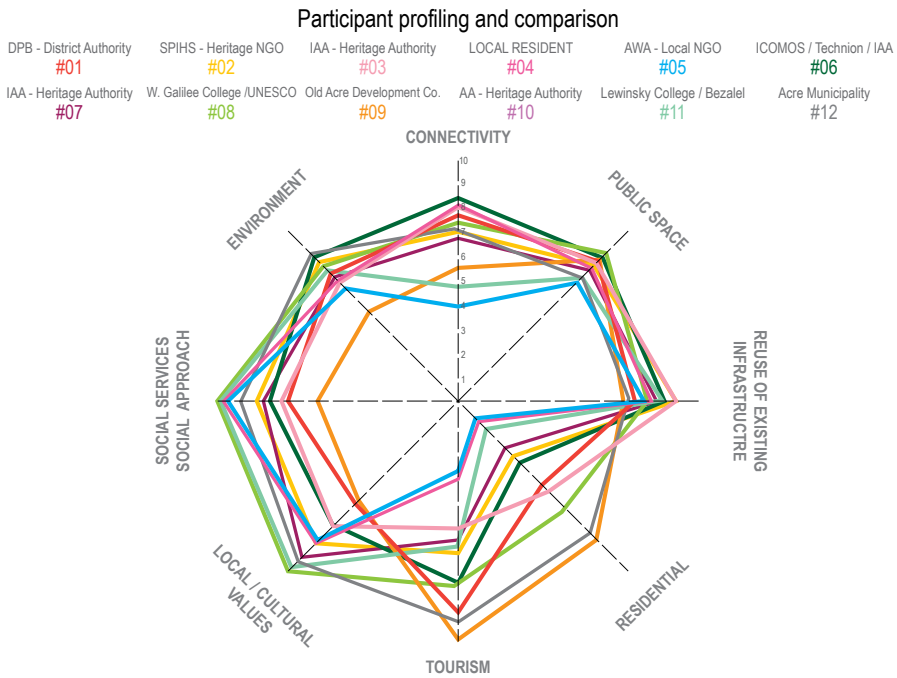


FIG. 8.19 Radar Plot_ Participant Profiling and comparison

There are obvious pairs of people agreeing related to the sector they work for, or their origin. In the case of #04 and #05, who share 14 answers and almost the same radar plot, they share a similar vision from that of the locals, specifically the Palestinian population, therefore they stand for more social and local oriented scenarios.

Another other pair who highly agrees is #04 and #02, sharing 17 answers. In this case, it is interesting to see how the NGO's interests align with the local's point of view. Actually, the radar plot shows minor differences regarding the interest in the social, environmental, and public space aspects. Yet, they highly differ in tourism interest, emphasizing how locals do not prioritise tourism over their own needs, while other organizations take it into consideration as part of their overall strategy.

Similarly, #04 and #11 have a very similar set of answers. The biggest difference relies on their interest regarding connectivity and tourism. The local resident is much less inclined to accept tourism-oriented proposals, whereas the Lewinsky College and Bezalel participant embraces the benefits brought by tourism if adequately managed. Connectivity, by contrast, is much more relevant for the local citizen than for #11. This is probably due to the former living in the city, and better understanding the local needs.

The representatives of similar sectors have relatively similar responses, and high levels of agreement. This can be observed in the responses from public institutions #03, #07, #10 (IAA), and #01 (DPB); as well as #03 and #02 (SIPHS), from the heritage sector. Yet, even if they agree, it happens much less (9 and 8 times accordingly). The fact that they represent conservation institutions, and have an architecture and urban planning background plays in their favour. The points in common revolve around their vision on conservation, and partially about tourism.

Yet, if we look at these three sets of representatives, there are some disagreements regarding tourism-oriented options. This is linked to the inclinations and priorities pursued by their organizations, being the district more Master Plan oriented with a holistic view of the area, where the economics play a fundamental role; while the IAA and SPIHS represent a more social and conservation-oriented institution, where cultural heritage stands before tourism.

Another point of disagreement is between the IAA #03, #07 and #10, and the locals #04 and #05. This result is surprising as the IAA works for conservation in the Old City and plays a key role mediating between the local communities and other public institutions. The explanation to this unexpected outcome could be the different approach to the concepts of inclusiveness, feasibility and relevancy which are rated in a least extreme way by the IAA representatives, and very polarized by #04 and #05. As it can be observed in the table and radar plot, the locals go for extreme rating (5 or 1, 10-9 or 2-1 accordingly). Another reason could be a manifestation of the existing gap between the local and the institutional perceptions.

In general, all the participants show a similar interest in the reuse of existing infrastructure, and the use or improvement of public space is seen as positive. However, there are opposing views when it comes to the interest in constructing more residential buildings: locals mostly are against, the heritage and academic institutions do not have it as a main point in their agenda, while the Municipality and the Old Acre Development Company prioritise residential projects. Something similar happens regarding tourism, we can observe different approaches to it, being it highly important for the Municipality and the Development Company, relatively important for the district, the IAA and SPIHS, while not a priority for the locals (#04 and #05). Another point of difference is the connectivity, which is relevant for those with an architectural background. Finally, regardless of environmental issues not being explicit in the scenarios, most participants have a high consideration towards environmental matters. This point opens the floor to further research on the matter.

8.3 Scenario Building Method – Specific themes

The specific thematic areas addressed by some of the scenarios are categorized into:

- Coastal flood risk in the Mediterranean basin
- Testing Adaptive Reuse as a Strategy to Enhance the Potential of Buffer Zones

In this section, both topics are developed in order to better inform the scenario building process. Background information is provided, as well as an introduction about the topic related to the case of Acre. Altogether, this exercise aims to provide more specific alternatives to actual challenges in heritage port cities. At the same time, this thematic area approach aims to provide a wider range of adaptive reuse alternatives and diverse thinking processes.

8.3.1 T.1 | Coastal flood risk in the Mediterranean basin: culture under threat

8.3.1.1 Background

The studies of the last decades show how we have moved into the Anthropocene (*Anthropocene*, 2021), a new Earth stage characterised by the human impact as the catalyser of changes to our planet (Crutzen, 2002; Zalasiewicz et al., 2008). The “hockey stick” trend visible in various studies from different disciplines showcases the acceleration of these dynamics and how they trigger climate change and disasters (United Nations Human Settlements Programme, 2012). These disruptive changes provoke economic crises, social instability, and ecosystem deterioration, resulting in other disasters such as the current COVID-19 pandemic, following a “snowball effect” (Roy Britt, 2005).

Governments and institutions such as the United Nations (UN) acknowledge the intricacies and consequences of not preparing for climate change and disasters and have proposed a series of frameworks to confront them. The **Agenda 2030** includes climate change and disaster risk reduction and mitigation (DRRM) as part of its Sustainable Development Goals (SDG). Goal number 13 specifically addresses climate action, and the other goals include three themes transversally (United Nations, 2015a). The UN Agency for Disaster Risk Reduction (UNDRR, formerly known as UNISDR) published **The Sendai Framework for Disaster Risk Reduction 2015-2030** in 2015, outlining targets and priorities for action to prevent and reduce existing disaster risks (UNDRR, 2015). Moreover, in December of 2015, during the COP21 Intergovernmental climate summit, leaders from 180 countries signed **The Paris Climate Accord**, agreeing to reduce greenhouse gas emissions and limit the global temperature increase to below 2 degrees Celsius (3.6 F) above pre-industrial levels by the year 2100 (United Nations, 2015b).

These measures have proven to be insufficient as they are being implemented too slowly to meet their aims (IOM, 2020). Therefore, alternative frameworks have been proposed by academics and other researchers. This is the case of Jem Bendell, who proposes the **Deep Adaptation Agenda** in response to the current situation, taking a more radical approach (Bendell, 2018). In his article “Deep Adaptation: A Map for Navigating Climate Tragedy”, Prof. Bendell advocates radical measures to address climate change and disasters as an ongoing emergency to be tackled now. Furthermore, he expresses great concern about the soft measures and the long timespan to be implemented due to systematic denial of the problem by governments, academics, and in public debate. In contrast to this superficial attitude, he proposes a four-pronged approach, the Deep Adaptation Agenda, as a mechanism to deal with profound disruption, accepting the hypotheses that *“climate-induced near-term societal collapse should now be a central concern for everyone”*.

The key aspects covered by the Deep Adaptation Agenda are resilience, relinquishment, restoration, and reconciliation. Each concept responds to the following questions, aiming to find viable, sustainable, and effective solutions to be implemented in the nearest future:

- **Resilience** (R1) asks us, “how do we keep what we really want to keep?”
- **Relinquishment** (R2) asks us, “what do we need to let go of in order not to make matters worse?”
- **Restoration** (R3) asks us, “what can we bring back to help us with the coming difficulties and tragedies?”
- **Reconciliation** (R4) asks, “with what and whom can we make peace as we face our mutual mortality?”

These actions cover a wide spectrum of topics, and are proposed as an umbrella approach to more specific themes. In my research, the Deep Adaptation Agenda is used to address **adaptive reuse**³² of **urban heritage**³³, as a strategy to turn cities' elements in decline into development catalysts (Pereira Roders & van Oers, 2011). This strategy can positively influence the socio-economic, environmental, and cultural spheres of sustainable development (United Nations, 2015a). The latter, culture, is a focal point of this paper, with the role of culture as a brace for sustainable development (Bandarin et al., 2011; Bandarin & van Oers, 2012) being acknowledged by bringing urban heritage to the forefront. It is additionally addressed by the incorporation of **cultural resilience**³⁴ as a cross-cutting element (Holtorf, 2013). It is a branch of resilience dealing not only with adaptation but also with continuity and change, both points aligned with the Deep Adaptation Agenda.

One of the consequences of climate change agreed by most scientists is a global sea level rise of 0.3 metres up to 2.0 metres by 2100 (Parris et al., 2012; Sweet et al., 2017). It increases the risk of coastal flooding due to extreme sea levels or coastal erosion that would result in the exposure of coastal cities to these hazards (Reimann et al., 2018). This not only means the erasure of the actual urban fabric, but would also have catastrophic consequences for the economy and social cohesion in these cities, as they depend on the activities linked to the port, like trade, fishing, tourism, and leisure (Marzeion & Levermann, 2014).

³² **Adaptive Reuse** is the transformation of the function of an underused system into a new use (Apserou, 2013; Plevoets & Van Cleempoel, 2019, 2020; Stone, 2020; Wong, 2017). It can tackle urban issues holistically, as this process can enhance positive environmental impacts, encourage social and participatory processes, and promote economic dynamism through culture (Apserou, 2013; Mathey & Steinberg, 2018). However, the success of such an intervention will depend on the underlying approach.

³³ As a concept, **urban heritage** is global. Usually, it is defined as the historical and physical layers constituting the contemporary urban area. These include the built heritage, with architectural and historical value, the urban plan, and land utilization. However, the current views on heritage, like "The Historic Urban Landscape" approach, published by UNESCO in 2011 (UNESCO, 2011) go beyond the notion of historical centres and traditional layering to include the broader urban context and its geographical setting (UNESCO, 2011). This approach includes a wider range of elements, comprising not only tangible but also intangible components. The framework developed during the "Heritage in Urban Contexts" meeting held in Fukuoka in 2020 (UNESCO World Heritage Centre, 2020a), classifies urban heritage into four categories: the wider context, the urban elements, the architectural elements, and the intangible cultural elements. All of these capture their local and regional identity. Therefore, this framework needs to be adapted to the context accordingly (Ibid.).

³⁴ Cornelius Holtorf defines **cultural resilience** as "the capability of a cultural system (consisting of cultural processes in relevant communities) to absorb adversity, deal with change and continue to develop" (Holtorf, 2013). Moreover, he adds that "Cultural resilience thus implies both continuity and change: disturbances that can be absorbed are not an enemy to be avoided but a partner in the dance of cultural sustainability (adapted from Thiele [2016, 36])." This perspective embraces disruption, transforming it into an opportunity for development, in which adaptation is key to prosperous societies (Gilbert & Bower, 2002).

This tragic future scenario serves as the basis for imagining alternative uses for these areas, addressing not only the environmental factors but also understanding the city from an integrated perspective with culture as the enabler of sustainable development (*Keeping the Promise: United to Achieve the Millennium Development Goals*, 2010; Unesco, 2016).

8.3.1.2 Ports at risk: the cases of Acre

The selected area, the Marina of Acre, a port in the Mediterranean Sea, serves as an example to test the hypotheses surrounding sea level rise. This port has undergone multiple changes over time, having a great potential for adaptation (Galili et al., 2010; Harari, 2012). Furthermore, while Acre is not an extreme case of rapid deterioration, as the historic areas of Dubrovnik or Venice, this port city is on the edge of becoming a mass tourist attraction. The ongoing gentrification process in the area jeopardises the fragile balance between the traditional livelihoods of locals and new economic activities linked to tourism owned by outsider business people (Killebrew et al., 2017; Sherwood, 2012, 2012).

Acre and the Marina

Being inscribed on the World Heritage List, the Old City of Acre preserves a historic town's urban and architectural elements. Its outstanding universal value relies on the Crusader remnants preserved under the Ottoman city (World Heritage Centre, 2013), showcasing Mediterranean port cities' dynamism and continuous change.

The Marina of Acre is one of the leading local and tourist assets in the city. This sea walk along the traditional fishing port brings together tangible and intangible cultural heritage elements in one place, a highly attractive space for leisure activities for tourists and locals.



FIG. 8.20 Marina of Acre. Source: Flickr_ Ray in Manila

8.3.1.3 Method: Scenario building exercise based on the survey

Aiming to test **the limits of acceptability** in relation to the hypothetical catastrophic future of sea level rise and the Marina of Acre disappearing, **adaptive reuse alternatives** are proposed based on the results from the survey (See 6.3 The Survey: Evaluating the perceptions and future vision for the port), which was created for and administered at the site. The exercise combines the citizens' perceptions, current uses, and future visions of the areas as the starting point to imagine hypothetical future scenarios and propose alternative uses based on the Deep Adaptation Agenda and the cultural resilience approach.

Results: Deep Adaptive Reuse and Cultural Resilience Approach Alternatives

Disaggregating the data shows a complex and varied range of perceptions on the Marina of Acre. We propose alternatives based on this outcome for a hypothetical rise in sea level and consequent flooding of the ports, aiming to find the most acceptable option among the citizens.

Consensual alternative

New port | Economic revival | No reconstruction

The question on port management (Question 19) serves as the starting point because a consensus was found among all the categories. Almost every respondent believes that sea level rise would be an enormous disruption that would affect the economy and development of the city, and that building a new port close to the current one would be a good solution, rather than reconstructing the latter. From these answers, we distil citizens' awareness of how a natural disaster may impact their city and the economy; there is low interest in reconstructing the current port. The new one should include the economic activities to compensate for the loss from the old port.

This means that implementing physical disaster mitigation mechanisms, such as a dam or barrier systems, would not be an adequate solution from a citizen's perspective. Instead, focusing on response plans that include planning a new port would attract more agreement, meaning the municipality should prioritise such planning.

If the construction of a new port close to the current one is chosen based on popularity among the citizenry, deciding on the uses this new port would accommodate and which it would not is fundamental to guarantee its sustainability.

The New Marina of Acre

Alternative uses for the (new) Marina of Acre

The most appreciated elements in Acre's port are related to cultural, economic, and social interactions, whereas the least appreciated elements are linked to the urban and environmental aspects. The new port should include excellent views of the sea, greenery, and a nice clean space to walk. Economic activities related to the local economy and tourism should be included. Cultural values should be promoted by enhancing the gastronomy, festivals, and the buildings and monuments of the new

port. Also, the new port should be easily accessible, close to public transportation and a parking area.

The preferred morning uses for the port, in almost every category, includes a fishing port and a green park. These uses connect to the need for a green and clean space and enhance the local economy and the desire to fish among the elderly. The only group that opposed the green park is the age range between 35 and 49. To compensate for their choice being neglected, their most preferred use should be included: the local market. This aspect would work out fine, as it is one of the most preferred uses for the evening, along with the sea promenade. The new project should not include boat tours, as this is one of the most undesired uses.

Altogether, the new port would provide a sea promenade and a green park, where fishing activity would be possible, both as a recreational activity and professionally. This area would include a local market that is attractive for locals and tourists, including traditional arts and crafts and local food. Tourist attractions should be integrated. These could include historical buildings, monuments, and exhibitions showing local arts and crafts. Boat tours should be avoided.

Issues raised by the alternative – Acceptance Evaluation

This alternative raises a series of issues and doubts that need to be addressed by the municipality, mostly linked with the process, timing, and stakeholder acceptance. Firstly, selecting the location for the new port would create a high probability of confrontation among Acre's stakeholders. Second, the timing for the construction of the new port could be controversial. From a disaster risk management (DRM) point of view, mitigation and preparedness are prioritized over response. Therefore, constructing the new port before the sea level rises would be the DRM better option. Yet, this entails a great level of economic resources, and as mentioned above, a high level of controversy about its location. It suggests that measures would be taken when the public perceives the risk so that the level of acceptance is high. Finally, neglecting the historical and cultural value of the Marina of Acre as part of a World Heritage site is not trivial. The heritage and cultural sectors would oppose the abandonment and deterioration of the area, advocating its reconstruction regardless of citizens' perceptions. Altogether, it generates a conflict of interests and priorities among stakeholders and shuffling the DRM, cultural heritage, economic, and urban priorities. In any case, the final decision should include citizen engagement to guarantee a reasonable level of acceptance.

Heritage - Tourism alternative

Mitigation | Reconstruction | Economic development

One of the issues observed in constructing a new port is the objection by heritage experts and the difficulty in finding a new location linked to the municipality's priorities and other political interests. Therefore, following the fourth point in the Deep Adaptation Agenda, R4 reconciliation, we propose an alternative that addresses the difficulties of building a new port, obviating the responses to the question about port management in the case of sea level rise.

The proposed alternative is the reconstruction of the Marina of Acre, as this site is more charged with cultural and heritage values, connected to its UNESCO WH status. This option would include two fundamental elements. The first element concerns flood risk mitigation aiming to delay the disaster by constructing physical mitigation systems, such as water barriers. Second, a reconstruction plan for the port is needed, which should include a response mechanism for the time of flooding, and the plan for the reconstructed port, to address the recovery phase.

Again, the key element for this alternative to be successful is citizen engagement and awareness. The surveys show that the citizenry is aware of the consequences of such a disaster. Their engagement can be guaranteed by taking into account the disaggregated data. In this case, the focus is on the recovery phase³⁵: the main elements and uses to be included/not included in the reconstructed port.

Regarding the choice of flood risk mitigation system, the economic factors need to be considered. Decision-makers are more reluctant to implement mitigation systems, as their impact is long term, conflicting with political interests that are more focused on short or medium-term impacts. Therefore, the key stakeholders taking a leap of faith to prioritize a DRM solution over other issues in the city would require high levels of institutional awareness and trust in science.

³⁵ The response phase is too complex to be addressed in this paper, and should be considered in further studies.

8.3.1.4 Reflections on the Deep Adaptive Reuse approach

The Deep Adaptation Agenda offers a new approach in which resilience-related aspects are included (R1), but which also integrates issues linked to perceptions, culture, and interests (R2-R4). Combining this perspective with cultural resilience aims to provide alternatives beyond the traditional DRM approach or the economic, business as usual perspective. Including the social and cultural values into the procedure provides different solutions to the same problems, placing the human beings and citizens in the focus.

This study provides adaptive reuse alternatives for a hypothetical disaster and mainly focuses on understanding the multiplicity of voices in the city and reaching a more or less consensual alternative for the citizens. It should be noted that the periods of disruptive change provoked by the implementation of the proposed alternatives are not addressed. Neither are the impact of the institutional, public, private, and civil society actors on the acceptance and implementation of the resulting solutions. This leaves space for further research on these topics.

The outcomes of the analysis and alternatives proposed for the Marina of Acre derive from the survey's responses. The identified issues, like the actual implementation, showcase the challenges around climate action. Similarly, reaching a consensus or partial consensus among the multiplicity of identities in a city is fundamental to starting the conversation and finding the most acceptable alternatives. Yet, this is just the first step in a complex, multi-level, and multi-disciplinary stakeholder process intertwined with political priorities. A response to the challenges raised by the climate emergency requires citizen engagement and a solid commitment by decision-makers.

Summing up, this paper explored how to combine Jem Bendell's Deep Adaptation Agenda with the cultural resilience approach. It can result in adaptive reuse alternatives, aiming to promote reconciliation and the four spheres of sustainable urban development while tackling the climate crisis and disaster-related issues. The study shows how combining these approaches reveals the voices in the city and provides a baseline for dialogue and engaging solutions. Merging the urban realm with culture and DRM as a method and testing it in the contested site of Acre reflects the complexity the urban world is facing and the need to propose innovative and integrated methods so that all the voices are included and solutions provided.

8.3.2 T.2 | Testing Adaptive Reuse as a Strategy to Enhance the Potential of Buffer Zones

8.3.2.1 Background

Heritage conservation is guaranteed through the implementation of diverse management and protection systems. UNESCO specifically recommends the use of Buffer Zones around protected areas, such as the Man and the Biosphere and World Heritage Sites, as a suitable practice to enhance the conservation values of the area (UNESCO, 2012), as well as a practice to attain other sustainable development goals such as climate change mitigation (ICCROM, 2008). The definition of buffer zone creates a high level of confusion and antagonism among decision-makers, practitioners and site managers (UNEP, 2020a).

Initially, the concept was used for planning, as a zoning tool to separate some areas from others, and differentiate their uses (Bandarin et al., 2008). This act of separation has proven to be detrimental for the adequate development of the communities living in these areas and the integration of city fragments, defined by Colin McFarlane as the bits and pieces of the city that become caught up in stories of the urban change, politics, and everyday experience, including all kinds of social and political relations, often oppressive and exploitative, sometimes progressive and generative (McFarlane, 2021), into the urban fabric.

Also, in the last years, the Operational Guidelines have been updated to move away from the buffer as a separator towards its use as a management tool (Bandarin et al., 2008), focusing not only on its role as added layer of protection for WH, but also on how these zones can support, protect and enhance the values of heritage sites and other identity areas: areas with similar features, including physical, morphological, demographic, intangible, social, or economic.

However, the role that the adaptation of Buffer Zones has to support and influence identity areas has been vaguely explored. Responding to the question “*How Adaptive Reuse can enhance Buffer Zones’ potential as identity area supporters?*” this paper aims to explore the adequacy of adaptive reuse as a strategy to enhance buffer zones’ potential as identity area supporters, through its testing in the city of Acre, and aspiring for the replicability of this method in other WHCs. To do so, the focus is set on the potential of activating the interlinkages between the city fragments, ranging from heritage sites and other identity areas to their buffer zones, going beyond the historic centre. This way, the notion of buffer zone expands and it becomes not just an added layer of protection, a passive system, but also a catalyser for sustainable development, an active system.

This broader vision of heritage aims to align with the Global Frameworks, which stress the role of culture as key for sustainable development, as culture embraces the spheres of economic, environmental and social development (United Nations, 2017). These frameworks include the New Urban Agenda, the UNESCO charters and memorandums, the Agenda 2030, and specifically the HUL approach, a UNESCO recommendation published in 2010 that emphasizes the need to go 'beyond the historic centre and ensemble' (UNESCO, 2011). It also acknowledges that the potential for 'putting heritage in the life of the community' entails the reframing of identity areas and seeing heritage in the continuum of time, because ultimately, the architecture and designs of today will provide the heritage of the future.

In this sense, Adaptive Reuse (AR) is one of the mechanisms for managing urban transformation, changing the function and programme of a building, as well as physically adapting the building to new needs and requirements. Even though the term may refer to altering any kind of building (Kent, 2020), the process of adaptive reuse is intrinsically linked to heritage conservation and historic centre regeneration (Kent, 2020). This adaptation of heritage not only serves as a way to manage heritage assets, but it is also a tool for sustainable development (English Heritage, 2013), including environmental advantages like contributing to lessening the energy, materials and resources needed on a new development, regarding the economy it attracts investment and enhances local economies (English Heritage, 2013), which have a direct social impact highlighting local identities and values (Brooker & Stone, 2008). Therefore, there is a clear and direct link between adaptive reuse and heritage conservation, which reflects on its positive influence in cultural heritage.

Usually, adaptive reuse processes are carried out in architectural elements, transforming the function of underutilized buildings into a new one (Apserou, 2013; European Union, 2018; Plevoets & Van Cleempoel, 2019; Stone, 2020; Wong, 2017). When this process is meant for the urban fabric - in our case we are addressing a cultural landscape focusing specifically on buffer zones - the process is more complex, as living cities are places where the process of making is always present, as noted by Saskia Sassen (UN-Habitat, 2020). The socio-economic aspects of the different components of the urban landscape change at dramatically different speeds (Hoelscher et al., 2022), providing a challenge for both historic buildings and ensembles, which can be addressed by the retrofitting of the diverse components that make up our urban heritage (Turner, 2008).

It should be emphasised how the process of adaptive reuse differs in its application when the adapted element is urban, instead of architectural. First, as the process of adaptive reuse has been traditionally used in architectural elements, this usually focuses on the two parts of the process: **adaptation** of the physical space through

tangible interventions in its materiality, form, structure, and other built elements; this way the building can host a new use (**re-use**), which implies changing the intangible aspects of the architectural element, such as the users, behavioural aspects linked to the place, and times of use, among others (Plevoets & Van Cleempoel, 2019; Stone, 2020; Wong, 2017). Second, urban interventions follow totally different decision-making processes than architectural: the latter are usually managed by private developers, and even when supported by public resources, the decisions more often than not are top-down; the urban, by contrast, are directly connected to the local authorities, the public sector, the civil society, the residents and other users. Hence, the urban adaptive reuse processes focus on the **re-use** (major change in intangible aspects), and aim to enhance the **adaptability** of these areas with minor changes to the physical urban parts (minor change in tangible aspects). Also, the decisions are made by a wider range of actors, always including the public sector, and being citizen engagement recommendable for greater success. These points are most relevant in Buffer Zones that have blighted building fabric or brownfields as a strategy to change the function of these urban areas, usually underutilized or mismanaged, to become sustainable development catalysers (Pereira Roders & van Oers, 2011).

The role of Buffer Zones is a double-edged sword as it can affect the adjacent identity areas negatively, or become an asset. On the one hand, a city needs cushions and sponges to provide resilience and sustainability. These areas of cartilage are essential in managing urban change as their potential to be modified is higher than the potential found in more consolidated areas (the non-changeable parts of the city). On the other, buffer zones can act as obstacles and barriers between different areas of the city, contributing to urban fragmentation.

Therefore, aiming to understand how adaptive reuse strategies can enhance identity areas and buffer zones; the needs, assets and challenges of the latter are explored, defying the usual approach that solely encompasses heritage sites (ICCROM, 2008). For this matter, an alternative approach to Buffer Zones is taken, moving away from the role as a separator to a more dynamic space of transition, a liminal space. This supposes a challenging task as liminal spaces are meant to seam urban fragments by bringing the softer areas, the changeable parts, and the values of the hard areas, the non-changeable parts together, becoming the drivers of transformation, thresholds between the historic centre and the city beyond.

To do so, two main tasks are carried out: first, data collection and analysis of the WHC database, with special emphasis on the actual role of their buffer zones; second, a scenario building exercise is tested in the WHC of Acre to explore how different adaptive reuse strategies could be implemented in its buffer zone to attain the aforementioned objectives; and these are then evaluated through discussions

with the main stakeholders. Altogether, concluding to what extent these AR strategies can be adequate to enhance the potential not only of Acre's buffer zone but other WHCs'.

8.3.2.2 From Buffer Zones to Liminal Spaces

Reference Frameworks

The definition of Buffer Zone, as added layers of protection, aspires to address the common issues and threats related to these areas. The State of Conservation (SoC) reports provide a thorough overview of these problems, which in most cases are related to visual impact, urban developments within the buffer zone, legislative/management problems, or unclear boundaries (World Heritage Centre, 2008). A more integrative description of buffer zone as Liminal Spaces (LS) takes into account these issues, and aims to reinforce the interrelations of these transition spaces with identity areas.

Other frameworks, like the Man and the Biosphere (MAB) Reserves by UNESCO, include the concept of buffer zone³⁶ and transition zone as added layers of protection to a core area (UNEP, 2020b). The first comprise a strictly protected area for landscape, ecosystem, species and genetic variation conservation; the second is meant to foster socio-culturally and ecologically sustainable economic and human activities, suitable for “scenic” structures as: monuments and sites and “nature reserves”. Similar to the WH buffer zone, the MAB zoning poses issues related to management, yet the objectives aimed by this programme are more integrated and well aligned with the sustainable development goals, as they include the social, economic, environmental and cultural spheres of development into the approach (MAB, 2008).

³⁶ https://en.wikipedia.org/wiki/Buffer_zone

From a limited definition of Buffer Zones to a broader approach to their values and potential

The definition of Buffer Zone is a complex matter as it varies depending on the context where it is used (Bandarin et al., 2008; ICCROM, 2008). The way it is used in the cultural heritage realm illustrates a continuous modification process, shown in the updates to the operational guidelines and to the World Heritage (WH) nomination process. In the recent HUL recommendation, the concepts of historic urban landscape and cultural landscape propose a more integrated view of heritage. Following this logic, buffer zone is redefined into the concept of Liminal Spaces (LS) providing elasticity to the urban fabric, a way for it to overlap, breathe, adapt and create a seamless urban structure. Doing so, we move away from zoning towards a continuously changing landscape opening up opportunities for new approaches to heritage that guarantee and improve the management of the city and its urban heritage (Bandarin & van Oers, 2012; UNESCO, 2011).

There are several approaches to Buffer Zones beyond the heritage realm, as this added layer of protection is also used in other identity areas, apart from World Heritage sites. The criteria considered to identify identity these areas includes, on the one hand, criteria regarding physical and morphological characteristics: the historic value of the area, the dominance of built up or urban spaces, the dominant architectural styles, or the building heights of its urban fabric (Abdel Tawab, 2010); also, regarding urban features, the dominance or lack of specific land uses, the density of an area, or the dominance or lack of public services and infrastructure. On the other, criteria related to intangible cultural heritage comprises, the artistic value of the area, the number of traditional arts and crafts found in the area, the amount of art performers and forms of art, the continuity of social practices, rituals and festive events, as well as their number of followers/participants³⁷. The more physical criteria by which an area can be subdivided into identity areas indicates the decline of the harmony of its character (Abdel Tawab, 2010; UNESCO, 2004; UNESCO, Living Heritage Entity, 2020); the more intangible criteria, by contrast, indicates the richness in diversity.

³⁷ Criteria based on the Text of the Convention for the Safeguarding of the Intangible Cultural Heritage

TABLE 8.3 Buffer Zone value and Attribute

Buffer Zone Value and Attribute Table		
AIM	VALUE	ATTRIBUTE
Defense / Security	Materiality Resistance Inaccessibility Shape Vision	Walls Water barrier Moat Safety measures (controls, electric fence...)
Liminal space / Threshold / Transition	Linkage Versatility Flexibility	Bridge Tunnel Street between consolidated areas Corridor
Connection	Connectivity	Public space Street / Avenue / Boulevard
Homogeneity	Visual continuity Shape Materiality Urban fabric Social fabric	Same typology urban fabric
Disconnection / Segregation	Separation	Brownfield Moat Infrastructure
Political statement	Clarity of the message Visibility Agreement / Disagreement	Street art Signage Demilitarized zones
Ecotone - Transition between biological communities	Integration of different elements	Sharp vegetation transition A change in physical appearance A change of species
Environmental protection	Water quality Riverbank stability Wildlife food and habitat Aesthetic value	Green belts Vegetation buffer Riparian buffer Recreational areas
Monumentalize	Vision of specific monument/area/ensemble/view Aesthetic value	Open space Water body Demolished buildings Limited height

In the same line, it should be highlighted why these identity areas influence a buffer area, and how this area differs from the identity one. As an added layer of protection, buffer zones attain to safeguard the character of the identity areas, determined by the aforementioned criteria. In this sense, the buffer zones are usually adjacent areas with a low harmony in its character, very subdivided, or without a strong identity. These areas give service to the identity areas as they usually include infrastructure, service and uses not found in the identity areas due to reasons of

impact, conservation, or similar. Nevertheless, this does not mean buffer zone areas lack interest, value or identity. Actually, the values linked to the identity areas' buffer zones cover a wide range of aspects, from environmental or conservation, to political interests. Therefore, in order to understand how buffer zones can support and protect identity areas, their values need to be identified, and depending on the underlying approach these areas can become drivers of transformation, thresholds between different identity areas or the opposite (See Table 8.3).

Adaptive Reuse as a cultural value support strategy

It is in this context when adaptive reuse becomes key to enhance the potential of buffer zones as an essential asset for cultural landscapes, to support identity areas, and to promote cultural values. Hence, the role of adaptive reuse as a mechanism to tackle urban fragmentation in an integrated way is fundamental. On the one hand, the process of fragmentation is simultaneously an economic, political, social, and ecological transformation of space; through changing geographies of densification and de-densification (McFarlane, 2021) (See Table 8.4). This relation with transformation of space is directly connected to the process of adaptive reuse, as it is also a mechanism to transform urban elements. However, the result of adaptive reuse processes aims to turn elements in decay into drivers of sustainable development, whereas urban fragmentation processes usually result in displacement, speculation or disease, constant forms of adjustment that feed the causes of urban informality (McFarlane, 2021).

Therefore, the implementation of adaptive reuse, as a holistic process, is particularly important in facilitating social inclusion and avoiding social exclusion, as well as in guaranteeing that no narratives are lost in the process (M. J. Stern, 2020). Overall, the results from an adaptive reuse process have the ability to influence not only the surrounding communities but also other intangible aspects beyond form and place, such as community building, sense of place (Siders & Rockman, 2020), and economic development.

TABLE 8.4 Urban fragments and fragmentation definition and characteristics

URBAN FRAGMENTS / FRAGMENTATION			
<p>Urban fragments are defined as the bits and pieces of the city that become caught up in stories of the urban change, politics, and everyday experience, including all kinds of social and political relations, often oppressive and exploitative, sometimes progressive and generative. These lead to fragmented urbanism, including the interactions different people have with fragments. Also, the fragmentation processes are directly related to changing geographies of densification and de-densification, especially those which deepen social inequalities and force residents into marginalized, underprovided spaces in the city, and to manage areas overloaded with urban fragments. However, it should be highlighted how densities of people can also become a resource to support the community. Implying that the processes of densification can both enable or disable, enhance, alienate, exploit, or inspire different forms of urban life, housing, infrastructure, and politization in the fragmented city. (McFarlane, 2021)</p>			
ATTRIBUTES	DRIVERS	CONSEQUENCES	TYPES
Gentrified and real estate speculation areas Privatised and commodified infrastructure and public spaces Cultures, economies and practises of securitisation High density areas compared to the rest Infrastructure and service fragmentation Segregated and militarised cities Gated enclaves (securitised)	The dynamics of capitalism Real estate speculation (specially on the urban fringe) Economies, cultures and politics of expulsion, demolition, and selective inclusion Cultural and social prejudices A lack of specificity in state or city policy and regulations on where new housing or other developments should be located Generally weak set of property rights among residents and landowners on urban peripheries	The prevalence of illness and disease (most health problems are linked to inadequate sanitation in particular). Life in the city becomes for a majority of citizens a shared experience of fragmented basic provisions. Shuffling and displacing of densities Targeting of particular places for speculation and economic surplus. A demand of constant forms of “adjustment” resulting in informality	Knowledge Material Written

The results of adaptive reuse processes reflect the concerns of the society that adapted it, serving as the custodians of heritage for the community and subsequently all (ICOMOS, 1994). Containing the traces and DNA of the history and narratives of the past, serving as a past-present-future continuum. These adaptation processes create collective memory, which, combined with identity, tradition, history, and culture, provide continuity to the urban heritage (Stone, 2020). Altogether, adaptive reuse serves as a strategy to safeguard the urban memory, and support new programmatic requirements by the communities, and at the same time mitigate and provide alternatives to battle the drivers of urban fragmentation: the dynamics of capitalism to sustain itself (Lefebvre, 1976); real estate speculation; and economies, cultures and politics of expulsion, demolition, and selective inclusion.

Adaptive Reuse Strategies for Buffer Zones – From Material to Urban Compatibility

The adaptation process can be tackled in various ways, so again, the underlying approach is key to determine the type of adaptive reuse process or intervention. In the case we are examining, **von Bertalanffy's General System Theory** (Bertalanffy, 2003)³⁸ is applied to **translate material compatibility principles into urban compatibility**. Understanding compatibility in conservation as “the action taken to prevent deterioration and to manage decay dynamically”(Gans, 1963) highlights how critical the use of right materials is for successfully renovating historic buildings. Yet, the biggest challenge relays in finding them, as there is a general false belief that stronger is better. Actually, *matching* materials are key for success, entailing that the new materials possess all the characteristics of the original masonry – chemistry, porosity, appearance, strength and moisture absorption (Maas, 2013).

Following this line of thought, similar principles can be used when adapting buffer zones. On the one hand, the aim of approaching this process through urban compatibility aims to prevent deterioration of the urban fabric and to manage urban decay. To do so, it is fundamental to find matching systems that adequately seam the identity areas with their buffer zones.

In material compatibility system, the original materials and those added in the conservation processes should form a composite structure that shows an adequate behaviour when environmental factors create stress (Torraca & Stambolov, 1982). This is achievable, for example, using materials with **similar porosity**. Other strategies such as vibration, binders and consolidation can bring more problems than solutions, therefore, these should be carefully considered: when **vibration** is inevitable (caused by traffic or machinery), a tolerable deterioration rate needs to be put into place to control the deterioration created by the vibration and foresee the structure's maintenance; **binders** are dangerous if applied on old masonry, as they have opposite characteristics (low porosity, high density, thermal conductivity and elasticity); and the **consolidation** process needed to avoid the loss of material, and the reinstatement of cohesion, requires additional protective treatment.

³⁸ General systems theory is the interdisciplinary study of systems, where broadly applicable concepts and principles are developed, as opposed to concepts and principles specific to one domain of knowledge. The goals of this theory are to model a system's dynamics, constraints, conditions, and relations; and to clarify principles (such as purpose, measure, methods, tools) that can be detected and applied to other systems at every level, and in a wide range of fields for achieving optimized equifinality (Bertalanffy, 2003), the principle that in open systems a given end state can be reached by many potential means (Beven & Freer, 2001).

The translation of these material compatibility into urban compatibility implies applying diverse adaptive reuse strategies.

- **SIMILAR POROSITY** – Two identity areas with a different “porosity” (different urban structure, building heights, social fabric, form, spatial configuration, or land use), are connected through a transition area, the buffer zone, which has a midway porosity, serving as cartilage, a soft threshold (See Figure 8.21).
- **ELASTIC ADJOINING** (Avoid **Binders**) – In order to avoid the negative effects of “binders”, which in the urban realm mean the addition of new elements that interfere, deteriorate, disrupt, or bring displacement into the identity area, adequate adjoining mechanisms are recommendable. These should take into account the material compatibility principles and prioritize interventions which correlate with the identity areas’ porosity (i.e., instead of changing the street morphology dramatically, from a pedestrian network to a vehicle-oriented street network, transition street networks which combine pedestrian and vehicle paths, such as boulevards can be an adequate solution) (See Figure 8.22).
- **CUSHION** – When the level of stress is high and inevitable (**vibration**) a way of managing the deterioration is to decentralize and scatter the sources of stress (i.e., tourism). One way to do so, is to use the buffer zone as a sponge to absorb the high levels of stress from one area and redistribute it in the buffer zone (i.e., limit the number of hotels in the historic area, and bring new hotels to the buffer zone) (See Figure 8.23).
- **SPONGE** – Similar to old masonry, historic areas (and some identity areas) struggle with severe disruptions, such as climate change, and in order to achieve **consolidation**, additional protective measures are needed. These measures imply the use of buffer zones like sponges to absorb these disturbances (i.e., the use of a vacant area to be swamped during flash floods) (See Figure 8.24).

Altogether, the various types of buffer zone and the Adaptive Reuse strategies based on material compatibility presented in this section showcase the importance of the underlying approach to address the adaptation of buffer zones. Also, the targeted aim expected from the intervention, usually set by the municipalities or governmental institutions, directly influence the design process and the outcome. In the next section, these principles are applied in the case of Acre’s buffer zone, responding to the guidelines set by the Global frameworks, specifically the 4 spheres of sustainable development, and the HUL recommendation.

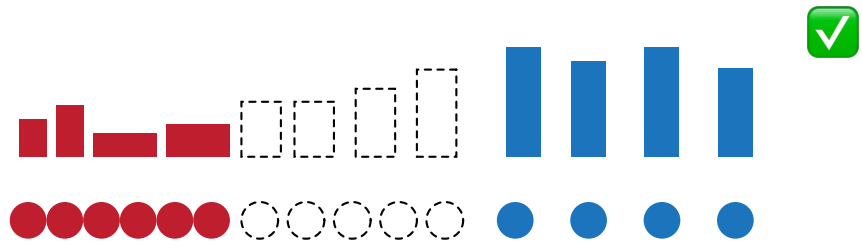
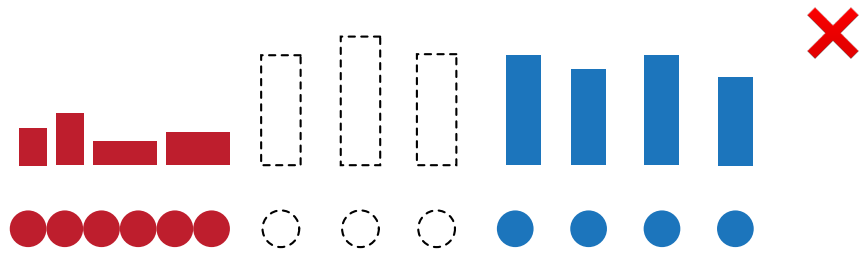


FIG. 8.21 Adaptive Reuse Strategy 1_Similar Porosity

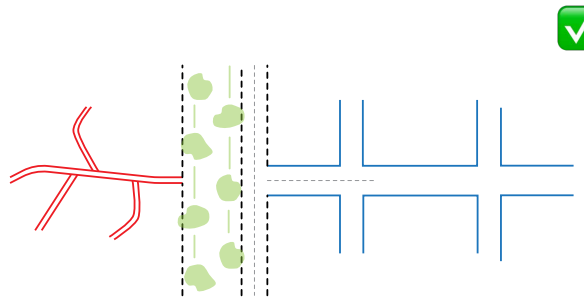
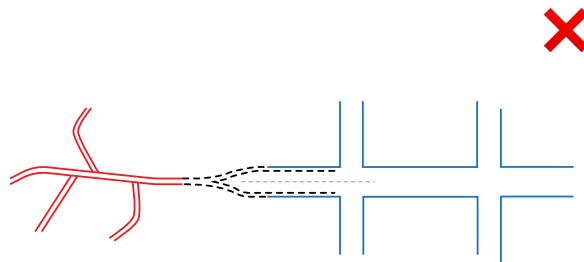


FIG. 8.22 Adaptive Reuse Strategy 2_Elastic Adjoining

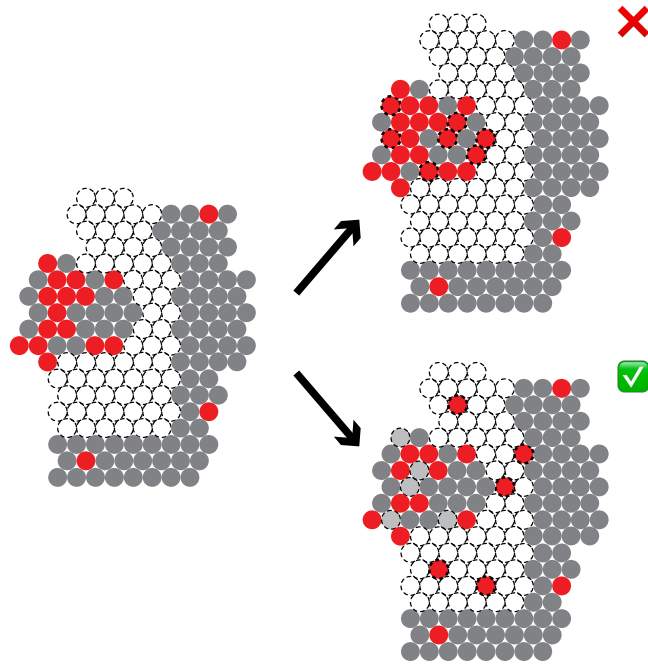


FIG. 8.23 Adaptive Reuse Strategy 3_Cushion

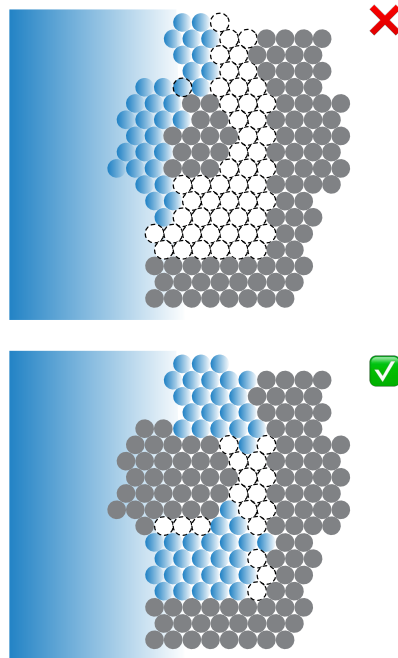


FIG. 8.24 Adaptive Reuse Strategy 4_Sponge

8.3.2.3 Method: Scenario building exercise

This scenario building exercise adapts the criteria described in 8.2.1 Design Criteria, to match the exercise's theme and aim: to address the challenges identified in 7.2 Diagnosis of Acre 7.2.2 Analysis of other sources: World Heritage Cities and Buffer Zones Diagnosis, through the adaptation of Acre's buffer zone and beyond. The scenarios explore extreme cases related to the touristic, housing strategy, and economic future for the city in order to test the limits of urban planning and address the most urgent and current matters at the city, regional and national levels. These proposals are designed, described, visualized and **measured according to parameters of sustainability** (economic, social, environmental, cultural, and urban), to be then evaluated by local stakeholders.

Design Criteria

Design Criteria – Themes

The tackled thematic areas comprise the spheres of sustainable development (social, economic, environmental and cultural), and urban design principles (connectivity, inclusiveness, and land use), aiming to propose scenarios which address real problems with an integrated approach. The themes are related to the main issues extracted from the diagnosis: **mass tourism, access and affordability to housing, and the economic future for the city**. The scenarios show the themes stretched to the limits to intentionally provoke a reaction and explore the possibility of middle ground options.

Design Criteria – Scale

The focus of this paper is set on buffer zones, therefore the scenarios address mainly this area, yet, as a broader concept of buffer zone is being tested the scenarios go beyond this area and include surrounding areas or consider the entire city and its hinterland. The aim of doing so is to explore the potential of buffer zones, as well as to reinforce their role as thresholds. If these zones are supposed to seamlessly sew the urban fragments and identity areas together, zoning and unmovable limits should be avoided, or at least blurred.

Design Criteria – Number of scenarios

The identified issues are linked to three themes: **mass tourism, access and affordability to housing, and the economic future for the city** (See **Error! Reference source not found.**). Each scenario aims to provide a solution to these issues through the adaptation of urban heritage using the 'urban compatibility' strategies. For these reasons, the number of proposed scenarios is narrowed to **three**, as it seems a reasonable number not to saturate the participants with excessive information, and not too limited to explore various variables.

Design Criteria – Urban compatibility and buffer zone aims

The area of intervention is the buffer zone, yet the proposals go beyond it to amplify the threshold intention. The proposed strategies are based on the 'urban compatibility' strategies (similar porosity, elastic adjoining, cushion and sponge), and consider the intervention aims so that the buffer zone's role aligns with it.

8.3.2.4 Results: Proposed Scenarios based on key thematic areas

I Mass tourism

Description

The first scenario addresses **mass tourism**, and attains to enhance the touristic activities in the city of Acre, and decentralize the areas of interest from the historic centre towards the buffer zone and beyond. For this matter, the proposed Master Plan addresses three issues: **connectivity, economic activities and the conservation of protected buildings**.

The train and bus stations are connected to the historic centre, the buffer zone and the seaside walks by a **shuttle bus** to facilitate the movement of visitors. In the same line, public spaces are activated through the implementation of bike and pedestrian trails that pass by areas of interest, conservation areas, and connect the traditional touristic places with the rest of the city (the **Heritage trail and the Seaview trail**).

Finally, urban heritage is utilized as a catalyser to attract tourists through the **adaptive reuse of protected buildings** into cultural centres, restaurants, hotels and other tourism-related economic activities.

Buffer Zone Aim

Looking at the Buffer Zone's aim, in this scenario it specifically serves as a **threshold**, providing continuity to the historic city, and integrating the old and new cities; and, at the same time, it tries not to monumentalize the Old city, by integrating it through the trails and public transportation.

Urban compatibility Strategy

Various 'urban compatibility' strategies are put into practice in this scenario: the change in street section to make the transition from the pedestrian historic centre to the motorized new city is managed by **elastic adjoining** (hybrid streets with wider sidewalks, vegetation and bike lanes); and the decentralization of tourism-oriented activities through the adaptation of conservation buildings is related to the **cushion** strategy.

ACRE | BUFFER ZONE _ OPTION TOURISM

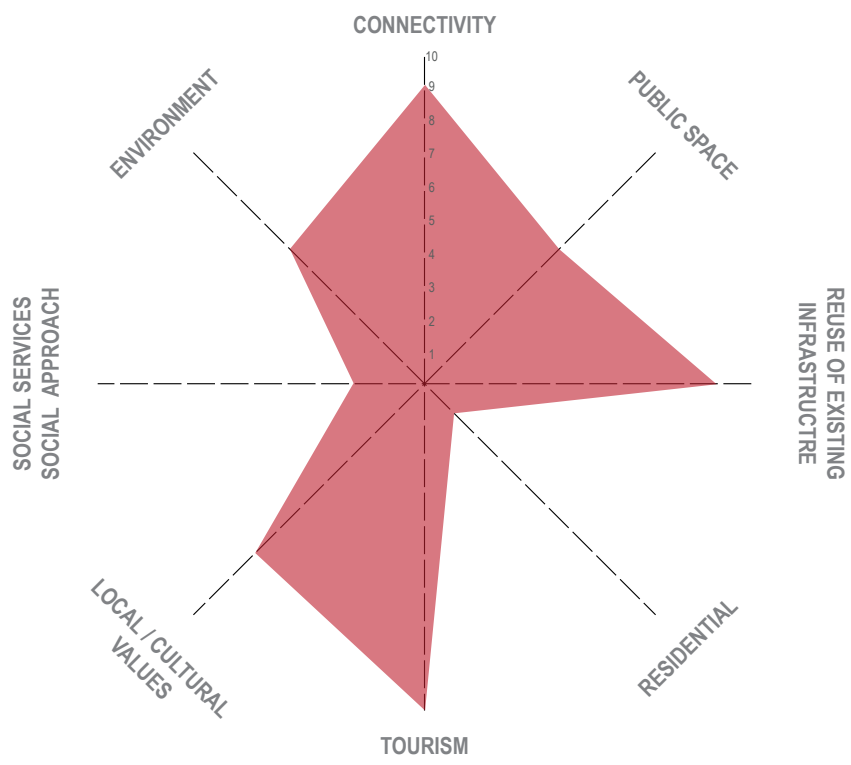


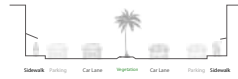
FIG. 8.25 Scenario 1 - Radar Plot showing the weight of diverse socio-economic, environmental, and urban criteria

ACRE | BUFFER ZONE _ OPTION TOURISM

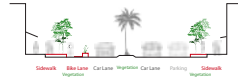
ZOOMED AREAS

(A) WEIZMAN AVENUE

CURRENT STATUS



PROPOSAL



Contexts
Extended sidewalk
Bike lane
Reduced Parking
Vegetation / Shading

(B) BEN AMI STREET

CURRENT STATUS



PROPOSAL



Contexts
Parking Flipped (from battery to parallel)
Bike lane
Vegetation / Shading

(C) VACANT SPACE AND PROTECTED BUILDINGS IN BEN AMI STREET AND MORDEKHAI ANIELEWICZ STREET

CURRENT STATUS



PROPOSAL | BEN AMI STREET - EXHIBITION CENTER AND ARTS AND CRAFTS CENTRE

PROPOSAL | ANIELEWICZ STREET - EXHIBITION CENTER AND ARTS AND CRAFTS CENTRE - PUBLIC PARK, CONNECTIVITY



Contexts

Nur Factory: New use - exhibition centre, arts and crafts school
Public space: temporary exhibition space, leisure, street art
Connection: pedestrian, bikes

PROPOSAL | ANIELEWICZ STREET - CONSERVATION ROUTE TRAIL (HOTEL AND NUR FACTORY), PUBLIC SPACES, EXHIBITION CENTRE AND AREA, GREENERY AND SHADING



Contexts

Anielewicz 43: New use - hotel
Open space: hotel parking, greenery, public space, leisure
Connection: pedestrian, bikes

Zoomed Areas

COMMERCE

- Restaurant
- Market
- Shop

EDUCATION

- Nursery
- School
- College

RELIGION

- Jewish
- Muslim
- Christian
- Bahai

ENVIRONMENT

- Parks
- Recycling plant
- Industrial Area

TRANSPORT

- Shuttle Bus stop
- Shuttle Bus
- Train Station - Old City
- Train Station
- Train
- Bike Station
- Bike Trail
- Bike Trail - Old City - Promenade
- Bike Trail
- Train Station
- Monastery - Old City

SERVICES

- Health Centre
- Bank
- Vacant area
- Post Office
- Police Station
- Pharmacy
- Gas Station
- Administration
- Cultural centre

TOURISTIC ACCOMMODATION

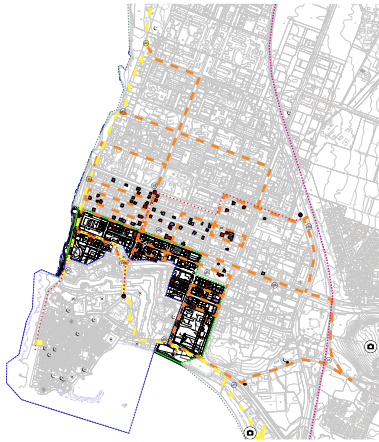
- Hotel
- Hostel
- AirBnB
- Place of interest

CONSERVATION

- building preservation

FIG. 8.26 Scenario 1 – Mass Tourism proposal

MASTER PLAN STRATEGY

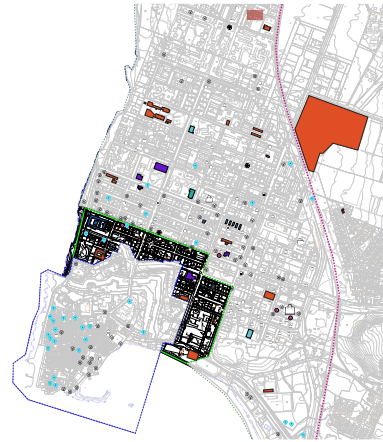


CONNECTIVITY

Bike / Pedestrian trails:

- **Heritage trail** connecting the Train station with the Old City passing by Protected buildings
- **Seaview Trail** connecting the Train station with the Beach, and Promenade passing by Protected buildings
- Bike renting and parking stations

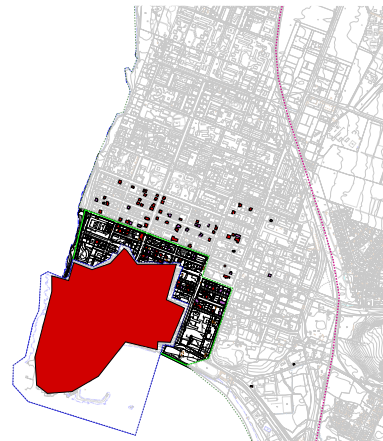
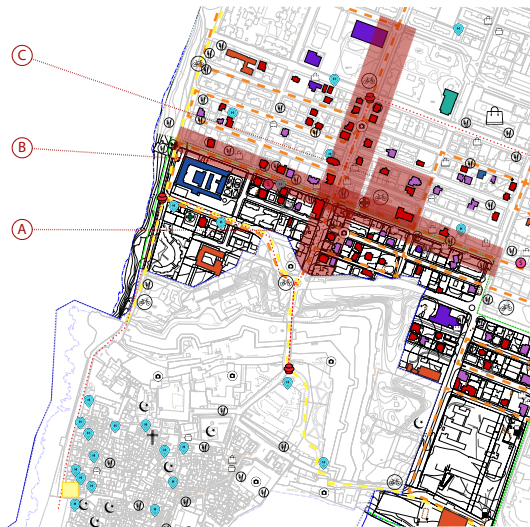
Shuttle bus: Train station - Weizmann Street - Old City



ECONOMIC ACTIVITIES

Increase in shops, restaurants, cafes and hotel
Galleries, exhibition centres, workshops

ZOOM INTO THE BUFFER ZONE



CONSERVATION OF PROTECTED BUILDINGS

Change of Use - linked to the economic activities
Refurbishment
Building cards: App to follow the route, sponsor programme...

II Housing access and affordability boost

Description

Scenario 2 addresses the challenge of **access to housing and affordability**, an issue not only faced by Acre but also at a national level due to the exponential demographic growth trend (ref). This entails a continuous increase in the real estate prices and housing demand. For this matter, the proposal makes use of the current regulations in the buffer zone to increase housing units through different strategies: **building infill** into vacant areas, **floor addition** to existing buildings up to the building height limit. Moreover, the population density increase requires more public amenities and services in the densified areas. To face this challenge, on the one hand, the already existing **interstitial spaces between residential units and void areas are converted into semi-public gardens and parks**. On the other, **conservation buildings are refurbished** and adapted to host social, administrative and economic uses. For both approaches, strategic locations are selected based on the current location of these services, so that the re-adapted buildings are in areas that lack services; and the interstitial public spaces, in available land and with few public spaces.

Analogous to the public services and spaces, a higher population density means a bigger demand of resources and infrastructure. In the case of Acre (as well as at a national level), water scarcity due to the climate emergency is a pressing challenge. Therefore, a **water collection and distribution system** are proposed, inspired by the Ottoman aqueduct, to bring water from the Cabri mountains, and also to collect rainfall in deposits scattered all over the city's public areas and gardens. Climate change will negatively impact the city of Acre in another way, the sea-level rise in the Mediterranean is foreseen to rise between 1.5m to 3m in the next decades (Sivan et al., 2001). This means that the Old city will flood periodically. Hence, to prevent this situation, **the moat (limit between the Old city and the buffer zone) is proposed as a flooding area**. Also, another flood mitigation system is proposed in the port, a **physical barrier** to moderate the flooding effects in the historic area.

Buffer Zone Aim

In this scenario the Buffer Zone has two aims: the densification approach acts as a **cushion**, which decentralizes the population increase in the old city, providing housing options in the buffer zone. Regarding the climate change mitigation systems, the buffer zone functions as a **sponge**, absorbing the overflow of water, and diminishing the negative effects of flooding.

Urban compatibility Strategy

The ‘urban compatibility’ strategies in this scenario are linked to **homogeneity, porosity, and environmental protection**. On the one hand, the densification approach attains to create a similar density fabric in both the historic centre, the buffer zone, and the rest of the city. Similarly, it attempts to create a smooth transition between these three areas by providing an in diminuendo porosity from the historic city towards the rest of the city. On the other, the flood mitigation system and water collection scheme not only prevent the negative effects of flooding and drought, but they also have positive environmental outcomes as they improve the soil quality, guarantee greenery in public spaces, prevent fires, and boost the city’s biodiversity. Altogether providing living, health and visual benefits to the citizenship.

ACRE| BUFFER ZONE _ OPTION HOUSING

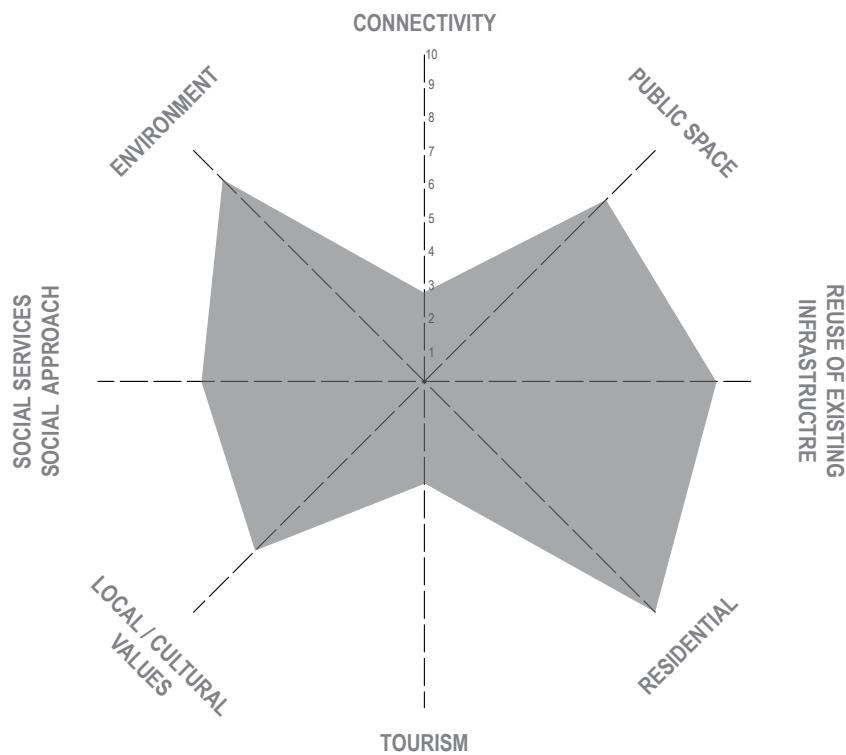


FIG. 8.27 Scenario 2 - Radar Plot showing the weight of diverse socio-economic, environmental, and urban criteria

ACRE | BUFFER ZONE_OPTION HOUSING

ZOOMED AREAS

D INTERSTITIAL SEMI-PUBLIC GARDENS



E IN-FILL WITH HOUSING - INTERSTITIAL SPACES

CURRENT STATUS

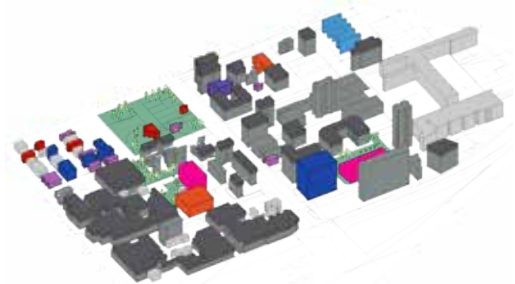


PROPOSAL | PINKASTREET - IN-FILL WITH HOUSING



F ADDITION TO EXISTING BUILDINGS

IN-FILL (HOUSING) NEW SERVICE BUILDINGS ADAPTIVE REUSE OF CONSERVATION BUILDINGS (CITY SERVICES)

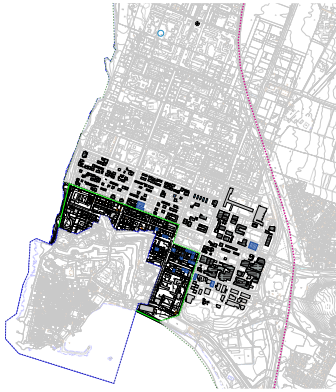


- No modification
- Existing building (potential for addition)
- Floor Addition
- Building preservation
- Infill - New building HOUSING
- Infill - New building SERVICE / ADMIN
- Semi-public gardens BETWEEN BUILDINGS

- Zoomed Areas
- COMMERCE
 - Restaurant
 - Market
 - Shop
- EDUCATION
 - Nursery
 - School
 - College
- DENSIFICATION
 - No modification
 - Floor Addition
 - Infill - New building HOUSING
 - Infill - New building SERVICE / ADMIN
 - Semi-public gardens BETWEEN BUILDINGS
- RELIGION
 - Jewish
 - Muslim
 - Christian
 - Bahai
- TOURISTIC ACCOMMODATION
 - Hotel
 - Hostel
 - Airbnb
 - Place of interest
- ENVIRONMENT
 - Parks
 - Water collector
 - Flood - control barrier
 - Water system
- SERVICES
 - Health Centre
 - Bank
 - Vacant area
 - Post Office
 - Police Station
 - Pharmacy
 - Gas Station
 - Administration
- CONSERVATION
 - Building preservation
- TRANSPORT
 - Train Station
 - Train

FIG. 8.28 Scenario 2 – Housing proposal

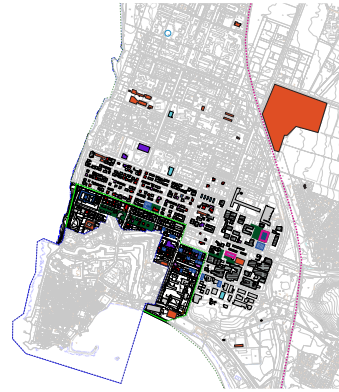
MASTER PLAN STRATEGY



DENSIFICATION

In-fill: New housing unit in interstitial spaces

Addition: Add more floors to existing buildings (in authorised areas)



PUBLIC SERVICES

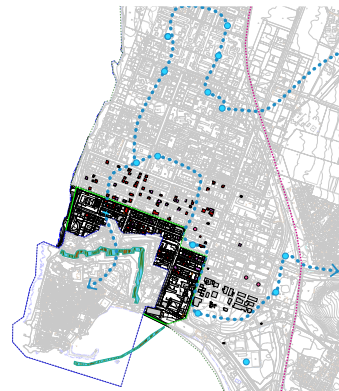
New buildings

- Use: citizen services (education, health...)
- Strategic situation: areas with lack of services, near public spaces

Interstitial semi-public gardens

- Use existing void areas between buildings for gardens
- Increase public spaces (building/plot scale)

ZOOM INTO THE BUFFER ZONE



RESILIENCE AGAINST CLIMATE CHANGE

Water scarcity: installation of water collectors in public gardens (water harvesting systems in new buildings and connection to kurkar)
Sea level rising: flood mitigation barrier at the port

CONSERVATION OF PROTECTED BUILDINGS

Change of Use - linked to public services
Refurbishment

I Administrative hub

Description

The focus of the third scenario is to create an **administrative hub** in the city of Acre. For this matter, three avenues are boosted to host administrative services (HaAtsmaut Street, Ben Ami Street, and Derech HaArba'a), to support the current administrative axis, Weizmann Street.

To do so, various strategies are implemented: the **street section is adapted** to have wider sidewalks for pedestrians, commercial additions at the street front for commercial use, more vegetation, and parking spots modified and reduced to include bike lanes; and a fluid connectivity between the train station, parking areas, and these avenues is assured through a **shuttle bus**. Regarding the new administrative use locations, new buildings are built in-between the existing buildings and in vacant areas (infill); and the conservation buildings along these avenues are refurbished and adapted to the new required uses. All these changes result in the boost of commercial activity along these ways, being some of these infill and adaptive reuse projects channelled for this use (restaurants, cafes, markets...).

Buffer Zone Aim

The proposal's Buffer Zone aims to activate this part of the city, as well as the adjacent areas to increase its importance and balance it with the Old City's. Therefore, **homogeneity** in terms of attractiveness is targeted by refurbishing conservation buildings and constructing new structures. Also, an economic activity **continuity** is intended by creating more dynamic avenues connected or close to the historic centre, which is full of restaurants, cafes and shops.

Urban compatibility Strategy

This scenario utilizes two 'urban compatibility' strategies: **elastic adjoining and a cushion**. The first is used in the street section transition from a pedestrianized old city into a hybrid section in the boosted avenues. Wider sidewalks, tree shaded areas, and dynamic commercial street fronts align with the historic city's urban fabric. The activation of other centres and areas outside the old city means spreading economic activities, decentralizing the areas of interest and the recreational areas, which is the aim of the cushion strategy.

ACRE| BUFFER ZONE _ OPTION ADIMINSTRATIVE HUB

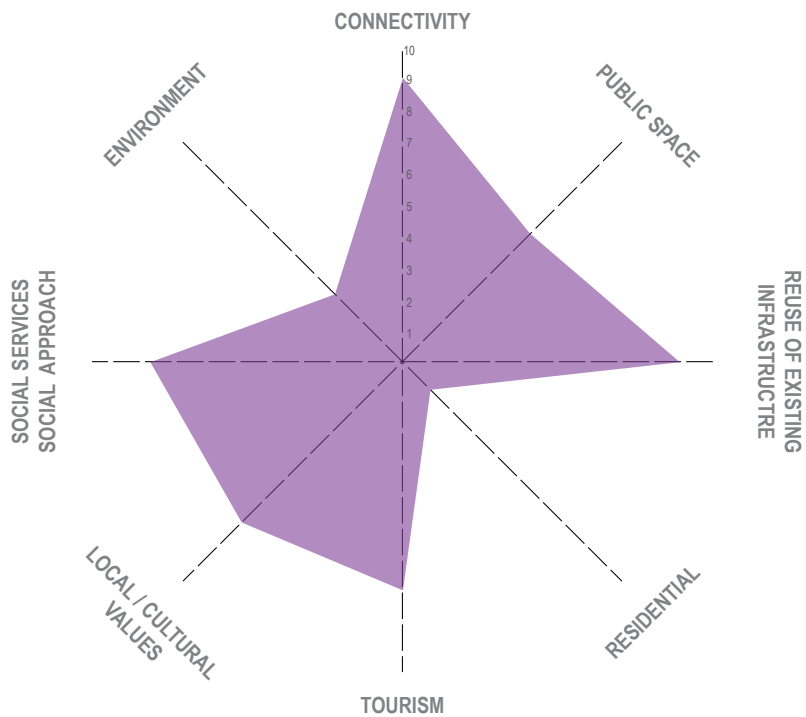


FIG. 8.29 Scenario 3 - Radar Plot showing the weight of diverse socio-economic, environmental, and urban criteria

ACRE | BUFFER ZONE _ OPTION ADMINISTRATIVE HUB

ZOOMED AREAS

G HAATSMAUT STREET



H BEN AMI STREET

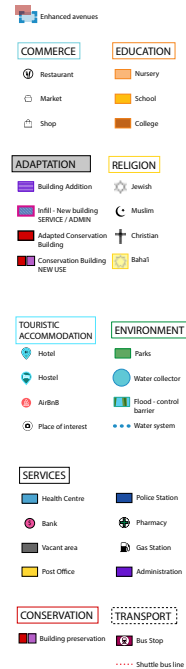


FIG. 8.30 Scenario 3 – Administrative Hub proposal

MASTER PLAN STRATEGY



Addition: Add extensions to existing buildings (in authorised areas) for commercial use



- Use: administrative
- Strategic situation: along main avenues, near public spaces

New uses along main avenues

Fast connection to the administrative hub in the British Mar

Zoom into the Buffer Zone



Change of Use - linked to administrative use
Refurbishment

Scenario evaluation

Key stakeholders

Acre has various decision-making bodies which manage different areas of the city with diverse visions and approaches. On the one hand, the Old City of Acre and its buffer zone (in the Mandatory city) is managed by the Conservation Committee, and, on the other hand, the Planning Committee deals with the Mandatory area, and the city expansion. Both bodies include representatives of the municipality, heritage institutions, the private sector, and the civil society. In the same way as with the scenarios, the **committees' members are profiled** by measuring their interests and red lines with the same **parameters of sustainability** as before (See Design Criteria Themes).

Evaluation criteria

The **scenario evaluation** by the representatives is carried out in person, by presenting an overview of the research project, and the scenarios. The representatives are asked to provide feedback and comments (qualitative data) about the scenarios, and also a numerical value from 1 to 5 (quantitative data) of four parameters: relevancy for the city, relevancy for the institution represented, inclusiveness, and feasibility. Also, improvements to the scenarios are requested, as well as a collective mark for each scenario to understand the level of agreement among the parts.

Evaluation Analysis Results

The evaluation exercise proved not to be the adequate method of evaluating the scenarios, as few participants filled in the evaluation sheets. Compared to previous evaluation exercises carried out during this study, it must be highlighted how the setup influences the stakeholders' ability to engage or not in the process. When they were interviewed on an individual basis, the feedback was extensive, whereas an evaluation at a group level reduced the level of engagement. Therefore, alternative mechanisms are needed to get relevant results. Below, a description of the alternative mechanism put into place is provided.

Alternative Evaluation method – Participatory planning exercise in Ben Ami Street

The presentation of the scenarios did not bring the expected outcomes, yet, these proved to be useful for the Municipality of Acre in a different way. The urban analysis and the areas identified as potential for change in this research are aligned with the urban analysis carried out by the planning department of the Acre Municipality. In both cases, Ben Ami Street, in the Buffer Zone, is identified as suitable for change, where a participatory exercise has been carried out.

The Planning department of Acre Municipality organized a 3-day event to conduct consultations and initial design proposals with the residents in the Mandate area of Acre. One of the areas for intervention was Ben Ami Street, a way perpendicular to Weizmann Street (the Mandate's main axis). To understand what could be done in this location a series of tours were carried out with the residents and experts (architects, urban planners...).

Moreover, working sessions consisting on roundtables were organized. During these sessions the experts presented the results from the urban analysis carried out based on data collected from the Israeli bureau of Statistics. This analysis identified the issues and needs of the area. With this in mind, the residents were inquired about the reasons why they like or dislike the area, their needs, the memory of the site, and so on. The final outcomes from these meetings were a series of urban planning and design proposals.

Outcomes and learnings

One of these proposals is aligned with the proposal for Ben Ami Street in the The scenarios built for the buffer zone in Acre are addressed through the specific theme approach. Testing how adaptive reuse can serve as a strategy to enhance the potential of buffer zones is the main aim, and it is attained through the following three thematic areas:

- Mass tourism
- Housing and affordability boost
- Administrative Hub

Please see 8.3.2 | T.2. Testing Adaptive Reuse as a Strategy to Enhance the Potential of Buffer Zones for a more extensive description.

Scenario proposed in this study: changes in the street section to eliminate parking areas, add bicycle lanes, and increase greenery to have more shading (See Figure 8.31).



FIG. 8.31 Scenario 1 – Ben Ami Street change in section - Mass Tourism proposal

The fact that both, the urban planners through their analysis and the residents, arrived to a similar alternative for the street as the one produced in this study is a positive sign that the integrated tool is useful and has the potential to facilitate urban processes. It also emphasizes the need to integrate citizen engagement in the urban planning and design processes, which should also be supported by information-based analyses. A more integrated approach towards urban planning and design, especially adaptive reuse processes, urges to recover the key role of citizens and professionals in the decision-making process. The example provided by this practical case serves as a means to learn and keep working on these processes, and it also presents a less conflictive approach towards urban issues and change, encouraging a shift towards process oriented versus project-oriented interventions.

8.3.2.5 Contributions of the Innovative approach of Enhancing the Potential of Buffer Zones through Adaptive Reuse

The main contribution of the integrated approach towards Buffer Zones that aims to put the HUL approach into practice in one of the elements that causes the most confusion regarding World Heritage sites, their Buffer Zones. Understanding these areas as seamlessly connected to the WH sites enhances the idea of cultural landscape, and offers a more holistic view of the city as a whole, instead of fragmented. The methods applied in the case of Acre aspire to be replicated into other cases and to support the Heritage Planning sector, providing an innovative outline aligned with the most recent heritage and landscape frameworks. Finally, the use of WHC cases opens a new research line where other WHC can apply the proposed methods, and enhance the potential of their buffer zones.

In the case of Acre's Buffer Zone, the city's analysis combined with the scenario proposals provides an empirical case to put the Liminal Space theories and urban compatibility strategies into practice. Regardless of the low engagement by the Committee in the group evaluation of the scenarios, the proactive attitude from the Municipality to facilitate a participatory initiative to test one of the scenario proposals (Ben Ami Street) showcases the importance of piloting methodologies, as well as the need to bridge theory and practice.

Altogether, the unexpected outcomes from the scenario building exercise have proven to be more useful and relevant than the planned evaluation exercise, thanks to its testing in the city and the importance of citizen engagement in the design process. The use and implementation of the integrative tool, hence, needs further development and research to understand its full potential at a larger scale, as well as its replicability. Yet, it has proven to provide an adequate baseline for analysis and alternative proposal design.

8.4 Conclusions

The scenario building method is the one selected in this research study as the main tool to propose adaptive reuse alternative proposals. Aiming to respond to task E. *Stress-testing the three urban dimensions (Historic centre, Buffer Zone, and the City as a whole) through specific scenarios: research by design through scenario building and evaluation by stakeholders*, this chapter offers a wide range of examples to showcase the multiple and diverse ways urban and spatial conflicts of interest can be approached through the adaptation of urban heritage.

It must be highlighted how having two approaches, a general and a thematic based, towards the urban challenges in the city is essential to adequately address the actual issues and not fall into “the business as usual” solutions. Moreover, the chapter provides a multi-scale range of samples to illustrate building specific situations, gentrified as well as neglected urban areas, and broader cases involving bigger extensions of the city that are rarely in the urban planning spotlight. All of these cases together conform a guide of reference for future research and adaptive reuse processes.

Considering the previous steps that include:

- the historic analysis
- understanding of the evolution of the heritage in Acre
- the actors and stakeholders profiling, and
- the cultural mapping

This scenario building exercises intend to bring clarity and offer a variety of solutions, and more importantly, a variety of procedures to come up with alternative solutions for adaptive reuse processes. All of it, with the intention to come up with well-informed and more comprehensive solutions for the current urban and spatial challenges.

Altogether responding to research sub-questions SQ 3 and SQ 4, as this chapter brings together the knowledge and datasets collected from the previous chapters. It combines this data into adaptive reuse scenario proposals that *integrate a ‘cultural resilience’ approach into processes of Adaptive Reuse of Urban Heritage (SQ 3); and that support urban heritage values (SQ 4)*. Stress-testing not only the selected urban dimensions, but also the overall evaluation tool.

SECTION 3

Final Outcomes

This section shows the two primary research outcomes. On the one side, chapter Eight describes the evaluation tool resulting from the research study. On the other, chapter Nine offers the research conclusions, aiming to respond to the initial research questions and add final thoughts that can feed into future research.

9 Tool to evaluate adaptive reuse alternatives of urban heritage in contested societies

The primary research outcome is the integrative methodology to evaluate urban heritage adaptive reuse alternatives in contested societies. To develop this mechanism various steps were followed. These are implemented starting from Chapter Four and adding new steps into chapters Five, Six and Seven, incrementally. The research uses mixed methods, and it follows an iterative approach. Therefore, each chapter serves to test the steps, and through the analysis of the outcomes, improve or change them accordingly. These are re-applied in the following chapters, and more steps are added to attain the integrative evaluation methodology, which is the sum of all the steps practiced throughout these four core chapters.

9.1 Summary of steps

The integrative evaluation tool is divided into five stages, which need to be followed in order:

- A Understanding the place through the people: Identification of the urban heritage in Acre through analysing past and present narratives about the city of Acre.
- B Understanding the place over time: Analysis of the evolution of the urban heritage in Acre: continuity, adaptation, or erasure.
- C Understanding how people use the place: Survey and interview the people on their habits, use, and vision of the city.
- D Unraveling the city through three dimensions (Historic center, Buffer Zone, and the City as a whole): Cultural mapping of the city of Acre.
- E Stress-testing these urban dimensions (Historic center, Buffer Zone, and the City as a whole) through specific scenarios: Research by design through scenario building and evaluation by stakeholders

A Understanding the place through the people: Identification of the urban heritage in Acre through analysing past and present narratives about the city of Acre.

The first step in the proposed methodology is the analysis of narratives, to understand the historical evolution of the studied place, the different communities and identities present in the area, their interests and needs, and the multiplicity of perceptions regarding urban heritage.

To do so, two types of narratives are studied: the past and the new (present). The past narratives are related to the historical evolution of the town, this is extracted through an in-depth literature review. Seminal books are the main primary source, which provide historical events, maps, and quotes.

The new narratives, by contrast, are found in a diversity of sources: social media, institutional websites and interviews. With all of these, a matrix correlating the stakeholders with their interests and needs is produced (See Table 4.1 and Table 4.2).

B Understanding the place over time: Analysis of the evolution of the urban heritage in Acre: continuity, adaptation, or erasure.

The data provided by the previous step is key to understand the place over time, specifically the evolution of the urban heritage over time. The maps resulted from the analysis of past narratives show the evolution of the city, its geopolitical position and its urban heritage. These serve as the base to build a matrix classifying the urban heritage elements and their change in use over time.

For instance, if an element is constant during several periods of times, thanks to the information extracted from the narratives we can determine if the element continues with its original use (continuity – green colour), or if the use has changed (adaptation – orange colour). If on the contrary, this element is destroyed in a certain moment, we can mark them in red – erasure (See Table 5.1, Table 5.2, Table 5.3, and Table 5.4). This matrix along with the ones from step A guide the next steps, serving as the baseline.

C Understanding how people use the place: Survey and interview the people on their habits, use, and vision of the city.

This step can be approached in two ways: when there is an existing urban challenge related to an urban heritage element (e.g., Khan El-Umdan to be converted into a boutique hotel), and when we intend to identify and improve heritage areas or elements in decay (e.g., neglected Aqueduct remnants).

In both cases, we need to do a stakeholder profiling through interviews. This results in a radar plot that visualizes the interests and needs of each actor related to various themes. Each theme is rated from 1 to 10 (being 1 the lowest) and it shows how interested the institution is in each. The rating is the following:

- 8–10 Main interest for the institution
- 5–7 The theme is a secondary interest for the institution
- 3–4 The theme is not a main interest or need
- 1–2 The theme does not relate to the institution's interests

EXAMPLE OF SCENARIO RADAR PLOT

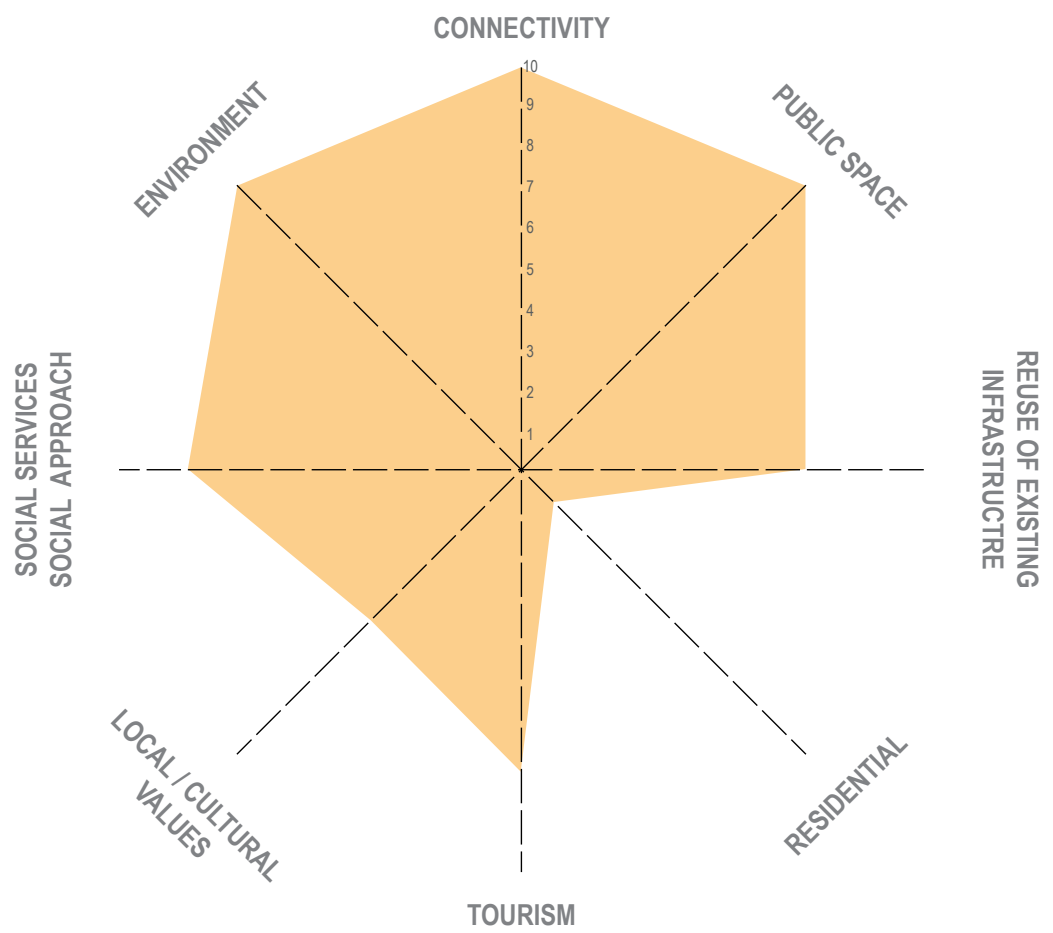


FIG. 9.1 Example of Radar Plot

In the case when addressing a specific urban heritage element going through challenges, a survey can be carried out. This method is highly useful when dealing with a conflictual case affecting different communities. The most important point to consider is disaggregating the data by multiple categories (sex, gender, religion, employment...) to have a holistic comprehension of the situation and the needs depending on various variables. This type of survey supports a less biased approach to the problem, and disaggregated data helps to unveil usually hidden information. The results from the survey provide citizen profiling and tag clouds.

D Unraveling the city through three dimensions (Historic center, Buffer Zone, and the City as a whole): Cultural mapping of the city of Acre

As the integrative evaluation tool is aimed for urban planners and decision-makers, this step is critical as it incorporates the design and spatial component. It also requires having a prior knowledge of the site, acquired through steps A and B.

With a better understanding of the historical evolution of our case and the conflicts of interest and needs among its inhabitants and principal actors, we can proceed to map. For the aim of the research, we focus on port cities with contested societies. Therefore, the key elements to be mapped are related to these topics, and are the following:

- Port cities' attributes
- Socio-economic, cultural and environmental features
- Urban features
- Conflict heatmap

The importance of working at a multi-scale level must be highlighted as crucial for an adequate analysis, map comparison, and future result dissemination. For this reason, the work focuses on three urban dimensions to provide a wide and comprehensive understanding of the city:

- The historic centre
- Buffer Zone
- The City as a whole

Altogether, the stakeholder and citizenship profiling (step C) along with the conclusions extracted from the mapping (step D) are used to design adaptive reuse proposals for the identified urban heritage elements (step E).

E Stress-testing these urban dimensions (Historic center, Buffer Zone, and the City as a whole) through specific scenarios: Research by design through scenario building and evaluation by stakeholders

Designing the adaptive reuse alternatives is a crucial step, therefore, these scenarios need to be designed and visualized in a way that is understandable by the stakeholders and citizens. For these reasons, the underlying approach towards their design needs to be clear. In this dissertation we have provided two options: a general approach, or specific themes.

With the approach in mind, in addition to the data, maps, matrixes and results from steps A-D a series of alternatives for the three urban dimensions is proposed, addressing the previously identified issues. This method is known as research by design through scenario building.

The scenarios are then presented to the stakeholders for their evaluation. They are asked to rate the scenario regarding certain criteria (e.g., relevancy for the city, relevancy for the institution, inclusiveness and feasibility). These results are expressed in a matrix that supports an effective comparison between stakeholders and among scenarios (if more than one).

The scenario evaluation follows the same logic as the stakeholder profiling, a radar plot based on themes, where the stakeholders' responses are depicted. This way, the radar plots (stakeholder profiles and scenario profiles) can be overlapped and compared to find the points of consensus and/or conflict. Also, this system facilitates the identification of neglected themes, dissonant stakeholders, supporting the design of alternatives to the aforementioned proposals that are more consensual, and consequently support conflict mitigation.

9.1.1 Result – Final Outcome

The tool's final outcome is a series of materials that combined, produce alternative consensual proposals of adaptive reuse for the identified urban heritage element(s). The aim of the tool is to focus on the process, as each step:

- helps in the understanding of the existing issues and needs
- provides evidence-informed resources to be used for multiple purposes beyond this research
- opens the floor to encourage public debate about urban issues

9.2 Main contributions of Adaptive Reuse theoretical framework into the Urban Heritage of Acre

The present study relies on various theories. The umbrella framework is linked to sustainable development and the key role of culture to attain it, including the Historic Urban Landscape Recommendation (UNESCO, 2011), the Agenda 2030 (United Nations, 2017), the New Urban Agenda (*New Urban Agenda*, 2017) among others. Regarding the central themes: adaptive reuse, urban heritage, and conflict; other theories and authors are considered. On the one hand, Jane Jacobs' urban diversity principles emphasize the importance of mixture of uses (Row & Jacobs, 1962), which along with Elinor Ostrom's Urban Commons model (Ostrom, 1990) provide the grounds for urban design and urban diversity. On the other, the concept of citizen engagement is framed into Arnstein's ladder of participation (Arnstein, 1969) and Deleuze's and Guattari's assemblage theory (De Landa, 2016; Deleuze & Guattari, 1987), which provide the key to address contested societies where the multiplicity of voices is rarely heard and where heterogeneous communities are both indispensable and are continuously evolving. On a similar note, Mouffe's notion on agonistic planning shifts the traditionally negative perception of conflict into an opportunity for participation and debate (Kapoor, 2002; Mouffe, 2016). Finally, urban resilience is embraced as a solution to tackle conflict through Holtorf's cultural resilience approach, being culture again key to attain not only sustainable development, but also mitigate conflict (Holtorf, 2013).

The study attempts to address multiple gaps related to the management of urban heritage in Acre and in doing so makes important contributions. First, the conflicting interests between the citizens' needs and the heritage conservation priorities is addressed by facilitating the participation and inclusion of the multiplicity of voices in the city. The evaluation tool explicitly includes a survey and interviews to guarantee that the citizenship and a variety of stakeholders express their perceptions.

Second, the limitations posed by the existing laws and regulations are overcome by proposing an evidence-informed tool that facilitates decision-making. Including a systematic and participatory mechanism for urban planning and design in a complex context helps reducing tensions, as it gives visibility to existing needs and at the same time it unveils the opportunities in Acre. In short, this tool enables adequate heritage management, but it can also point up entrenched issues that have been avoided. Therefore, focusing on the tool implementation process rather than the final outcome is highly relevant to identify and tackle these breaches.

Third, intentionally focusing on the public urban heritage and going beyond the architectural elements responds to the limitations the Akko Conservation Committee possesses when it comes to public elements, as they usually revise projects from private developers and householders. Opening a debate around public elements is key to identify and tackle conflict, as opposed to avoiding or ignoring the issue. Nevertheless, even if the tool's intentions are good, acknowledging the specificities and qualities of the studied case, Acre, and its casuistic is essential. The changing socio-political local and national environments directly impact decision-making procedures, and the processes encouraged by the evaluation tool can be negatively impacted. Therefore, realistic expectations that accept and manage a sudden loss of interest in the process, low citizen engagement, or radical change of view are vital. Similarly, continuous commitment from the local authorities is necessary for a successful and productive process development.

The present study integrates the theoretical approaches mentioned above, through their application in a practical case, the city of Acre in Israel. In doing so, it develops an integrative evaluation tool for urban planners and designers, and decision-makers, contributing to both the urban design and heritage practices, as it provides with an evidence-informed mechanism to propose alternatives of adaptive reuse. The fact that the tool is implemented systematically, facilitates complex processes by minimizing bias, and consequently mitigating conflict.

9.3 Replicability in other cities

The evaluation tool presented in this thesis has been developed and tested in Acre. This port city in Israel is characterized by continuous presence of conflict and the overlapping of diverse urban and heritage layers, diachronically (over time) and synchronically (at the same time). The specificities of Acre are not unique, and we can find other cities with similar characteristics that can benefit from the implementation of this tool. To do so, these cities need to meet some requirements:

First, the proposed tool focuses on port cities, as these are situated in geostrategic locations, share similar attributes (walls, customs buildings, tourism accommodation, markets, a port), and usually possess a long history of visitors, shifting demographics and war. To get the best results from the tool, studying a port city is convenient.

Second, the existence of urban heritage is also a precondition, even though the HUL extends the notion of heritage, implying that most cities include it, this heritage should be acknowledged by certain sectors of the citizenship or its institutions. Working with a World heritage City, or a history and heritage charged place is suggested. If this is not the case, an additional study prior to the evaluation tool implementation is needed to analyse and identify the urban heritage and set a baseline.

Third, the aim of the evaluation tool is to propose alternatives of adaptive reuse for urban heritage elements. This adds another prerequisite to the list, where two situations can be considered.

- In one case, the city's institutions or citizenship have identified an urban heritage element in decay that needs to be adapted. So, the tool is implemented with this element in mind. An example of this is the case of Khan El-Umdan, where a heritage building with an issue is addressed and evaluated.
- The alternative case considers the analysis of the city as a whole to identify opportunities or areas in need for change. In this case, an in-depth analysis needs to be carried out, similar to the case of the entire city of Acre, developed in this research.

Finally, the selected city should be going through some kind of conflict. This does not mean it should be serious or obvious, yet, disagreement among different stakeholders or conflict of interest should occur in order to find consensual adaptive reuse alternatives. This is already a reality in most cities, hence, offering spaces for debate and view exchange is key to attain humane coexistence and, ultimately, sustainable development.

10 Conclusions

This research started from the need to respond holistically to a gap between theory and practice in the urban planning and design sector: the global agenda did not align with local actions. This incoherence results from a need for tools to integrate these theories into empirical cases. For these reasons, this study develops a methodology for coming up with alternative proposals during the design process targeted at decision-makers, urban planners and urban designers. Moreover, the tool focuses on specific issues, such as urban heritage and contested societies, and it is also narrowed down to the action of adaptive reuse, as one of the suitable interventions to enhance areas and elements in decay and regenerate urban centres.

The development of the integrated tool serves as a way of testing various methods in an empirical case, the city of Acre in Israel, aiming to bridge theory and practice. The implemented methods guide the process, feeding it back iteratively. This way, every time we advance in the process, the steps can be revised and refined to be applied again. All of these trials, organised in chapters, build the design tool and also respond to the research question. At the same time, these chapters separately respond to the research sub-questions.

Altogether, the research findings contribute not only to the academic body of knowledge as an academic research exercise but also provide tangible and practical outcomes like the integrated tool for decision-makers, urban planners and urban designers replicable in other heritage cities, as well as the fieldwork carried out in Acre, which includes ready to use analyses, and adaptive reuse proposals.

10.1 Research questions revisited

The questions that were posed as the starting point for this research were motivated by a need to understand how adaptive reuse of urban heritage could serve as a means to mitigate conflict. This initial broad question was broken down into simpler sub-questions to support and facilitate the research. The response to these sub-questions result in the whole research process, which ultimately responds the main research question.

10.1.1 MQ | How can conflicts over heritage use and preservation be mitigated through the adaptive reuse of urban heritage?

In order to respond to this question, some considerations must be taken. First, conflicts of interest exist in almost every context to a greater or lesser extent. Addressing them adequately is key to peaceful cohabitation and plays a vital role in increasing social cohesion and mitigating social unrest. Second, this research focuses in the role of adaptive reuse, as it is a process proven to turn elements in decay into development catalysers. Moreover, the attention to urban heritage aims to emphasize the role of culture as a sphere of sustainable development and to expand the notion of heritage beyond the historic centre, monuments, and architectural elements. All of these elements together provide the pieces of a puzzle that can be put together in various ways, with diverse results. In our case, the aim is conflict mitigation over heritage use and preservation. Therefore, the underlying approach of the adaptive reuse process needs to be aligned with conflict mitigation, cultural resilience is chosen as the most adequate approach to attain it.

The above statements considered, tackling conflict mitigation through adaptive reuse of urban heritage needs on the one hand, an **adequate understanding of the context** where this process is carried out. This includes:

- clarifying the level of citizen engagement as well as the capacity of the institutions to influence adaptive reuse processes (See 2.3.2 Citizen Participation: levels, approach and vision)
- the analysis of the various layers of the city (See 7.2 Diagnosis of Acre)
- the identification and profiling of stakeholders (See 0 Interview scenario overviews)

On the other, the design process must guarantee that the multiplicity of voices is included. For this matter, the following is needed:

- citizen consultation methods that unveil their perceptions, needs, memory and future vision for their city (See 6.3 Evaluating the perceptions and future vision for the port)
- citizen engagement in the design process, such as co-creation (See 0 Alternative Evaluation method – Participatory planning exercise in Ben Ami Street)

Furthermore, there must be both a willingness to attain consensus and a tangible opportunity to pursue it. This means that the political regime in place, the institutional structure and the decision-making hierarchies need to be flexible enough to back it (e.g., it would be highly complicated to aim for a consensus in an authoritarian regime).

Similarly, the **system in place must have sufficient flexibility** in letting go of some ideas by stakeholders, as well as in institutional arrangements, so that the proposals and alternatives brought up through more inclusive processes, and the processes itself **influence their implementation**.

- the design process should include a system to rank and evaluate adaptive reuse proposals so that more consensual alternatives can be designed (See 8.2 Scenario Building)
- spaces for negotiation must be in place, where healthy debates regarding the city's issues can be discussed. These should facilitate discussions both with the citizens (charades with the citizens) (See 0 Alternative Evaluation method – Participatory planning exercise in Ben Ami Street) and among the stakeholders (Old Akko Conservation Committee) (See 6.2 Key Stakeholder Interviews).

When these conditions are met conflict mitigation is more attainable, and the institutions can work towards more inclusive processes that result in more consensual adaptive reuse alternatives. In the same way, when the multiplicity of voices is taken into account, and healthy debates are facilitated, the neglected voices can take their place in the discussion, and concealed and entrenched issues can be exposed. Altogether leading towards a less contested society.

10.1.2 **SQ1 | How can we arrive at a shared or common understanding of Urban Heritage by different stakeholders in and out of Acre?**

Societies characterised by conflict tend to be severely divided, and citizens' opinions are polarised. In these cases, promoting a healthy debate where all the voices can be heard is vital to negotiate how the city is being planned. In the case of Acre, we find numerous obstacles to arriving at a consensus, ranging from an unbalanced demographic and geographical distribution of Israeli and Palestinian inhabitants to institutional processes that not prioritize citizen engagement. Moreover, regarding the history of the place and its values, the multi-layered nature of Acre makes agreement more challenging.

To tackle these issues, and eventually arrive to a shared or common understanding of urban heritage, a deep analysis of the past narratives is needed, where the evolution of the city and its elements can be traced over time. Present narratives are also crucial as a way to understand the current conflict of interests. Therefore, one of the main requirements to reach a consensus is getting the bigger picture, a chronological and extended analysis of the urban heritage evolution and of the past and current stakeholders' interests. Having this as a baseline, it is possible to work towards solutions that can be agreed by everyone, regardless of these proposals not being ideal for any of the actors.

Geographical and political conditions will facilitate or complicate the process of building this baseline. Hence, an evidence-based approach is crucial to avoid frustration during the process. In the same way, limitations regarding data availability, governmental bias, or freedom of expression need to be acknowledged prior to the study, as these may hide or misrepresent certain communities. If this is the case, the baseline picture we are creating is incomplete and further research will be needed to gather the data about all the voices and adequately carry out the process towards mutual agreement.

10.1.3 **SQ2 | How can conflicting values be included in the processes of the Adaptive Reuse of Urban Heritage?**

Urban planning and design processes, by default, encounter a number of challenges regarding inclusiveness, acceptance and consensus. This is usually related to the institutional mechanisms in place, and in countries with little or no experience in participatory processes, these gaps are more acute. Moreover, in contested contexts addressing this matter becomes more complex, as providing an adequate and acceptable response to the city's needs through an urban practice is likely to exclude some

communities, be biased by political interest, or disregard the elephant in the room (e.g., the most acute issue that no one tackles due to unveiled rooted problems). Therefore, including conflicting values in the urban planning and design processes is delicate.

Initially, it's essential to identify the diverse array of stakeholders in the area, ensuring inclusivity without leaving no one behind. A simple way is to address the categories of the public sector, private sector and civil society. A profound analysis of these should be sufficient to guarantee inclusiveness. Second, a series of interviews should be carried out to understand the points of consensus and disagreement, the conflicts of interest, and priorities. These help in the profiling of the actors. These profiles should follow the same criteria, in order to be comparable, in this research we propose radar plots where 8 criteria are ranked. This way the different profiles can be overlapped and compared.

Including all the citizens and communities is key, as they are the most important part of inclusive processes. Yet, their inclusion will depend on the available resources and expertise. Different urban processes require citizen engagement in different moments of the design. In this research, they were included through a survey in deciding on how to manage the port of Acre in case of sea level rise. This can be regarded as the preliminary phase of the process. The citizens are also included in the adaptation of Acre's buffer zone, but in this case, they are consulted on an actual process. In this case, they participate in the post-design phase, and their role is linked to approval.

In both cases, stakeholder profiling, and citizen surveying, the conflicts of interest are identified, and these should be integrated as a fundamental piece in the urban planning and design process. This way, the multiplicity of values, conflictual and consensual, can be used as part of the design process to provide more inclusive alternatives. Or, at least, open the debate about, and visualize underlying urban and social problems.

10.1.4 **SQ3 | How can a 'cultural resilience' approach be integrated into processes of Adaptive Reuse of Urban Heritage?**

Every intervention in the urban fabric is backed by an underlying approach, promoted by political, social, economic or other interests. Acknowledging this is essential to understand how adaptive reuse processes can be utilized for diverse purposes and how selecting an adequate approach can enhance or be detrimental to the city and its citizens. The world is undergoing a series of drastic physical and social changes due to accelerated demographic shifts, and environmental factors, such as the climate emergency.

It is in this context when the role of cultural resilience becomes relevant to manage adaptive reuse processes. This approach is based on the concept of *resilience*, as the capacity of an element to absorb the impacts of adversity and “bounce back”, but also “bounce forward”. “Bouncing forward is sometimes used to describe anticipatory actions designed to prevent a disaster or more commonly, to convey the notion of not just suffering the impacts of an acute shock but seeking to advance a community or place to a better situation as part of or following, recovery” (Fastenrath et al., 2019, Meerow et al., 2016). However, it expands the notion of resilience to integrate the role of culture as key to attain sustainable development, utilizing the cultural assets in relevant communities to absorb adversity, deal with change and continue to develop’ (Holtorf, 2013). This approach combined with the Deep Agenda (Bendell, 2018), questions if going back to a previous state is desired, advocating for a revision of what to bring back, and what to leave behind. Altogether, this ‘cultural resilience’ approach serves as the underlying framework to promote adaptive reuse processes that support societies and urban needs holistically.

To do so, the 4R approach needs to be integrated in the urban planning and design processes (Bendell, 2018):

- **Resilience** (R1) asks us, “how do we keep what we really want to keep?”
- **Relinquishment** (R2) asks us, “what do we need to let go of in order not to make matters worse?”
- **Restoration** (R3) asks us, “what can we bring back to help us with the coming difficulties and tragedies?”
- **Reconciliation** (R4) asks, “with what and whom can we make peace as we face our mutual mortality?”

This can be done through tailor-made surveys (e.g., the survey in the marina of Acre) that integrate the 4R into the questions. Similarly, the design process should integrate the 4 spheres of sustainable development, having a clear idea of the influence of these aspects in the resulting proposal. The proposed tool to do so is the scenario radar plot, where 8 criteria are ranked and visualized for the proposed scenario. This method not only visualizes the capacities and flaws of the scenario but also obliges the designer to bring awareness to these criteria before the final proposal, introducing sustainability and the concept of resilience throughout the whole process.

10.1.5 **SQ4 | How can processes of Adaptive Reuse support Urban Heritage values?**

Adaptive reuse processes can serve multiple purposes depending on the underlying approach. In any case, these can have a positive impact at the economic, social, cultural and environmental levels, but again, the aims of the intervention will determine these impacts. Therefore, regarding the sub-question we are tackling, carrying out adaptive reuse processes with a cultural resilience approach is the selected strategy to support urban heritage values, as this approach relies on the existing cultural assets to absorb and overcome disturbance or change.

First, the heritage element to be adapted needs to be analysed so that the values intrinsic to it, and those perceived by the inhabitants are identified. To do so, past and present narratives must be analysed (See 4.1 Narrative analysis) to distil the values and the evolution of the urban heritage element. Second, the aim of the intervention needs to be framed, so that it aligns with the previously analysed narratives. In the case of this research different scenarios are proposed with different aims.

TABLE 10.1 Aims of the urban heritage scenarios

SCENARIO	AIM OF THE SCENARIO
I. Khan El-Umdan	Integrate local needs with economic and tourism-oriented interests.
II. The Aqueduct	Connection between two WH sites and the reuse of outdated infrastructure to create a public space network.
III. Al-Jazzar Mosque compounds	Re-use of empty and under-utilized buildings to bring in public services, housing and tourism.
IV. Marina of Acre	Include more local or tourism-related activities and
V. North and South development	Tackle the housing problem more integratively, with a less invasive approach that does not require high-rise buildings.
T.1. Marina of Acre	Investigate the port's management if / when the sea level rises in the future.
T.2. Buffer Zone	Utilise the assets in the buffer zone area to better integrate the old city and the new city and address the residents' needs

Third, the scenarios must be evaluated and tested among the stakeholders to assess how adequate, feasible, and acceptable they are. This provides the opportunity to propose alternatives that are more aligned with the local interests and that are more likely to be implemented.

Therefore, considering the element's narratives, emphasizing the element's values, and the proposal of scenarios that align with the identified values and narratives are the key ingredients that can successfully lead to adequate adaptive reuse processes that support the local interests and urban heritage values.

10.2 Reflections on the Main Research Aim and Approach

10.2.1 Research Aim

The research aim framed at the beginning of this study was ‘to develop an integrative methodology to evaluate urban heritage adaptive reuse alternatives in contested societies while meeting Sustainable Development Goal 11: ‘Make cities and human settlements inclusive, safe, resilient and sustainable’’. The development of the research has proven that this aim is relevant to the fields of urban design, urban planning, heritage, and heritage management, and it is of great significance for the city of Acre. First of all, the need to bridge theory and practice urges researchers to test their methods in empirical cases and to align with the profession’s requirements. In this case, the existing processes to tackle adaptive reuse interventions tend to be limited as they depend on the developer’s interest and the availability of funds. Therefore, bringing a tool for practitioners is not only relevant, but it is a successful way to combine academic knowledge with experiences from practice.

Moreover, focusing on urban heritage is not trivial, as the way heritage is addressed has dramatically changed in the past years, thanks to the HUL Recommendation. This means that a reassessment of how heritage is planned and how heritage elements are treated can support a more holistic approach to heritage and expand the academic body of knowledge on the topic. Similarly, narrowing the research down to contested societies is a double-edged sword that, on one side facilitates understanding the multiplicity of voices, as contested contexts usually provide a wider range and more polarized perceptions. But on the other, it involves dealing with highly politicized matters that increase bias, that are opaque, or that are challenging to adequately and fairly tackle.

Finally, aligning the research with SDG 11 was a wise decision, as it set a clear and solid framework to work with. The guidelines and observations provided by the global frameworks are internationally accepted and broad enough to be translated into the local context. Also, having a global vision from the beginning of the research was useful for maintaining a steady direction and, when in doubt, always having an anchor.

10.2.2 Research Approach

The research approach has multiple angles to it, ranging from quantitative and qualitative methods, to research by design. This multi-angle approach has proven to be adequate to address a complex topic and case study. The methods usually applied in social sciences, like database analysis, interviews and surveys, provide quantitative and qualitative data that reflect the human side of the research, whereas other methods related to the architecture and urban planning disciplines, like research by design and mapping, facilitate bridging the back between theory and practice, and visualizing data, scenarios and results.

The combination of these diverse methods is relevant for this study as it supports the actual design processes, and provides a tool for decision-makers based on information. Therefore, I would recommend applying similar approaches to research about architecture, urban planning and urban design disciplines, as it provides a global understanding of urban issues, the outcomes can be easily visualized and presented to the relevant stakeholders and the public, and it can support both participatory and institutional processes. Similarly, it would be interesting to apply these methods in traditionally non-design-oriented disciplines to test if these types of methods are relevant. Finally, I would like to highlight the importance of case studies as the enablers of real and in-context research. The challenges posed by empirical cases, along with the interaction with real stakeholders, local institutions and actual data, not only make the research results more relevant, as they are implementable, but they broaden the researcher's skillset.

10.3 Limitations of the Research

The research encountered various limitations linked to the specific context of the case study. On the one hand, even though enough data is available, the fact that the Israeli Bureau of Statistics does not give access to disaggregated and georeferenced data makes it difficult to plan according to real issues. General data is useful to get the big picture, but the research, and specifically the usefulness of the integrated tool, would increase if the data was more extensive. In addition, user participation in Israel is low due to the socio-political context. This fact, challenged qualitative data acquisition from the citizenship as it fluctuated and varied depending on the political situation, user's ethnicity and background.

On the other, the research timeline (10/2019 – 03/2023) included the COVID-19 pandemic. This had a huge impact on the development of the research as the fieldwork had to be modified, and the work with the communities was reduced. Further research should include more workshops, surveys and citizen participation. Likewise, the time to test the scenarios was short compared to the time institutional processes usually require. This meant having little time to explore the scenarios which, in addition to the COVID restrictions, resulted in more initial design stages instead of more advanced stages. Therefore, when this tool is replicated in other cities, institutional engagement and sufficient time to pilot proposals is recommended to guarantee that the process is successful.

10.4 Broad Research Contributions

The contributions of this research are related to both theory and practice, as one of the research premises is to bridge the gap between theory and practice so that academic knowledge can both support and learn from practice.

10.4.1 Contributions to theory:

- Application of the HUL recommendation in a specific case to contribute to the revised approach to heritage and expanding the notion of heritage beyond the historic centre.
- Compilation of the history of Acre from the heritage and planning perspective, specifically focused on the evolution of its heritage over time.
- Contribution to the limited literature on adaptive reuse of urban heritage, compared to the more extensive one about architectural buildings. In this research, urban elements and the wider context are especially relevant, as these categories have been barely explored.
- Approaching the issue of conflict and contestation from an agonistic planning perspective as opposed to the more mainstream communicative planning approach, providing an alternative understanding of conflict and how it can be used to benefit the citizenship and encourage healthy debates and platforms for negotiation.
- Expanding the notion of cultural resilience to combine Holtorf's definition with Jem Bendell's Adaptation Agenda to create a cultural resilience approach towards urban design. In this case, this approach is framed in the context of heritage planning so that it is integrated into the design process.
- Translation of the material compatibility principles into the urban realm, as Urban compatibility, so that the approach towards adaptive reuse of urban elements aligns with the principles of conservation, shifting from the usual adaptive reuse interventions in architectural elements to a more process-oriented and principle-based understanding at the urban level.

- Contribution to the methods specific to research in architecture and urban design that include designing as their core, such as mapping, or scenario building, to support the critical role of research by design in obtaining more diverse and thought-provoking results.

10.4.2 Contributions to practice

- Application of the HUL recommendation in an empirical case to address city and heritage issues.
- Building of a step-by-step guide, which is developed in this thesis and summarized in Chapter 9 *Tool to evaluate adaptive reuse alternatives of urban heritage in contested societies*. This guide aims to address adaptive reuse processes more inclusively. This involves understanding the multiplicity of views, creating a baseline regarding the conflict of interests and the stakeholders' priorities, and developing a tool to identify and map the needs of the city.
- A methodology to address adaptive reuse processes holistically, including sustainability principles, as well as other approaches like cultural resilience and urban compatibility, in order to design adaptive reuse proposals and/or alternatives for existing ones.
- Testing the tool in Acre has a double purpose: on the one hand, we can assess the adequacy, relevancy and effectiveness of the methodology in an empirical case. This is highly relevant in order to make amendments, improvements and identify any gaps. On the other, the application of this tool in an empirical case implies that the actual stakeholders benefit from the findings. Also, putting into practice the proposed tools will have a direct impact on the city's ongoing projects and processes.
- The development of a tool focused on the urban planning and design processes provides an additional instrument for the professionals' toolbox. In addition, this tool is information-based and has been tested, opening the floor for further research. Its replicability in other cities can produce a wide range of similar and context-dependant tools. These have a positive impact in both the urban planning and design practice, and stakeholders' decision-making processes.

10.5 Societal Relevance

The development of an integrated tool to evaluate urban heritage adaptive reuse alternatives in contested societies has multi-sectoral and multi-level advantages. On the one side, the underlying approaches integrated in the tool are aligned with the sustainable development agenda. Therefore, the spheres of economy, society, environment, and culture are directly tackled, having a direct impact on how the citizens' needs are met, along with a coherent view of societal dynamics regarding economic activities and the impact the adaptive reuse proposals have in the natural and urban environments.

Similarly, the focus of this research on urban heritage, taking the HUL recommendation as a main framework, also emphasizes the crucial role of heritage in societies as both an enabler or an obstacle for sustainable development. This point is key to stressing how adaptive reuse processes can become sustainable development catalysers as they influence the spheres of sustainable development. First, they activate economic potential when new uses, techniques and activities are included in the process. Similarly, these processes can promote social movements and turn them into cultural hubs.

Moreover, the technical process of adaptive reuse is intrinsically linked to environmental sustainability, mainly related to the reuse of materials, as there is no need to use virgin lands or new materials. And it also has the potential to integrate technological advancements related to low emissions and energy efficiency.

10.6 Technical Relevance

With regard to the technical relevance, the development of a tool for practice through its testing in an empirical case highlights the actual gaps and issues in urban planning and design practice. Bringing a tool to the table is relevant for the discipline, practitioners and future researchers. First, urban studies benefit from this research, which implements and tests diverse methods, mainly research by design tools. This is due to the position these tools have compared to the mainstream quantitative and qualitative methods. This hybrid tool brings design and visual materials closer to academia, consolidating the relevance of these in urban and heritage studies.

Second, urban planners, urban designers and decision-makers benefit from the development of a practical tool that, even if it is backed by theory, is mainly informed by its testing in an empirical case. This makes it easier for practitioners to grasp the tool and relate to it. Specifically, the tool applied in Acre has provided a solid baseline for the stakeholders to continue to use in future adaptive reuse processes.

Third, the intention of the tool is to be replicated in other cities. This implies the tool will have to be improved and changed to be aligned with the local context. However, the principles and guidelines are common in most cases. The interest for future researchers relies on the possibility of testing the tool, comparing the results to those from Acre, and continuing its development so that it can have a wider impact in other types of cities beyond contested and port cities.

10.7 Recommendations for Future Research

The potential of the proposed integrative tool to evaluate alternatives of adaptive reuse processes of urban heritage is determined by its replicability in other cities. Therefore, future research needs to consider various points in order to have successful results.

First, before using the tool, the aim of the evaluation, the underlying approach, must be identified and determined. In this case, we focused on urban heritage in contested urban contexts. Yet, other themes can be tackled using this tool, which means the tool needs to be modified accordingly.

Second, the tool needs to be adapted to the local context. This implies understanding the level of engagement and participation (See 2.3.2 Citizen Participation: levels, approach and vision), data availability, and access to the stakeholders. Considering these, the tool can be adapted to distil the most from the process.

In line with the latter, it is vital to work hand in hand with the decision-makers and the citizens. Emphasizing the importance of guaranteeing citizen and institutional engagement throughout the process.

Finally, to be on the safe side and reduce misunderstandings and waste of resources, it is critical to pilot the alternatives in specific areas. In this study, the Marina of Acre served as the area to explore the alternatives through the survey. This way, we can test if the methods are applicable in the selected context and if the results are relevant. Also, we can understand the replicability and expandability of the processes.

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Appendix

Survey

Questionnaire

Survey Acre – Marina

The details requested in this survey are being used for the purposes of data collection for a PhD research at Bezalel Academy of Arts and Design. The information submitted in this form will only be accessed by necessary university staff. The surveyed person is informed that his/her data will be held securely and will not be distributed to third parties. He/She has a right to change or access his/her information. When this information is no longer required for this research, official university procedure will be followed to dispose of this data.

הפרטים המבוקשים בסקר זה משמשים לאיסוף נתונים לצורך מחקר דוקטורט באקדמיה לאמנות ועיצוב בצלאל. למידע המוגש בטופס זה נגיש רק צוות האוניברסיטאות הדרוש. לאדם הנסקר נמסר כי נתוניו יישמרו בצורה מאובטחת ולא יופצו לצדדים שלישיים. יש לו / היא זכות לשנות או לגשת למידע שלו. כאשר מידע זה אינו נדרש עוד למחקר זה, ינוהל ההליך הרשמי של האוניברסיטה לסילוק נתונים אלה.

יتم استخدام التفاصيل المطلوبة في هذا الاستبيان لأغراض جمع البيانات لبحوث الدكتوراه في أكاديمية بتسلنيل للفنون والتصميم. سيتم الوصول إلى المعلومات المقدمة في هذا النموذج فقط من قبل موظفي الجامعة الضروريين. يتم إبلاغ الشخص الذي تم مسحه بأنه سيتم الاحتفاظ ببياناته بشكل آمن ولن يتم توزيعها على أطراف ثالثة. يحق له / لها تغيير أو الوصول إلى معلوماته. عندما لا تكون هذه المعلومات مطلوبة لهذا البحث ، سيتم اتباع الإجراءات الجامعية الرسمية للتخلص من هذه البيانات.

* Required.

1. * גיל / عمر / Age

Mark only one oval.

- ☐ <18
- ☐ 19 - 34
- ☐ 35 - 49
- ☐ 50 - 64
- ☐ 65 - 79
- ☐ > 80

2. * מין / الجنس / Sex

Mark only one oval.

- ☐ איש / رجل / Male
- ☐ אשה / النساء / Female
- ☐ אחר / آخر / Other

3. * שפת אם / اللغة الأم / Mother tongue

Mark only one oval.

- ☐ עברית / Hebrew
- ☐ العربية / Arabic
- ☐ Other: 4.

4. * דת / دين / Religion



5. * מקום לידה / مكان الميلاد / Place of birth

Mark only one oval.

- ☐ אכר / عكا / Acre
- ☐ Other: 6.

6. * אם התשובה היא עכו / إذا كان الجواب عكا / If the answer is Acre (Place of birth)

Mark only one oval.

- ☐ עיר עתיקה / المدينة القديمة / Old City
- ☐ מנדט / امر رسمي / Mandate
- ☐ דרום / جنوب / South
- ☐ צפון / شمال / North
- ☐ אזור תחנת הרכבת / منطقة محطة القطار / Train Station Area
- ☐ Other: 7.

7. **Place of residence / مكان الإقامة / מקום מגורים ***

Mark only one oval.

☐ Acre / عكا / עכו Other: 8.

8. **If the answer is Acre (Place of residence) / إذا كان الجواب عكا / אם התשובה היא עכו ***

Mark only one oval.

- ☐ Old City / المدينة القديمة / עיר עתיקה
- ☐ Mandate / امر رسمي / מנדט
- ☐ South / جنوب / דרום
- ☐ North / شمال / צפון
- ☐ Train Station Area / منطقة محطة القطار / אזור תחנת הרכבת Other: 9.

9. **Profession / مهنة / מקצוע ***

Mark only one oval.

- ☐ Employed / يعمل / מועסק
- ☐ Unemployed / عاطلين عن العمل / מובטלים Other: 10.

10. **Type of profession / نوع المهنة / סוג המקצוע ***



11. **How often do you come to this area? / באיזו תדירות מגיעים לאזור זה / ?كم مرة أتيت إلى هذه المنطقة ***

Mark only one oval.

- ☐ Everyday / كل يوم / כל יום
- ☐ 1- 2 times per week / في الاسبوع / בשבוע
- ☐ 1 - 2 times per month / كل شهر / לחודש
- ☐ 3 - 4 times per year / كل سنة / לשנה
- ☐ Less than once per year / أقل من مرة في السنة / פחות מפעם בשנה
- ☐ First time I come here / أول مرة جئت إلى هنا / פעם ראשונה שאני בא לכאן Other: 12.

12. **What do you usually do here? / ماذا تفعل عادة هنا? / מה אתה עושה כאן בדרך כלל? ***



13. What are the elements you like the most from this area? (Choose 3) / מהם האלמנטים * (שאתה הכי אוהב מהאזור הזה? (בחר 3) / ما هي أكثر العناصر التي تعجبك في هذه المنطقة؟ (اختر 3)
Check all that apply.

- ☐ The location / המיקום / الموقع
- ☐ Easy to access / קל לגישה / يسهل الوصول إليها
- ☐ The views / הצפיות / المناظر
- ☐ The social interactions / האינטראקציות החברתיות / التفاعلات الاجتماعية
- ☐ The space is nice / המרחב נחמד / الفضاء جميل
- ☐ The buildings / הבניינים / المباني
- ☐ The products you can buy / המוצרים שאתה יכול לקנות / المنتجات التي يمكنك شراؤها
- ☐ The food / האוכל / الطعام
- ☐ The cultural activities and festivals / פעילויות התרבות והפסטיבלים / الأنشطة الثقافية والمهرجانات
- ☐ Easy to park / קל לחנות / السهل بارك 14

14. What are the elements you like the least from this area? (Choose 3) / מהם האלמנטים * (שאתה הכי אוהב מהאזור הזה? (בחר 3) / ما هي أقل العناصر التي تعجبك من هذه المنطقة؟ (اختر 3)
Check all that apply.

- ☐ The location / המיקום / الموقع
- ☐ Difficult to access / קשה לגישה / يصعب الوصول إليها
- ☐ The views / הצפיות / المناظر
- ☐ The social interactions / האינטראקציות החברתיות / التفاعلات الاجتماعية
- ☐ The space is not nice / החלל לא נחמד / المساحة ليست جميلة
- ☐ The buildings / הבניינים / المباني
- ☐ The products you can buy / המוצרים שאתה יכול לקנות / المنتجات التي يمكنك شراؤها
- ☐ The food / האוכל / الطعام
- ☐ The cultural activities and festivals / פעילויות התרבות והפסטיבלים / الأنشطة الثقافية والمهرجانات
- ☐ Difficult to park / קשה לחנות / من الصعب الوقوف 15

15. If you could decide about this place, what would you prefer this area to look like in the morning? (Choose 1) / אם היית יכול להחליט לגבי המקום הזה, איך היית מעדיף שהאזור הזה ייראה בבוקר? * ((בחר 1) / إذا كان بإمكانك اتخاذ قرار بشأن هذا المكان ، كيف تفضل أن تبدو هذه المنطقة في الصباح؟ (اختر 1 Mark only one oval.



Fishermen port / נמל דיגים / ميناء الصيادين



Boat tours / סיורים בסירה / جولات القوارب



Green and leisure park / פארק ירוק ופנאי / حديقة خضراء وترفيهية

- ☐ Fishermen port / נמל דיגים / ميناء الصيادين
- ☐ Boat tours / סיורים בסירה / جولات القوارب
- ☐ Green and leisure park / פארק ירוק ופנאי / حديقة خضراء وترفيهية
- ☐ I do not want it to change / אני לא רוצה שזה ישתנה / لا اريد ان يتغير 16

16. If you could decide about this place, what would you prefer this area to look like in the evening? (Choose 1) / אם היית יכול להחליט לגבי המקום הזה, איך היית מעדיף שהאזור הזה ייראה בערב? * ((בחר 1) / إذا كان بإمكانك اتخاذ قرار بشأن هذا المكان ، كيف تفضل أن تبدو هذه المنطقة في المساء؟ (اختر 1 Mark only one oval.



Local market / שוק מקומי / السوق المحلي



Restaurants and cafes / מסעדות ובתי קפה / مطاعم وكافيهات



Sea promenade / טיילת ים / كورنيش البحر

- ☐ Local market / שוק מקומי / السوق المحلي
- ☐ Restaurants and cafes / מסעדות ובתי קפה / مطاعم وكافيهات
- ☐ Sea promenade / טיילת ים / كورنيش البحر
- ☐ I do not want it to change / אני לא רוצה שזה ישתנה / لا اريد ان يتغير 17

17. From the proposed uses, which one you do not want at all? (Choose 2) / מזה שימושים * (המוצעים, איזה אתה בכלל לא רוצה? (בחר 2) / من الاستخدامات المقترحة ، أي واحد لا تريده على الإطلاق؟ (اختر 2)
Mark only one oval.



Fishermen port / נמל דיגים / ميناء الصيادين



Boat tours / סיורים בסירה / جولات القوارب



Green and leisure park / פארק ירוק ופנאי / حديقة خضراء وترفيهية



Local market / שוק מקומי / السوق المحلي



Restaurants and cafes / מסעדות ובתי קפה / مطاعم وكافيهات



Sea promenade / טיילת ים / كورنيش البحر 18

- ☐ Fishermen port / נמל דיגים / ميناء الصيادين
- ☐ Boat tours / סיורים בסירה / جولات القوارب
- ☐ Green and leisure park / פארק ירוק ופנאי / حديقة خضراء وترفيهية
- ☐ Local market / שוק מקומי / السوق المحلي
- ☐ Restaurants and cafes / מסעדות ובתי קפה / مطاعم وكافيهات
- ☐ Sea promenade / טיילת ים / كورنيش البحر 18

18. Why? / لماذا؟ / * לממה? /

.....

19. If the sea level rises and the Marina of Acre disappears how do you think the city will manage? / אם מפלס הים יעלה והמרינה של עכו תיעלם איך לדעתך העיר תסתדר? / إذا ارتفع مستوى سطح البحر واختفت مارينا عكا ، فكيف تعتقد أن المدينة ستدير?
Mark only one oval.

- ☐ A new port would be built close to the current one, and the economic activity won't be heavily affected
- ☐ No port will be longer needed, and life will continue without it.
- ☐ It will be a big disruption, and will affect the city's economy and development Other:

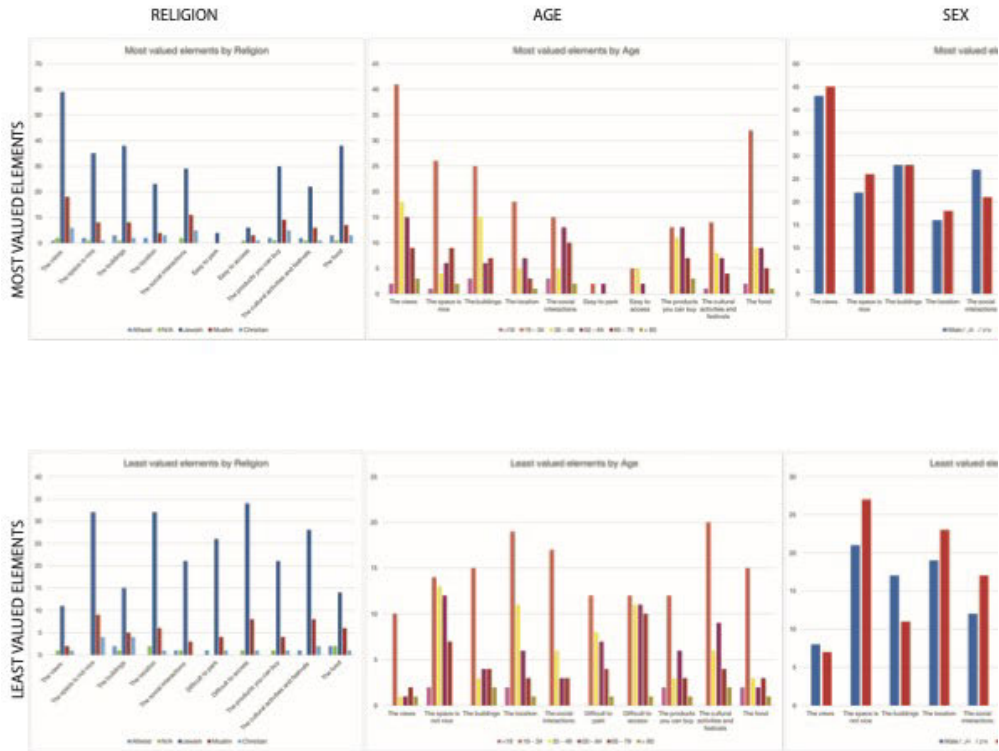
Responses

Graphic Visualization of Survey Results in the Marina of Acre

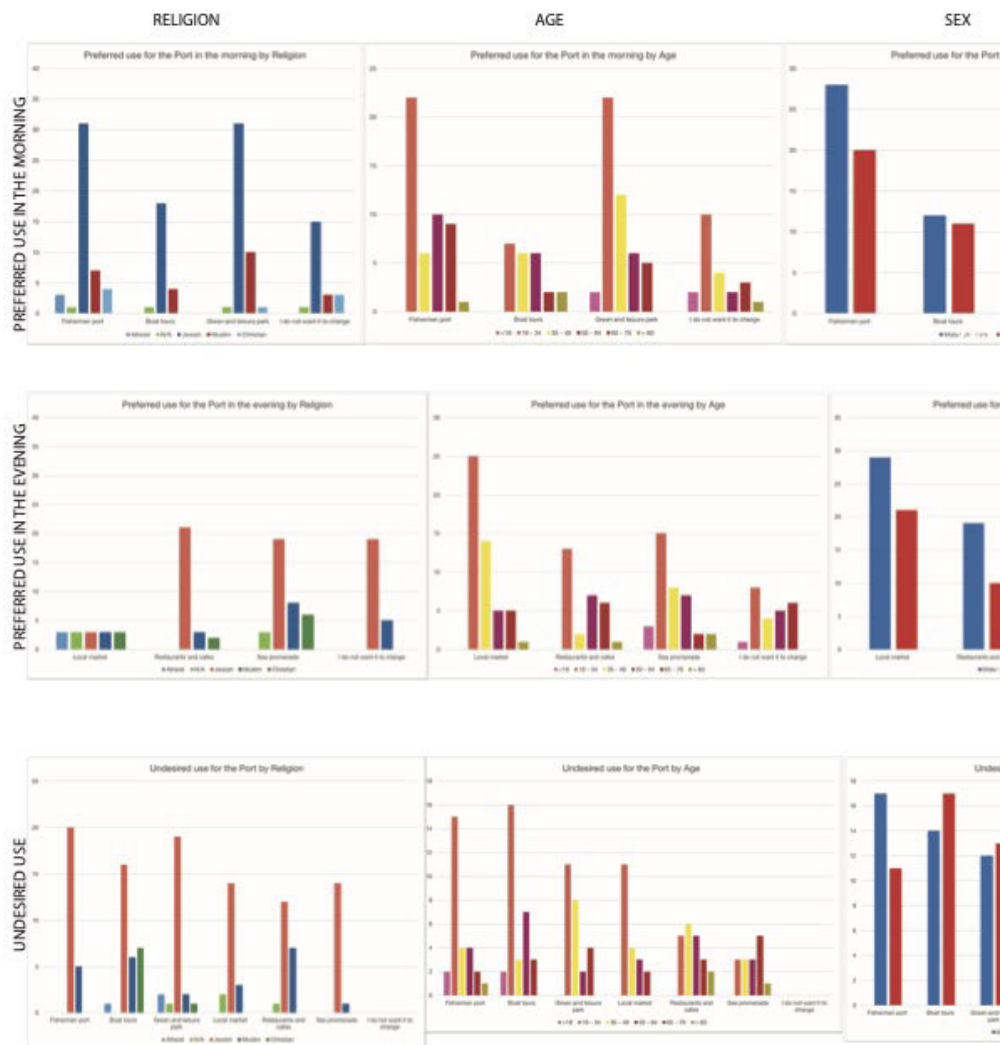




Graphic Visualization of Survey Results in the Marina of Acre

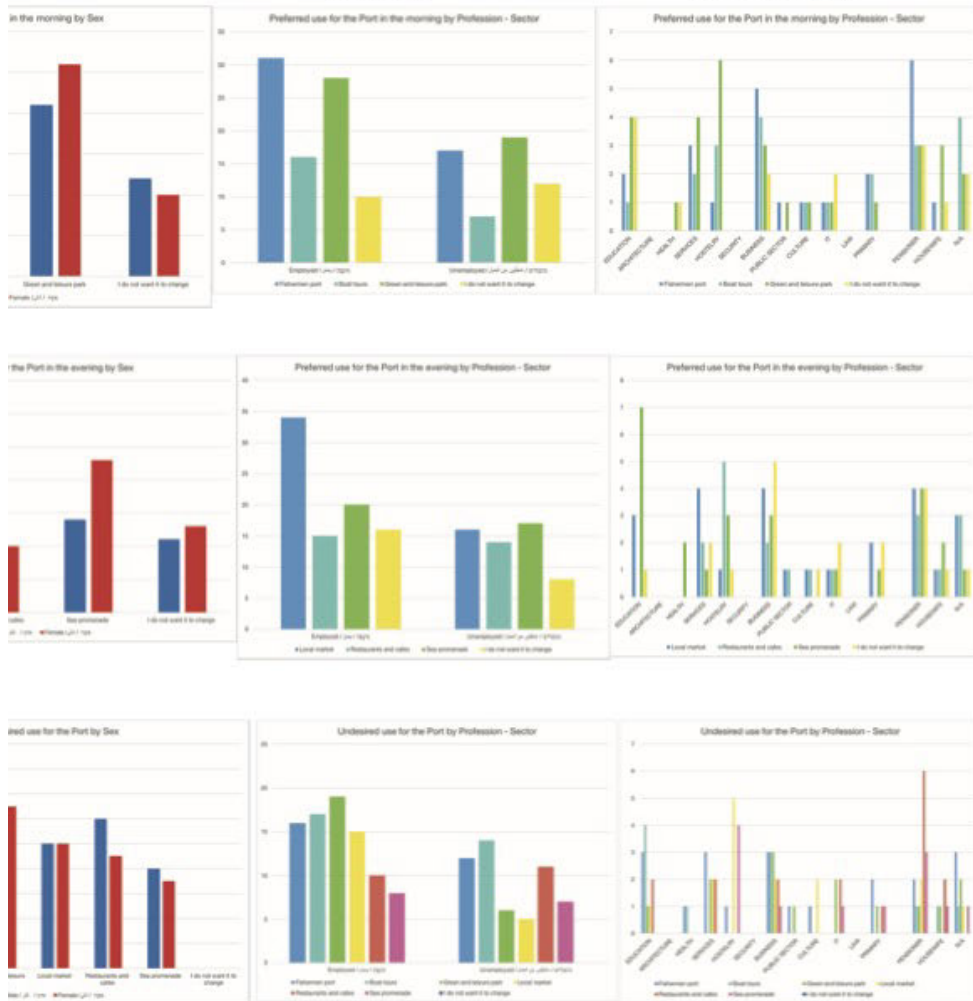


Graphic Visualization of Survey Results in the Marina of Acre



EMPLOYMENT

PROFESSIONAL SECTOR



to the 21st-century urban challenges
by YARZA PÉREZ

Primary Sources

The following documents can be found in the **TU Delft Repository** in the following link:
<https://data.4tu.nl/>

Survey

- Survey questionnaire
- Survey results
DOI: 10.4121/d53ebb35-86c1-450d-beca-a8df1ca019b5

Interviews

- Consent forms
- Transcriptions
DOI: 10.4121/c71a7e92-cf85-4e5d-a79f-87305d46462b

IAA

- Committee protocols (English translation from Hebrew)
DOI: 10.4121/be46e013-9807-4883-8055-c4f9c4109ee8
- Conservation regulations
- Air Photos
DOI: 10.4121/2ffccff8-9120-487a-8a43-90b9ae8ca4b6

Municipality of Acre

- <https://www.akko.muni.il>
- Master Plans
- Land Use Map
- Original Plans of Acre

Israeli Bureau of Statistics

- Statistics: socio-economic data about Israel and the city of Acre.
DOI: 10.4121/b959e247-26ea-4e42-940e-835cdf5812a

Curriculum Vitae

Ana Jayone Yarza has a background in **Architecture and Urban Planning**, and a **Master's degree in Strategies and Technologies for Development**. During the past decade she acquired extensive international experience on the realm of **sustainable development, with a focus on urban resilience, cultural heritage conservation and urban planning**.

Her **professional experience** ranges from working in traditional architecture studios in Paris (France), San Sebastian and Vitoria (Spain); to sustainable development projects in multi-lateral agencies and NGOs, such as UN-Habitat, UNESCO and various Foundations.

The **most remarkable projects** she has collaborated in are the following:

- an *integrated urban settlement in Kalobeyei (Kenya)* for the refugee and the host communities (UN- Habitat, Kenya)
- *integrating disaster risk reduction and management into cultural heritage conservation in the Kathmandu Valley* UNESCO World Heritage sites (UNESCO, Nepal)
- *promotion of urban resilience in the earthquake affected coastal areas of Atacames (Ecuador)* through the co-design of local architectural and integrated solutions (EUAV - European Commission | Fundación Ecuasol, Ecuador)

Her **research endeavour** started when she joined **HERILAND** (Marie Skłodowska-Curie grant, Horizon 2020) in October 2019, to produce various **publications** and culminate with this **Ph.D. thesis**.

Ana Jayone YARZA PÉREZ



Urban Resilience
Urban Planning
Cultural Heritage
Sustainable Development

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ACADEMIC INFORMATION

University of the
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SAN SEBASTIAN
Bs. Architecture
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Architecture National High
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M. Architecture
Erasmus Programme
2010

Polytechnical University
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BARCELONA
M. Architecture
Year 4 - 5 and Thesis
2011-2014

Complutense and Polytechnical
Universities of Madrid
MADRID
M. Strategies and Technologies
for Development
2015-17

AY

PROFESSIONAL EXPERIENCE

DELFT 10/2022 - 02/2024
Ph.D. Candidate TU Delft
DELFT / JERUSALEM
10/2019 - 10/2022
Ph.D. Candidate
TU Delft + Bezalel
HERILAND_MARIE SKŁODOWSKA-CURIE
European Union's Horizon 2020
Adaptive Reuse of Urban Heritage in
Contested Societies. The Case of Acre (Israel).
Urban and Community Resilience
Capacity building
Stakeholder Engagement + Networking
Reference Person_Mike Turner and Frank van der Hoeven



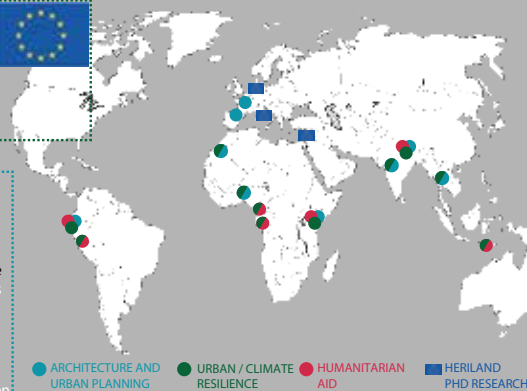
NEPAL 10/2018 - 10/2019
UNESCO Heritage Expert
_Integration of Cultural Heritage into
Disaster Risk Reduction and Mgmt. (DRRM)
_WH2WH Cultural trail (Urban Resilience)
_Development of Cultural Heritage
indicators related to (DRRM)
_Urban and Community Resilience
_Capacity building
_Stakeholder Engagement + Networking
_Business Development
Reference Person_Christian Manhart and Nipuna Shresta



KENYA 07/2016 - 05/2017
UN - Habitat
Urban Planning + Design LAB
_Integrated Refugee/Host Settlement in
Kalobeyei, Kenya (Resilience + DRR)
_Urban Resilience in Moroni, Comoros
_Earthquake Affected Informal Settlement
improvement in Haiti (Resilience + DRR)
_Urban and Community Resilience
_Stakeholder Engagement + Networking
Capacity building
Ref. Rogier van den Berg, Yuka Terada and Jonathan Weaver



ECUADOR 01/2018 - 06/2018
Fundación Plan Ecuasol
DG ECHO - EUAV
_Urban Resilience
_Disaster Risk Management
Capacity building
ARCHIT. | URBAN PLANNING
SPAIN 07/2018 - 12/2018
Mirando Al Horizonte
Rehabilitation projects
SPAIN 03/2015 - 06/2015
Esparza Arquitectura Sostenible
_Sustainable/bioclimatic projects
PARIS 2010/2011
Arte - Charpentier | GA
Architecture
Archit. and Urban Planning
Refurbishment/new construction



MOROCCO/INDIA 01-06/2016
Terrachidia and INDUS
University
_Urban Resilience project in
M'Hamid Oasis
_Workshop coordination
RESILIENCE / HUMANITARIAN
CAMBODIA 12/2010
Architecture School Paris -
Belleville
_Canal area regeneration
BENIN 07-09/2015
Basque Youth Volunteer Progr.
_Local urban resilience
_Education and health projects
EAST TIMOR 07-08/2014
CAMEROON 07-08/2012
Pro Acis
_Local urban resilience

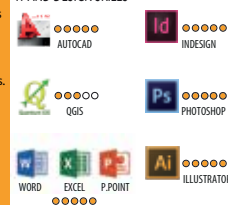
MOTHER
TONGUE
C2
C1
B2
A2



PUBLICATIONS

- *Published during PhD development. **Published with UN - Habitat.
- Yarza Pérez, A.J. and Verbakel, E. (2022), "The role of adaptive reuse in historic urban landscapes towards cities of inclusion. The case of acre", Journal of Cultural Heritage Management and Sustainable Development, Vol. ahead-of-print No. ahead-of-print.
<https://doi.org/10.1108/JCHMSD-05-2022-0074>
- Yarza Pérez, A.J. (2022), Deep Adaptive Reuse: A response to the 21st-century urban challenges. SPOOL 9(2), 25-40. <https://doi.org/10.47982/spool.2022.2.02>
- Yarza Pérez, A.J. (2021), Evaluating Adaptive Reuse Alternatives of a Multi-Layered Port City: Acre, Israel. SPOOL, 8(1), 49-80. <https://doi.org/10.7480/spool.2021.1.5903>
- UN-Habitat (2016), Kalobeyei New Settlement Local Advisory Plan: Kalobeyei Integrated Socio Economic Development Programme, Turkana County, Kenya. UN-Habitat
- Yarza Pérez, A.J. (2016), Planning an Integrated Urban Settlement, Kalobeyei New Site, or how to build a sustainable integrated town. UPC

IT AND DESIGN SKILLS



Publications

- Yarza Pérez, A.J. and Verbakel, E. (2022), “The role of adaptive reuse in historic urban landscapes towards cities of inclusion. The case of acre”, *Journal of Cultural Heritage Management and Sustainable Development*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JCHMSD-05-2022-0074>
- Yarza Pérez, A. J. (2022). Deep Adaptive Reuse: A response to the 21st-century urban challenges. *SPOOL*, 9(2), 25–40. <https://doi.org/10.47982/spool.2022.2.02>
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- UN-Habitat (2016), Kalobeyei New Settlement Local Advisory Plan: Kalobeyei Integrated Socio Economic Development Programme, Turkana County, Kenya. UN-Habitat
- Yarza Pérez, Ana Jayone (2017). Planning an integrated urban settlement: Kalobeyei New Site, or how to build a sustainable integrated town. Thesis (Master thesis), Centro de Innovación en Tecnología para el Desarrollo Humano (itdUPM).

Adaptive Reuse of Urban Heritage in Contested Urban Contexts

The Case of Acre in Israel

Ana Jayone Yarza Pérez

The world is facing global challenges that are dramatically changing the social and physical environments, resulting in cultural confrontation. Rapid urban growth, and gentrification increase urban pressure while jeopardizing social cohesion, multicultural values and local economies. Moreover, environmental factors associated with climate change challenge the way cities respond and adapt, as their assets have to be re-designed to meet the current and future generation needs.

One response to these challenges is adaptive reuse, the transformation of the function of an underused structure into a new use. This process turns the cities' elements in decline into development catalysers. The adaptation to these changes is often a source of conflict, as urban policies lack citizen engagement in the redefinition of public space, resulting in more disagreement. This is particularly acute when addressing contested communities, as their continuous evolution directly influence the adaptation of cultural heritage.

Considering these aspects, this research question is responded: *'How can socio-spatial conflicts that result from contested identities be mitigated through the adaptive reuse of urban heritage?'*

The relations between Adaptive Reuse, Urban Heritage and Contested Identities are studied, resulting in the research's objective: to develop an integrative methodology to evaluate urban heritage adaptive reuse alternatives in contested urban contexts, using the case of Acre (Israel).

This final outcome is proposed as a tool for decision-makers and urban planners that provides information-based results to be applied in urban design practice, aiming to translate the theory into practice, and to bridge the gap between global goals and local issues.

A+BE | Architecture and the Built Environment | TU Delft BK