Architecture + Havoc: The Agency of Historic Sites During Conflict

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Architecture + Havoc: The Agency of Historic Sites During Conflict

Abstract
For the fields of architecture and preservation, havocked environments are catalysts for our work managing, manipulating, and reviving the built condition. Over the last few decades, however, technological advancements have transformed the way in which the world sees conflict. No longer must we wait for a peace—havoc reveals itself immediately on our screens. It is critical for the fields to extend their role beyond pre-conflict preparations and post-conflict response. The built environment has just as much agency as warring parties do, and it is essential to critically engage with the physical and humanistic realities of conflict zones.

This thesis proposes a new paradigm for the designer—that of an activist and enabler. By developing an arsenal of spatial tactics, the designer supports civilians of embattled places to sustain life and culture within their built environment. With the Old City of Aleppo, a UNESCO World Heritage site and former battlefront of the Syrian War, as the area of study, this thesis undertakes a speculative reimagining of the historic fabric of the city as a malleable asset for survival. By means of an alternative narrative, Aleppans, through a series of enclaves and networks, transform their city into an archipelago of politically autonomous territories. While this thesis does not offer a solution for conflict nor its prevention, it does aim to mitigate urbicide by empowering people to preserve the tangible and intangible properties of their heritage. This alternative narrative reconsiders design thinking as a tool for intervention and endurance vis-à-vis grassroots action.

Keywords
Syria, UNESCO, civilian, tactics, war

Disciplines
Historic Preservation and Conservation

Comments
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ARCHITECTURE + HAVOC: THE AGENCY OF HISTORIC SITES DURING CONFLICT

Emily Canby Gruendel

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Producing a thesis is long and strenuous process. I have meticulously worked to unite my skillsets into a palpable product that is relevant for both my fields of practice, architecture and preservation. More so, I have striven to create something that stands as a culmination of my four years of work at the University Of Pennsylvania School Of Design. Upon the edict of my master’s degrees in the subjects, I can honestly say that I am proud of the work nestled between the following pages, and I hope that it finds a purpose outside of the academic realm.

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Chapter 1: The Theory of Havoc

Figure 76. Havoc in Aleppo. Photograph by Patrick Tombola / Laif / Redux.

1.1 The Subject of Havoc

Havoc is a word we associate with conditions of widespread devastation, chaos, and loss. It can take on both physical and psychological forms, be intentional or haphazard, natural or manmade, and everything in between. In any case, havoc insinuates a conflict of entities and is an ideal moment in which to explore the intersections of both architecture and preservation—two fields which take great pride in creating, managing, and maintaining spaces for people; fields which require an analysis and critique of the present in order to establish a future. This thesis confronts havoc through the lens of both architecture and preservation in order to consider how mutual collaborations, tactics, and policies can be more actively employed during times of conflict.

Historically speaking, the fields of architecture and preservation do address the context of conflict. Medieval Europeans built castle walls and dug moats well in advance of any impending battles and refortified them once war subsided. Likewise, preservationists today work perilously to document and record sites of importance in fear that, one day, such places may no longer exist. After disaster, those same professionals are some of the first to assess battlefields in order to make plans for restoration, memorialization, and rebuilding efforts. Pre-conflict planning and post-conflict response are a foundation of both fields’ work.

But what about during conflict? When an unpredictable circumstance arises in which people need to quickly and efficiently organize to save their homes, their livelihoods, and their lives, how can architecture and preservation become involved? After all, conflict affects the built environment, a realm of reality which both fields assert their professions within. So cannot an architect’s or preservationist’s skillsets be recalibrated during times of uncertainty so as to protect life and structure; people and place? Might design become more active in its role? Should not the built environment have a purpose beyond shelter, program, and symbolism, and, if so, to what effect? Can design mediate the needs of entities in the midst of havoc; neither pre-ceding nor post-ceding catastrophe, but engaging with the moment in a tactful manner? The answer to these questions must be, in one form or another, yes.

Based on the concept that the fabric of our cities has just as much agency during conflict as warring parties do, this thesis explores how both the architecture and preservational fields can assert more active roles in present-day struggles—breathing action into the seemingly static state of site. With the Old City of Aleppo, Syria as the site of study, this thesis undertakes a speculative exploration in which the role of design is reconsidered in a havoced historic context. Reimagining how the Syrian War affected Aleppo, this thesis rolls back the clock in order to postulate on ways the architecture of the city could be adapted for an alternative outcome. By testing these larger theories in a reality-based state of havoc, this thesis transcends theory and envisions a more tangible truth through abstracted narrative and architectural form.

Deployable, adaptable, feasible, and resilient: these are the characteristics of an architecture of agency. Yet the intricacies of these maneuvers must be dealt with in order to fully anticipate such endeavors.
How can such strategies be readily applied in the time of need? How might an intervention be adaptable to different circumstances of havoc? How and by whom will a tactic be deployed or created? To what end will such architecture operate, and will it have a life outside the realm of havoc? These are the questions which this thesis research probes, and these are the questions with which to approach and assess the project of Architecture + Havoc in the context of Aleppo.

1.2 The Case for Aleppo

One may posit the question: Why Aleppo? And indeed it is a relevant inquiry as it sits so close and yet so far from the grasp of this scholar’s every-day existence thanks both to technology and distance. But then one might pose the counter question: Why not Aleppo? A city inhabited from the earliest days of humanity, Aleppo is both rich with history and troubled by conflict. A pivotal battlefield of the Syrian War until late 2016, Aleppo has been torn apart by rebel and regime forces, not to mention the many proxy wars between. Aleppo represents so much of what the fields of both architecture and preservation admire. A once cosmopolitan city where multiplicities of people, cultures, livelihoods, religions, architectures, and histories thrive, before the war Aleppo maintained a delicate balance of new and old; commerce and culture. Today, however, the city is devastated in both form and function. Thousands of civilians are displaced or dead, with countless other affected.

We can learn from the travesties of Aleppo by reimagining how its story could have been different—how its designation as a United Nations Educational Scientific and Cultural Organization (UNESCO) World Heritage Site could have meant more. How might the city’s designation helped to prevent the atrocities that unfolded there, and how might have the built fabric done more to save the lives of the civilians caught in the crosshairs of conflict? Why did a civil war unravel into such a blatant targeting of buildings and infrastructures? How might the city’s historic sites have been adapted, added onto, and respectfully altered in order to accommodate a preservational agenda? As it pertains to this thesis, preservation is about the protection of

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culture and heritage; a safeguard for place and person, tradition and custom, tangible and intangible. Without people, a place does not maintain the integrity that it once had.

Furthermore, one can draw many correlations between Aleppo and cities like New York, London, Shanghai, Los Angeles, and other pluralistic entities. One must wonder; if a city as grand as Aleppo could suffer as it did, is it not possible that such havoc could take to its counterparts? Havoc is not, nor will it ever be, confined to one place. The way in which history unfolds is rarely predictable. Looking to the recent history of Aleppo as a case study for speculation on the roles of architecture and preservation is, therefore, essential. Postulating on the realities of the recent past has both the practicality of post-event rationale in addition to pre-havoc strategy. This thesis is a practical exercise in conflict negotiation through the built fabric, within which the past, present, and future are critically considered. Ultimately, this thesis is about more than just Aleppo, Syria. It is about changing the way in which the fields of both architecture and preservation respond to conflict, opting more for an activist approach than a post-or pre-conflict reaction.

1.3 The Power of Havoc

The term urbicide was first coined by Bogan Bogdanovic, the former mayor of Belgrade, during the Bosnian war in the early 1990’s. In his book, *The Destruction of Memory: Architecture at War*, Robert Bevan defines urbicide as the targeting of cities and their architecture with the intention of destroying the culture, values, and daily life of the people who inhabit it. It attempts to obliterate the physical in order to affect the spirit of a people. The harm that urbicide causes, therefore, is just as much tangible as it is intangible. Power, according to Bevan, is embodied within the possibilities of the built environment:

> Urbicide...demands attacks on more than the individual buildings of representative communities; it is the aggregation of buildings that constitute heterogeneous shared spaces where people mingle that are the targets. The architectural conditions that foster this heterogeneity have to be destroyed if an ethno-national or ideological homogeneity is to take its place. The space that cities allow for diversity and exchange of ideas also means that authority cannot be uniformly imposed—power can never be absolute. Cities as a locus of tolerance and freedom are, to their detractors, dangerously uncontrollable, instinctively oppositional to authority, constantly changing and evolving in new and diverse ways.

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5 Bevan, *The Destruction of Memory*, 122.
Cities of diverse communal coexistence are a threat to totalitarian powers. Places where people find commonalities between their disparate customs are fruitful for tolerance, are difficult to upend, and likewise difficult to control. Cities are commanding enclaves for those trying to combat systematic injustices because that is where the most extensive activism resides. It is for this reason that such places become targets for aggression and attack. Cities and their buildings embody more than just the physicality of place; they take on symbolic and intangible qualities which resonate with the lives of those within them. Culture is just as much tied to its buildings as it is tied to its customs and people. An attack on a place is therefore a threat to a society; an act of fear-inducing propaganda.⁶

There are generally two sides to havoc. On one hand, there is the target of the destruction: the place, the people, and the culture. On the other hand there is the perpetrator of the destruction: the terrorist, the government, the natural disaster. Joining these two sides lie something inherently more interesting; motive and meaning. What does the havoc represent for both oppressor and the oppressed? Is it a haphazard accident, an intentional attack on life, a threat to society, the taking of power? Each condition of havoc is unique depending on perspective and motive. Additionally, the question of how the oppressed respond to the havoc becomes of critical concern. What series of events led to such devastation and in what way was it received and reacted to?

The answer to that question may correlate to the type of havoc that has occurred and the extent of the havoc. In the case of an avalanche, for instance, one might have only seconds to respond to the threat because of the rapid destruction barreling down the mountainside. During war, however, destruction can occur over very long or very short periods of time. One may be able to properly prepare for the possibility of an air-raid over a series of weeks, but, an impromptu blitz of thousands of soldiers may not be as easy to anticipate nor defend. Likewise, a decades-long economic disaster, such as that in Detroit, offers an alternate, longer term perspective of the concept of havoc and destruction. While slower, economic havoc is much more of a systematically entrenched issue to combat.

⁶Ibid., 73.
In the context of Aleppo, a city which was besieged for nearly four years by rebel forces before being retaken by Assad and his allies, havoc was both widespread and long-term, with short, fast moments of battle and intensity. Some impacts of the battle for Aleppo surely could have been prevented, or at least minimized, whereas other impacts may not have been. It is important to emphasize that the insertion of architectures into an Alternative Aleppo will need to be framed into moments of intermediate destruction. That is to say, this thesis does not propose to build large defensive structures on active, war-torn battlefields. The moments in which this thesis proposes architectural adaptations and additions need be subdued though can be incremental, adding up to a much larger entities capable of prevailing during those times of high destruction.

1.4 Preservation’s Approach to Havoc

Traditionally, the architecture and preservation fields have operated outside of the realm of havoc, addressing the subject either before disaster strikes or after the smoke has cleared. For preservation, preemptive planning and documentation efforts attempt to precede disaster, with reconstruction closely following the foundation of peace. While the focus of the field was originally attuned toward monuments and archeological sites, it has continuously expanded over the last century to include more contextual spaces including districts, landscapes, and vernacular heritage. According to Jukka Jokilehto, a professor at the University of Nova Gorica in Slovenia and Special Advisor to the Director General of ICCROM (International Centre for the Study of the Preservation and Restoration of Cultural Property), UNESCO’s views on reconstruction has evolved similarly. Over the course of the twentieth and twenty-first centuries, UNESCO has expanded the definition of cultural heritage, dictating that reconstruction should include “the social-economic condition of place.”7 By considering more than just the built environment as it pertains to the authenticity and integrity of a place, the international preservation community is beginning to realign their concepts of what cultural heritage is.

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In a recent conference at the University of Pennsylvania Museum, titled “Preservation of Art and Culture in Times of War”, professor of international law and United Nations Special Rapporteur Karima Bennoune emphasized the human dimension of cultural heritage. She stated that in order to combat the intentional destruction of heritage, the international community, in conjunction with local professionals, citizens, and youth, must promote cultural pluralism. She also stressed that culture can change, explaining that cultural rights and universal humans rights go hand in hand. It is important for professionals to recognize the multiplicity of narratives relative to sites of heritage in order to most appropriately preserve them. 

According to UNESCO, the historic Old City of Aleppo embodies outstanding universal architectural value as per section III and IV of the selection criteria. The synthesis of Aleppo’s outstanding universal value (criteria III) states:

*The old city of Aleppo reflects the rich and diverse cultures of its successive occupants. Many periods of history have left their influence in the architectural fabric of the city. Remains of Hittite, Hellenistic, Roman, Byzantine and Ayyubid structures and elements are incorporated in the massive surviving Citadel. The diverse mixture of buildings including the Great Mosque founded under the Umayyads and rebuilt in the 12th century; the 12th century Madrasa Halawiye, which incorporates remains of Aleppo’s Christian cathedral, together with other mosques and madrasas, souqs and khans represents an exceptional reflection of the social, cultural and economic aspects of what was once one of the richest cities of all humanity.* 

That is to say, Aleppo is a world heritage site because of its people and their architectural legacies. One might speculate that without Aleppans, Aleppo would not be a World Heritage site. The recent devastation the historic city is a tragedy, however, the death and displacement of thousands of civilians is even more troubling.

In 2013, UNESCO placed Aleppo on the List of World Heritage in Danger as a response to the escalating civil war. Since then, the organization has conducted annual conservation reports on the World Heritage Site’s conditions. The most recent report is from January 2017, following the retaking of the city by the government. In June of 2015, the World Heritage Centre organized the “Post Conflict Reconstruction in the Middle East Context” conference, where they stressed the importance of rebuilding Aleppo as it pertains to

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10 Ibid.
the sites defining values and characteristics.\textsuperscript{11} However, a paper produced by Dr. Anas Soufan following the conference states that UNESCO should convene:

\begin{quote}
...a multidisciplinary committee, instituted by experts and Syrian administrators [to] outline a plan of intervention according to the situation on field. In case of total reconstruction, the residents and users of the old city should be consulted about the aesthetic outcome of the proposed projects of reconstruction related to the concerned monument.\textsuperscript{12}
\end{quote}

This statement suggests a top-down approach to preserving and rebuilding the city in which residents would be referred to only for opinions on the “aesthetic outcome” of such an endeavor. Additionally, it forgets to account the need for their city to function for its inhabitants—a fact that cannot be precluded from historic sites in particular, as Karima Bennoune might argue. Negating the potential needs of a post-havocked civilization undermines the social justice movements that the field was founded upon. Similarly, this report’s leap to Aleppo’s reconstruction, which has been echoed by the Syrian Directorate General of Antiquities and Museums (DGAM,) is a mistake. What if the city’s destruction necessitates new programmatic and architectural needs? Will it even be appropriate to recreate what the war destroyed? Moreover, why, in the middle of a deadly humanitarian-crisis of a war, are international communities thinking about reconstruction rather than how they might get involved today?

The trend towards more community and place-centric rebuilding is encouraging, though far from universal. When we speak of preservation, we need reinforce the notion that cultural heritage is intrinsically tied to both the people and the built fabric that make up a place. Both fields must do more to consider and assist communities, especially during times of conflict.

\textbf{1.5 The Framework of the Thesis}

This thesis is an architectural and preservational design project in which many case studies are distilled into a strategic catalog of tactics that can be employed across a multitude of conflict scenarios. These tactics are then tested in the context of Aleppo, gaining a level of specificity in terms of materiality, purpose, processes of implementation, and potential impact. This project imagines how the battle for Aleppo could be


re-written by encouraging civilian survival though architectural agency. However, this thesis does not propose a solution for the Syrian War or any war for that matter, nor will it articulate an exact way in which the city of Aleppo should rebuild. Rather, it aims to produce a set of strategies which become an arsenal with which the professions of both architecture and preservation might combat the destruction of heritage, the loss of life, and their fight against injustice.

This thesis probes these key questions: What types of architectural and preservational interventions, policies, and collaborations can be adopted by people on the ground during times of conflict? More specifically; how can the design of spaces, the additions to structures, and the collaboration of disparate entities enable political changes that save human life and protect cultural heritage sites? And finally, to what end will design during these moments of havoc operate once the havoc has subsided? By utilizing tactics and strategies based from the following case studies, this thesis will attempt to show how design thinking can contribute to a political, emancipatory project.
Chapter 2: Case Studies

This section briefly outlines some of the case studies which were evaluated on the topic of havoc. While each case study is unique, this collection provides a crucial framework within which to consider design strategies during conflict, which are relevant in concept, materiality, or form. These case studies express varying typologies of havoc and provide valuable insight into the theories between conflict, architecture, and historic preservation. While some of the case studies posit post-conflict approaches to the design of spaces, some offer ideas on design in a more conceptual basis, while yet others are more palpable approaches to besiegement. The goal of this section is to establish a range of possibilities for the project of Architecture + Havoc while also acknowledging the breadth and depth of research conducted.

2.1 Theoretical Urban Strategies

Figure 77: Analytical Maps of West-Berlin. Drawings by Rem Koolhaas and O.M. Ungers.

The City in the City: Berlin as a Green Archipelago | Rem Koolhaas + O.M. Ungers

A 1970’s reimagining of West Berlin, Koolhaas and Ungers combat the decaying city by means of an acupunctural approach. By focusing on certain important places within the city and developing them to function for the needs of the people in the area, this project creates an optimized, autonomous network within the city by allowing the rest of the urban fabric to decay. This project is unique in the way that it approaches preserving existing sites through both architectural and programmatic means. This project exists on an urban scale which is relatively similar to the Old City of Aleppo. While it is conceptual, this project is an interesting

approach to revitalizing the urban condition during a drawn out period of economic havoc. Such a nodal focus may be applicable during times of war, when a complete urban planning approach may not be realistic.\textsuperscript{14}

![Image](image.png)

\textbf{Figure 78. An Architectural Disobedience. Rendering by Leopold Lambert.}\textsuperscript{15}

\textbf{Weaponized Architecture: The Impossibility of Innocence | Leopold Lambert}

With the argument that architecture can be used as a political tool, this project explores spatial injustice can be turned on its head so that the oppressed may battle systemized inequity through the built environment. In the West Bank, Israeli forces have been dividing up Palestinian land with walls and settlements. Leopold Lambert asserts that Palestinians could integrate into this weaponized architecture system with their own ‘architecture of disobedience’. By linking the disjointed archipelago of land through hidden, underground tunnel networks and decoy sites, Palestinians create encampments for agriculture, storage, dwelling, and the shepherding of livestock. This project assumes a level of reality by acknowledging

\textsuperscript{14} Ibid.

that such a place would eventually be bulldozed by Israelis, leaving in its stead a ruin emblematic of the continuous conflict.  

![Image of Information Pods and Space Mixer drawings by Cedric Price]

Figure 79. Information Pods’ and ‘Space Mixer. Drawings by Cedric Price.

**The Detroit Think Grid | Cedric Price**

Another urban approach to revitalizing place, Cedric Price’s Detroit Think Grid engages disparate communities across the city by tapping into existing infrastructures to create an informal education system. This project thinks about architecture in relation to its use and flexibility, considering how it could evolve over time. Designed for Oakland Community College, this project attempts to counteract the biased, political advancements of urban renewal by using temporary, mobile architectures to decentralize education throughout Detroit’s urban, rural, and suburban spaces. Additionally, this project appropriates Detroit’s declining industrial

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16 Ibid.

sites and roadways to create opportunities to disseminate information to the general public. As Kathy Velkov, an associate professor of architecture at the University of Michigan states in the Journal of Architectural Education,

...the framework for the Think Grid was conceived of as being far more dependent on collaboration with a community of urban actors, whose communications and decision making the informational network was in place to facilitate, and governed through the promise of a direct democracy.¹⁸

This project is influential in the way it transverses scale, time, and locale for the greater goal of empowering the masses with an independent education system.

![Figure 80. Nodal Concept Design for Philadelphia Revitalization. Rendering by Ecosistema Urbano.](image)

**Ecological Reconfiguration of an Urban Center | Ecosistema Urbano**

Similar in concept to the Detroit Think Grid, this project addresses Philadelphia’s empty urban lots by reestablishing social, physical, and recreational networks throughout the city. This project utilizes the street grid and urban-catalysts to create ecological corridors for economic growth and mobility. Ecosistema Urbano

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¹⁸ Ibid., 50.
defines urban-catalysts as “light and dismantable structure[s]” which can be “strategically placed in areas with [a] high percentage of urban-voids...” Such nodal tactics consider how acupunctural developments might work in conjunction with city plans to improve a struggling urban fabric.

![Figure 81. Rojava Embassy at the New World Summit in Oslo City Hall. Photograph by Emile Buts.](image)

### 2.2 Spaces for Political Legitimacy

**Rojava New World Embassy | Jonas Staal**

A project for the Oslo Triennale, the New World Embassy creates a physical space for organization on behalf of the Kurdish region of Rojava in Northern Syria. As a group who has been oppressed for decades by nations such as Syria and Turkey, Kurds were met with an opportunity because of the Syrian War. Assad’s regime was forced to retreat from this Northern Province in order to address the uprisings across the rest of the country. This allowed the Kurds enough peace-time momentum to create their own political entity, so-called Democratic Socialist Communalism or Democratic Confederalism. This administration emphasizes unilateral,

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20 Ibid.
non-biased representation across gender and religious affiliations. The built project by Jonas Stall gives the Kurdish government in Rojava a global platform, legitimizing their otherwise illegal and autonomous political organization. This type of project emboldens a group of people and their endeavors through structural means and can be seen as a political and architectural precedent for this thesis.\textsuperscript{22}

2.3 Preservational Approaches to Conflict

Rebuilding Warsaw

Aleppo has been equated to post-WWII Warsaw, where retreating Nazi troops razed eighty five percent of the city’s historic center. Following the war, Varsovians, in conjunction with international organizations and an extensive set of archival documentation (including paintings by Bernardo Bellotto), reconstructed their city as a communal endeavor.\textsuperscript{24} Civilians helped to clear away rubble, which was practically and symbolically reused to create bricks for new structures. While this case study is not exemplary as a

\begin{figure}[h]
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\caption{Civilians Rebuild Warsaw after WWII, 1954. Photography by Ryszard Bielawski.\textsuperscript{23}}
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preservation project (reconstruction today may be considered unauthentic or controversial), Warsaw is notable as a communal approach to preserving cultural heritage.  

Rebuilding the Timbuktu Mausoleums

In 2012, Islamist extremists destroyed fourteen historic mausoleums in Timbuktu, Mali. In response, UNESCO organized and funded the rebuilding of the structures, employing local craftspeople and traditional building practices to do so. In conjunction with the International Criminal Court (ICC), UNESCO also pursued the prosecution of those involved in the destruction, citing the violation of the Hague Convention of 1954 which prohibits the intentional destruction of cultural heritage. In August of 2016, one of the destructive, Islamist militants, Ahmad al-Faqi al-Majdi, pled guilty to ICC charges and is presently serving a nine year sentence for the crime. The prosecutorial response to the intentional destruction of these cultural heritage sites by}

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international bodies is unprecedented. This is the first case where the ICC focused “solely on cultural destruction as a war crime.” Additionally, this UNESCO-led reconstruction is only the third in the organization’s existence, preceded only by Warsaw and the Mostar Bridge, which was destroyed by the Bosnian War. While this is a post-destruction response, this case study represents the international community’s growing efforts to condemn and prevent the destruction of historic sites in conflicted regions.

Figure 84. Pakistani Villagers Rebuild after Floods. Photograph by Al Jazeera.

Sindh Valley Disaster Mitigation | Yasmeen Lari

Annual flooding wipes out numerous villages in the Sindh region of Pakistan. In an effort to mitigate the effects of these persistent floodwaters, architect Yasmeen Lari has undertaken a number of projects in the region to help communities during and after such disaster. Using local materials, Lari has constructed multiple raised community centers that double as areas of refuge. Lari has also trained locals in traditional building crafts so homes may be quickly rebuilt following floods. Using lime-based mortars, Lari’s team instructs small


groups of people in water resistant building practices, who then help their neighbors rebuild their homes. This communal training campaign can then continue into the future by locals passing down such practices to the following generations. This case study shows how architecture skillsets can be employed as a bottom-up system, empowering locals to protect their culture and built heritage on their own accord.\footnote{\cite{aljazeera}}

### 2.4 Community-Driven Design

![Proposal for Bab Amr Housing. Render by Marwa al-Sabouni and Khaled Komee.][1]

The Battle for Home: Treeblock Houses \mid Marwa al-Sabouni

A Syrian architect, Marwa al-Sabouni argues that design can deeply affect communities, citing the architectural and political histories of Syria which contributed to the war. Using Homs, Syria’s third largest city (behind Aleppo and Damascus), as her evidence, al-Sabouni contends that a top-down design approach is a mistake:

\footnote{\cite{jandoroteo}}

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\footnotesize{\textsuperscript{31} Al Jazeera, "Pakistan: A Traditional Future" (video) in Rebel Architecture, directed by Faiza Ahmad Khan, posted April, 27, 2016, accessed October 20, 2016, http://www.aljazeera.com/programmes/rebelarchitecture/.

If anything can be learned from this pointless war it is that our solutions should spring from our own depth...Our need is for a shared home, and this home must be ours, built from our sense of who we are a citizens of this place, and from our wish to restore it, to embellish it, to make it our own, and to hand it on as a gift...The fabric of our cities is reflected in the fabric of our souls.  

Al-Sabouni asserts such a thesis in her Treeblock project; a response to the government’s plan to build large, detached housing blocks in damaged Baba Amr. Here, the buildings grow over roadways, offering shade, amenities, and privatized spaces for this mixed-use development. Al-Sabouni’s work, in combination with her analysis of Syria’s architectural, social, and political underpinnings, exemplifies how important it is for design and political fields to commit to a community-driven approach when it comes to rebuilding or preserving sites, especially those who have experienced conflict.

La Carpa | Recetas Urbanas

Architect Santiago Cirugeda is paving the way for collective-based design initiatives throughout Spain, where a recent economic downturn has left communities in need and buildings abandoned. By using unconventional design strategies, such as finding legal loopholes for property ownership, and employing readily available, cost-effective materials and labor, Cirugeda’s architectural studio, Recetas Urbanas, focuses on the needs of locals. Past projects include Skip Urban Playground, a miniature playground which was

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continually relocated to areas lacking in recreational space, and La Fabrika de Toda La Vida, an adaptive reuse of an old cement factory into an artist’s commune.\textsuperscript{36}

One of his best known projects is La Carpa, or “The Big Top.” La Carpa operated as a temporary community center, sited with numerous community-built structures, including office space, a skate ramp, and two circus tents complete with a troupe of clowns. It functioned as an informal event campus in Seville for four years and was touted as “the city’s first self-built independent arts space.”\textsuperscript{37} Cirugeda’s work exemplifies the role of architecture as a tool to fight systematic injustice and conflict through alternative means.

2.5 Memorial and Rebuilding Efforts

World Trade Center

Devastated on September 11, 2001, the site of the New York City World Trade Center has undergone extensive rebuilding efforts in the sixteen years since the attacks. A nationally controversial project, the city in


conjunction with developers, the Port Authority, and numerous other stakeholders, decided to rebuild the site as a mixed use entity. Combining memorial with public plaza, mega-tall office building, and shopping and transportation hubs, the World Trade Center is an intriguingly complex space that mixes tourism and business. While early planning stages attempted to take into consideration community and survivor input, ultimately this project became more about investments and monetary gains than a community-driven negotiation of a highly politicized site. This approach to conflict is the antithesis of this research, but a case study worth noting as its strategy is common in today’s western societies. A similar example is 30 St Mary Axe, otherwise known as the Gherkin in London, where an IRA bomb razed the late Baltic Exchange building.

Figure 88. B-018 Nightclub Entryway. Photograph by Bernard Khoury.

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B-018 Nightclub  | Bernard Khoury

A Beirut nightclub located on the site of a former Palestinian refugee camp, B-018 is an erotic approach to memorializing a site’s history. By countering the prescribed program stylistically, this structure’s bunker-like exterior is dramatically juxtaposed by its plush and soothing interior, albeit underground. A complex tactic for memorialization, Elie Haddad, dean of the LAU School of Architecture and Design surmises that Khoury’s project may be “a fitting monument for Lebanon’s un-commemorated civil war… playing that role in a subliminal and perverse way.” 42

Figure 89. View of 18 West 11th Street in Context. Photograph by author.

18 West 11th Street  | Hugh Hardy

Located on a quiet block in the Greenwich Village neighborhood of Manhattan, 18 West 11th Street is an emblem of a tragic explosion that left three dead in the early 1970’s. Also known as the Weathermen House, this site was originally one of a set of 1840’s townhouses on the block. Following the leveling

42 Ibid., 85-96.
explosion, architect Hugh Hardy designed an infill building for the site’s new owners, David and Norma Langworthy. Matching its surroundings in height, materiality, and function, this building is distinctive in the way the two middle floors jut from the facade; a symbolic nod to the explosion. This controversial building was met with much criticism from neighbors and the Landmarks Preservation commission prior to its construction in 1978, primarily because it was not a reconstruction of the original. Today, however, the townhouse is considered an iconic marker to the site’s tragic past. This project represents an evolution in design and preservation thinking away from reconstruction and towards symbolism and memorialization. It also shows how new construction in historic contexts can be both distinctive and compatible.

2.6 Disseminating Information

Figure 90. Heritage Cards for the US Military.

Cultural Heritage Playing Cards

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A project developed by Colorado State University in conjunction with the United States Department of Defense’s archeologist Laurie Rush and the Combatant Command Cultural Heritage Action Group (CCHAG), these sets of playing cards help disseminate information about cultural heritage to military personnel in conflicted areas of the world. With three sets developed for the countries of Afghanistan, Egypt, and Iraq, these cards aim to prevent accidental damage to important sites in regions where personnel may not be familiar with the culture. This case study is interesting in its unconventional means of incorporating information into a useful item for soldiers. Such a tactic may be effective for spreading architectural or preservation information to civilians during war when materials are scarce, yet vital for survival.

2.7 Grassroots Resistance

Figure 91. Makeshift Barricade of Abandoned Buses. Photograph by Karam Al-Masri / AFP / Getty Images.

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Surviving in Syria

Syrian civilian tactics in the midst of the war were some of the most fruitful case studies of this research. These tactics emphasize not only the resourcefulness of people, but also the extent of a person’s needs and abilities during times of havoc. It is apparent that one such need was to create blockades to protect people from sniper fire and aerial bombing. Blockades were usually made with readily available materials such as fabric, vehicles, and disused construction materials, as well as smoke from tire fires. Another critical need was food, as aid and supplies were limited due to rebel and military check points and roadway damage. To combat this, some civilians created independent gardens. Image 17 depicts one man’s vegetable garden, inside a bomb crater. The impact from the bomb disrupted a sewage line, producing fertile gardening conditions. Additionally, many children used bomb craters and disused vehicles as opportunities for play. These interventions attempted to address the needs of civilians through protection, sustenance, and the continuation of cultural practices—the most difficult things to come by during times of havoc.

Figure 93. History of Aleppo Timeline with Adapted Plans of Aleppo, Over Time.

Chapter 3: The History of Aleppo

The history of Syria is a long, layered tale, stemming from the earliest human civilizations. The largest city in Syria, Aleppo is a cultural relic of such a history; the physical evidence of continued inhabitance dating as far back as 10,000 BCE. Recently, however, the country has suffered from a terrible civil war. Due to its increasing violence, this war has prompted the largest diaspora since World War II. These battles are not simply between the Assad-controlled government and the rebel armies; countless other feuding parties including the Islamic State of Iraq and Syria (ISIS), Kurdish militants, Turkey, Russia, and the United States have contributed money, arms, and military power to the effort. Aleppo, the country’s economic capital, was the key battleground of this war. Located in the northern half of Syria, a few dozen kilometers from the Turkish border, the city, its civilians, and all of its historic fabric were severely threatened by this war’s many factions.

This thesis suggests that the built realm can enable civilians to survive and cultural histories to persevere. To postulate on how the architecture of a city might take on a level of agency, this thesis must first understand its history. By learning from Aleppo—a culture that has seen so much change, so many rulers, and


so many wars—this thesis is far better equipped to address the questions at hand without the risk of blatant
naivety. By examining these key historic aspects of Syria and Aleppo’s past, including how the city has
approached rebuilding in recent eras, this thesis creates a fruitful basis to deduce specific architectural and
preservational strategies. The following section outlines the most crucial aspects of Syria’s past as they relate
to the architectural, social, political, and cultural implications of the current conflict. This text demonstrates
that the decisions behind Aleppo’s architectural landscape are almost always dictated by its ruling party, and
not its civilians.

3.1 Pre-Modern History of Syria

Since 3,000 BCE, Syria has changed hands over two dozen times, with rulers including the Assyrians,
Babylonians, Egyptians, Romans, Turks, and the Ottomans.52 This drive to conquer lands and its inhabitants is
a common theme throughout all cultures and their histories; the correlation between power, ownership, and
growth is natural to the human condition. It is imperative to understand how this drive has shaped the built and
cultural environments of the region and for the city of Aleppo in particular.

In the seventh century BCE, the Assyrian Empire’s Dynastic leaders took great efforts to build large,
ornate structures.53 When a king conquered new lands, he would raze the buildings of the previous
authoritarian power.54 Through fire, looting, and destruction, leaders forcibly created tabulae rasae so that
their own power and prestige would not be threatened by legacies of the past.

Today, much of the cultural heritage in Iraq and Syria is threatened by ISIS, who has destroyed
numerous historic sites, such as Palmyra, and killed hundreds. While such extremist groups fight for religious
purposes, purifying landscapes of blasphemous idols and impious people, such blatant attacks on culture and
heritage are impious and deliberate grabs for power. But even if this idea of overtaking cultures through the
obliteration of physical relics persists, there are also continual efforts towards the preservation of histories.
According to Zainab Bahrani, a Professor of History and Archeology at Columbia University, middle eastern

52 Ibid.
2015), 46.
54 Mancini and Bresnahan, Architecture and Armed Conflict, 47.
civilizations dating as far back to 2500 BCE believed in the respect of the built environment. Many structures erected following a great military victory or triumph were inscribed with phrasing that roughly translated to ‘do not destroy buildings,’ equating said destruction to the taking of a life.\textsuperscript{56}

The razing and rebuilding campaigns of historic empires can be read, on one hand, on a level of hypocrisy. However, one might also take these differing beliefs to suggest that many cultures believe themselves and their artifacts to be superior to others; as more worthy of preservation than of that that came before. The Romans, with all their conquering powers, were no exception to this dichotomy. Transforming villages into vast agricultural empires, building viaducts and baths across lands, the Romans were perhaps some of history’s greatest transformers of space for their own prowess.

The city of Palmyra was largely influenced by Greco-Roman and Parisian design and flourished as a trade center under Roman rule.\textsuperscript{57} Aleppo also grew during Roman occupation and, like Palmyra, became an integral node along the Silk Road, a trade route between Asia and Europe. Between the second century BCE


and the thirteenth century AD, the Silk Road facilitated some of the first cross-continental exchanges of goods.\textsuperscript{58} The Great Mosque and the surrounding Souq al-Madina, which once served as public processional space during Aleppo’s Roman era, are now considered some of the most historic sites inside the Old City of Aleppo.

### 3.2 Modern History of Syria

For the duration of the Silk Road, Syria volleyed between ruling parties including the Seljuk Turks, various Crusaders, and the Ottomans in 1516.\textsuperscript{59} The Ottoman Empire ruled over Syria for four hundred years until the Sykes-Picot agreement of 1916. During the late Ottoman Empire in Syria, local society began to recognize the importance of its own culture and preservation by means of a literary enlightenment.\textsuperscript{60} Writers and storytellers contributed to the Arab Awakening, a period which reminisced on topics of modernity, style, and “the value and definition of the local heritage.”\textsuperscript{61} A nuanced regionalism emerged, highlighting the fine arts, architecture, and cultural heritage.

This enlightenment, however, was met with sharp contrast by the Ottoman Reforms of 1839. The Ottoman ruling class wished to stifle regionalist movements in order to modernize themselves on a level that rivaled their western counterparts. Administrative buildings and city extensions were constructed during this era with the aim of elevating the prestige of the Ottoman Empire to that of Britain or Russia. In this sense, the manipulation and creation of modern architecture was a propaganda tool for the government. However, this nationalist strategy resulted in a strengthening of a citizen-driven demand for the preservation of heritage.\textsuperscript{62} A hybridization of Ottoman modernization and local historicism emerged towards the end of the nineteenth century. The Bab al-Faraj Clock Tower, designed by Austrian architect Charles Chartier, mixes turn-of-the-century technology with Aleppan ornamentation and craft.

\textsuperscript{59} Al-Sabouni, Battle for Home, 182.
\textsuperscript{61} Soufan, Historiographical Overview of Syria, 3.
\textsuperscript{62} Ibid, 3-4.
When the Ottoman Empire dissolved in the early twentieth century, British and Arab troops took control over the land, subdividing it into numerous smaller nation-states, one of which was Syria. In 1920, Syria was appropriated by the French in what became a twenty-six year occupation period. Though the Syrians negotiated their independence from France in 1936, it was not until 1946 that Syria was formally declared an independent country.\textsuperscript{64}

During the French occupation, Western influence altered Syria’s cities. The French appreciated the Greco-Roman, pre-Islamic architecture, and as such, encouraged its preservation through archeological intervention, conservation, and by seizing relics for European museums.\textsuperscript{65} With the belief that French culture was more enlightened than Syrian, the French also began a campaign to ‘civilize’ Syrian cities such as Damascus and Aleppo. Such top-down approaches by colonial entities was common throughout Arabic, Asian,
and African regions during this era. Imperial powers struggled to meld local culture with modernity, which contributed to the creation of the Western preservation field.

In 1925, Syrians revolted against French rule who abruptly responded by bombing many of the country’s major cities. The French, upon being questioned by the League of Nations as to the reason for the bombings, replied that it was a planning strategy to modernize the medieval, non-orthogonal street plans of the cities. Reluctantly, French entities contributed to repairing the damage incurred by their bombing campaign in order to regain some political face, both locally and internationally. One example of French reconstruction is the neighborhood of al-Azizyah in Aleppo, just northwest of the citadel.

Planners and preservationists of this era began to confront the clash between modernity and cultural heritage in the built environment, preserving sites, establishing design regulations, and undertaking massive archeological explorations in numerous cities. In Syria, many professionals saw fit to demolish structures located immediately adjacent to historic sites in order to declutter the foreground for such monuments. This type of approach towards preservation—establishing a pedestal upon which the ‘most important’ histories may shine—is immediately aligned with trends of the era and is specifically referenced in the 1933 Athens Charter. In this document on cultural heritage policy, under the “Legacy of History” recommendations section, line 69 states, “[t]he demolition of slums surrounding historic monuments provides an opportunity to create new open spaces.”

Following French occupation, Syria struggled through military coups and the Arab-Israeli war before the socialist Ba’ath Party assumed power in 1963. The Ba’ath party, currently led by Bashar al-Assad, continues to hold power in Damascus today, while a secondary branch of the party was overthrown when Iraq’s Saddam Hussein was ousted in 2003. Nonetheless, Syrians have continued to maintain ties with European

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67 Soufan, Historiographical Overview of Syria, 11-12.
68 Ibid., 9.
70 Al-Sabouni, Battle for Home, 182.
powers, employing many foreign-born architects and urban planners to design their cities. A 1952 Plan for Aleppo by Andre Gutton established a monument-centric urban planning strategy which redesigned the historic core by widening roadways, imprinting orthogonal gridding, and creating intentional axes to major monuments, such as the citadel.

International political allegiances enabled Syria to garner more global recognition as a sovereign and powerful state. During the 1950’s, Syria signed a pact with Russia, establishing a military which continues to hold through today. Similar political allegiances were attempted between Syria and Egypt, but fell-through following a series of coups and the March 8th Revolution in 1963. In 1973, tensions between Syria and Egypt escalated, resulting in the Yom Kippur War which lasted through the 1980’s.\textsuperscript{71}

During the 1970’s and 80’s, an increasing trend towards preservation and local heritage flourished throughout Syria, specifically in the historic city centers. With the advent of the UNESCO World Heritage list in the 1970’s—to which the Ancient City of Aleppo was added in 1986—the Syrian Government became aware of the relative value, both historically and economically, of the country’s heritage.\textsuperscript{72} The preservation of these built histories coalesced nicely with the Ba’athist agenda, which promoted ideas of a united Arab nation, as well as the need for economic reform including increased tourism.\textsuperscript{73} However, while the real estate value of historic centers was on the rise, many local residents found the building restrictions imposed by these historic districts burdensome. For instance, the Syrian government promoted wealthy, foreign investors to convert old homes in historic centers into more profitable enterprises such as hotels, restaurants, and night clubs. However, local civilians who had lived in the city centers for generations were dissuaded from modifying their own homes in order to accommodate their growing families. This preference for foreign investment over local citizens added to the trend of top-down control over Aleppo’s physical fabric by the Syrian government. While such preferences have prompted great dissent towards Ba’ath party rule, as visible during the 1980 Sunni fundamentalist uprisings,\textsuperscript{74} the regime’s interest in heritage may have also led to the recent destruction of

\textsuperscript{71} Ibid., 183.
\textsuperscript{72} UNESCO, “Ancient City of Aleppo,” World Heritage List.
\textsuperscript{73} Soufan, Historiographical Overview of Syria, 16.
\textsuperscript{74} Al-Sabouni, Battle for Home, 183.
cultural artifacts and sites by ISIS. It is the impression of many in the field that cultural heritage designation may in fact make such sites greater targets for destruction.\textsuperscript{75}

### 3.3 The Arab Spring

In 2000, Bashar al-Assad became the leader of the Ba’ath Party in Syria following his father’s death. While the government claims to be a “Socialist Popular Democratic Republic,” it is clear from such a transfer of power that the Syrian government is more of a dictatorship than a democracy. Because of this, President Assad’s reign has been met with opposition both locally and abroad. The United States in particular has expressed concern over the government’s potential allegiances with terrorist organizations and their increasing development of chemical and nuclear weaponry.\textsuperscript{76} These tensions grew in 2011, when uprisings sprung up throughout the Middle East in countries such as Egypt, Tunisia, and Syria. Known as the Arab Spring, or the Arab Uprisings, these events sparked numerous battles between government and civilian forces and were a catalyst to Syria’s war.\textsuperscript{77} What began as a protest by students in the city of Deraa in response to the mistreatment of teenage political prisoners turned bloody when police officers shot and killed a number of protestors in March of 2011.\textsuperscript{78} These events prompted numerous demonstrations across Syria in which activists demanded a fair democratic system and a decrease in police power.\textsuperscript{79} According to the BBC, Assad attempted to extinguish the protests with his security force. Many protesters have since established informal militias, known as the Free Syrian Army. These rebel forces have been waging war across the country since 2012.\textsuperscript{80}

\textsuperscript{75} Bahrani, “Destruction and Preservation as War,” (2016 Fitch Colloquium).
\textsuperscript{78} “Syria: The Story of the Conflict,” \textit{BBC News}.
\textsuperscript{79} Loubna Mrie, phone interview by author, December 3, 2016. See Appendix II.
\textsuperscript{80} “Syria: The Story of the Conflict,” \textit{BBC News}.
3.4 The Syrian War

This conflict is not just between the Assad regime and the rebel resistance. The conflict has taken on religious and international underpinnings over time with the majority of Syrians, who are Sunni, battling the president, who is Alawite, in conjunction with growing international anti-Muslim sentiment. Other warring groups include the Kurds, and jihadist groups, such as ISIS. Extremist groups have taken the war as an opportunity to spread their reach, radicalizing rebels in need of food, water, and arms. Over the course of this
war, rebel forces have been divided into an increasingly fractured state, weakening the resistance tremendously.\textsuperscript{81}

While many news reports call this the “Syrian Civil War”, this battle has been anything but. Although this war has been fought on Syrian soil, many other nations, including Russia, Great Brittan, China, and United States, along with countries throughout the region, such as Iraq, Turkey, Israel, Lebanon, Iran, Palestine, and Afghanistan, are engaged in battle as well. Russia preserves its ties with the Syrian government and has aided their efforts through military and monetary support since 2015.\textsuperscript{82} Most of the airstrikes in Aleppo were carried out by Russian jets. The United States, Great Brittan, and other Western entities, similarly have intervened in response to their concern over the spread of extremism, in addition to having both political and economic interests in the country. Russia also claims to be interested in this war for the sole purpose of combatting ISIS, but the majority of their airstrikes have resulted in civilian, non-militant, casualties. The United States is also guilty of killing civilians. Turkey continues to protect its borders from the Free Syrian Army but did allow refugees to cross for a time. Although the UN attempted to organize peace talks in early 2014, the Syrian government “refus[ed] to discuss a transitional government.”\textsuperscript{83}

War crimes and human rights assaults have been overwhelmingly prevalent during this war. Kidnapping, chemical warfare, continuous blockades of humanitarian aid, and the targeted destruction of infrastructure and cultural heritage are just some of the conditions which civilians have endured in Aleppo. Barrel and chemical bombs, used by the Assad regime, have resulted in hundreds of casualties, many of whom were children. When more accurate weaponry is employed, hospitals, schools, roadways, infrastructures, and UN aid are often the target. In September of 2016, the United Nations reported that it would halt aid efforts to Aleppo following a devastating airstrike on their convoy.\textsuperscript{84} These calculated attacks by the Russian and Syrian governments seek to dismantle their opponent’s abilities to eat, drink, sleep, work, and get medical treatment, regardless of the amount of civilian life lost along the way. News articles suggest that these attacks are

\textsuperscript{81} Loubna Mrie, interview.  
\textsuperscript{82} “Syria Profile – Timeline,” \textit{BBC News}.  
\textsuperscript{83} Ibid.  
\textsuperscript{84} Ibid.
deliberate attempts to radicalize rebel forces. In late September 2016, Max Fisher of the New York Times suggested the strategy of cutting off rebels from needed amenities would push them to align with ISIS forces, which have greater access to food, water, and arms. Fisher writes:

The strategy, more about politics than advancing the battle lines, appears to be designed to pressure rebels to ally themselves with extremists, eroding the rebels’ legitimacy; give Russia veto power over any high-level diplomacy; and exhaust Syrian civilians who might otherwise support the opposition. This approach could succeed even if pro-government forces never retake Aleppo. A yearlong siege of the city has not brought President Bashar al-Assad’s forces closer to victory. Too weak to win outright, they appear instead to be hedging, trying to weaken the rebels so that they cannot win either, and to ensure any final settlement would be more favorable for Moscow and its allies.85

ISIS has engaged in abhorrible war crimes such as murder, kidnapping, and suicide bombings. One of their most atrocious contributions to this war was the destruction of the World Heritage site of Palmyra, Syria. When ISIS forces overtook the city in May of 2015, they destroyed a number of Roman-era temples and statues. In the eyes of ISIS, these temples and idols symbolized polytheism, a faith which sits in sharp contrast to the monotheistic belief that is a central tenant of Islam. While not all has been lost in Palmyra—ISIS repurposed a theater into an execution arena before being pushed out of the city altogether—the city is severely threatened and countless artifacts, structures, and histories have been erased.86

The destruction of cultural heritage, as noted previously, is not new to Syria. However, such atrocities have recently become punishable offenses in international courts of law.87 Though no direct actions have been taken towards the punishment of ISIS for their destruction of Palmyra, nor the Russians for the targeting of hospitals, nor for the Assad regime’s blatant attacks on local infrastructure and civilian

life, it is clear that these atrocities fit into the pattern of Syrian history. The incessant drive of authoritarian powers to condemn, destroy, erect, and dismantle the physical fabric of society dates back millennia.

And what of those civilians whose lives have been traumatized by this war? Where do they stand in all of this? Caught in the crossfires of war, Syrians are facing extraordinarily difficult decisions. Nearly eleven million Syrians (1.3 times the population of New York City) have sought refuge from the war throughout Europe, Northern Africa, and North America. Many Western countries, however, now have strict regulations regarding the number of refugees they allow entry to. Syria’s colonial visitor, France, is one country which has placed a moratorium on refugees seeking entry into the country. On the contrary, France has been quite enthusiastic to collect the country’s artifacts in order to safeguard Syrian culture against the devastation of the war.

3.5 Aleppo Today

Before December of 2016, Aleppo was the foremost battleground of the Syrian war. As the longest rebel-held city in Syria, Aleppo’s eastern side was the site of the most severe destruction. Figure 22 depicts the Assad regime (in red) surrounding the rebel forces (green) from November 2015 through January 2017. A small group of Kurdish militants (blue) held strong just north of the city center. While not visible in this map, a number of ISIS forces do occupy parts of the rebel-held regions of the city. In December of 2016, following an extensive air raid by pro-government forces, Aleppo was retaken by the Assad regime.

The battle for Aleppo has resulted in thousands of deaths and has left countless scars upon the city. A once vibrant city of 2.5 million now lies in shambles. Satellite imagery demonstrates the extent of such physical destruction (See Figure 23). Since 2012, most of the eastern neighborhoods in Aleppo as well as the historic Old City have been subjected to intense air raids. The 2016 satellite imagery shows signs of greenery in places around the Citadel, suggesting a complete abandonment of these neighborhoods due to the

destruction. Most of the city’s infrastructure, including water lines, electrical grid, and local markets, are completely destroyed. It has also been reported that over two hundred other sites of cultural heritage in Aleppo have been damaged or destroyed and hundreds of others remain threatened. While the Syrian War is not over, the loss of Aleppo by the rebel forces was by far the greatest blow to the revolution to date.

3.6 Concluding Remarks

Throughout the history of Syria, there has been a strong pattern of political upheaval and architectural destruction followed by urban growth and increasing social tensions. From the Assyrians to the Romans to the French and through today’s Ba’ath party, each governing power has had their way with the cultural and physical fabric of the region. Aleppo is most surely an example of this pattern, maintaining a heralded architectural fabric. While the current Syrian war may be just another destructive moment for Aleppo, the destruction remains remarkable. Perhaps this is due to the advent of social media, making such human rights atrocities immediately visible to the world. In any case, Aleppo’s rich culture, which is embedded within the lives of its inhabitants as well as the physical fabric of the city, has been severely threatened by this war. What the civilians of Aleppo crave is the moment, some distance in the future, in which they can reestablish their lives and their great city once more. It is imperative that the responsibility for rebuilding Aleppo not be handed over to the next government in charge or a foreign party, as Marwa al-Sabouni argues. Power is the ultimate weapon of mass destruction. It is the Aleppans themselves who must hold this power, the power of their city.

Figure 98. The Re-taking of Aleppo, November 2015 – January 2017. Adapted from "Live Map of Syrian Civil War".\textsuperscript{92}

Figure 99. Satellite Imagery of Aleppo, 2012, 2014, 2015, 2016.**

Chapter 4: The Architecture of Aleppo

There is a power to the built world; likewise, there is a power to its destruction. It would be inappropriate to speculate on interventions for a city as rich and as complex as Aleppo without understanding the power of its architecture and its destruction. The symbolism, function, values, needs, and history of a building are all essential in order to appropriately respond to it. There can never be one solution for rebuilding; each site and context is distinct, even within a single city. Therefore, the following section explores key aspects of Aleppo’s rich architecture. The goal of this portion of the thesis is to contextualize the war within the setting of Aleppo, noting critical historic sites, typologies and, where applicable, the damage that each has endured from the war. This section explores the contextual elements of the city so they may inform the rest of the project, reimagining the story of the Syrian War in Aleppo.

4.1 The Destruction of Syrian Architecture

Aleppo maintains an eclectic terrain of urban fabric. The city was founded because of its locale; the proximity to the Queiq River, its fertile farming grounds, and its large, defensible plateau, the site of the Citadel. The city developed outward from the Citadel, expanding exponentially due to its growth in population over the last century. Many of the structures within the Old City of Aleppo were built during Ottoman Empire, though numerous buildings date from earlier eras, including the Umayyad and Abbasid Dynasties (see Figure 25). Centuries-old mosques are juxtaposed with 20th century apartment complexes and bustling streetscapes, while the historic souqs thrive as centers of commerce.

Of course, the Old City of Aleppo no longer looks like this anymore. A UNESCO report from January 19th, 2017 estimates that approximately 60% of the historic city has been damaged, with about 30% completely destroyed. Bombs, tunnels, machine gun fire, and homemade weaponry devastated this urban landscape, bringing to a halt the social and cultural institutions that gave Aleppo life.

The severity of such urbicide has left many to speculate on the city’s future. After all, Aleppo was recaptured by the Syrian government, who, along with their allies, targeted heritage and cultural resources.

How, when, and by whom will the city rebuild, and what affect will it have on the country as a whole? What will the rebuilding of Aleppo mean for the thousands that continue to fight in Idlib, Dumayr, Talbisah, and the many other rebel-held cities within the country? Does rebuilding strengthen to the government and undermine the revolutionaries? How will the city rebuild?

Already, efforts have been made to reestablish power by repairing and rebuilding police stations across eastern Aleppo. Preservationists have also begun to prepare for the reconstruction era, despite reservations for a government which considers the pure reconstruction of a demolished monument an appropriate solution to the havoced historic fabric of the city. According to a report by the Syrian Ministry of Culture on the state of historic sites in Aleppo, “historical buildings were left until they can be assessed as to how they can be reconstructed.” That is to say, that the Syrian administration plans to reconstruct the historic portions of Aleppo just as they were before the war. Not only does this approach run counter to contemporary historic preservation authenticity principles, but wiping away the havoc that the city experienced will physically erase the tragedies that Aleppo and its civilians endured. Such a strategy by the hegemonic powers of the Syrian Ministry of Culture and the Government covers up the atrocities that were committed over the last seven years. And for what purpose—a façade of peace and prosperity for a country which continues to wage war against itself? This era of rebuilding will surely effect how the Syrian War is remembered within Aleppo and throughout the world.

Looking at previous Syrian destruction and rebuilding efforts may shed some light on Aleppo’s potential future. Under the rule of former president Hafez al-Assad, the city of Hama was nearly destroyed in the early 1980’s. Located between Homs and Aleppo, Hama (which means fortress in Arabic) maintained a vibrant historic core and was home to a government opposition group known as the Muslim Brotherhood. In retaliation for attacks on Syrian government buildings, Assad nearly destroyed the city and murdered between 10,000 and 20,000 people. According to Robert Fisk, a reporter in the area at the time, Assad’s campaign

97 Bevan, *The Destruction of Memory*, 72.
leveled the Old City of Hama, replacing it, instead, with parking lots. Urbicide along with genocide in this context were used as tools of power to strip people of dignity, life, and place. The correlations between Hama and Aleppo make one wonder why such acts can be committed again, thirty-five years later. Even as a World Heritage Site, the Old City of Aleppo was not spared the devastation of war. Will Aleppo become Bashar al-Assad’s parking lot as Hama was for his father, or a recreation of false history as the Ministry of Antiquities suggests?

Figure 100. *Age of Buildings within the Old City of Aleppo Map.* Image by Design Studio NN.

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98 Ibid., 72-73.
Figure 101. Bab Qinasreen Neighborhood in the Old City of Aleppo, Plan.\textsuperscript{100}

\textsuperscript{100} Stefano Bianca, \textit{Urban Form in the Arab World, Past and Present}, London: Thames & Hudson, 2000, available through ArtStor.
4.2 Aleppan Typologies

The urban vernacular of the historic core of Aleppo can be characterized by a plethora of tight, meandering streetscapes, densely bordered by homes and shops, and perforated with courtyards. Figure 26 depicts one such area in the residential neighborhood of Bab Qinasreen in the southern end of the Old City. Note the lack of orthogonal roadways and the tendency for arterial streets to dead-end. While these urban patterns are common throughout the Old City of Aleppo today, historically the orthogonal grid was a more
dominant feature; a legacy of Greek and Roman town planning. Remnants of this grid can be seen to the west of the citadel where the historic Souk al-Madina is located. A modern version of the grid was reintroduced towards the outskirts of city during the twentieth century to accommodate residential expansion. One can see this phenomenon on a map of present day Aleppo where the outer rings of the city are organized into a gridded plan (Figure 27). Such rings are defined by large highways, which were constructed during the mid-twentieth century due to the popularity of automobiles.

During the Crusades in the 12th century AD, the city was a fortress. According to a report on Traditional Syrian Architecture, “for defensive reasons, every neighborhood [in Aleppo] had its own markets and services and a gate on the main street leading into the neighborhood.” This way, each section of the city was able to protect itself from invaders. Some of the historic gates and portions of the city walls remain standing even after incurring damage from the present-day war.

4.3 An Aleppan House

One key feature of Aleppo is the traditional Arabic courtyard house. Rectangular in plan and two to three stories in height, courtyard homes in the Old City of Aleppo typically date from the nineteenth century Ottoman period. These central courtyards allow homes to be permeated by light and air while also providing space for daily activities. Small windows and doorways puncture the exterior façade while bedrooms, located on the upper floors, allow for privacy. Larger or more lavish houses can host multiple courtyards and families. Some key features of these houses include overhangs and cornices, kishks, roof gardens for heat absorption, varying ceiling heights, and other architectural elements to promote natural airflow.

Over the last half century, however, this typology has been largely abandoned. Many of the historic homes in the Old City have been added to and the courtyards concealed so that multiple generations can live under the same roof. This rejection of the courtyard house has also contributed to urban sprawl on the

103 Ibid., 10.
104 Ibid., 12-14.
105 Ibid.
periphery of the city. Newer neighborhoods are built of contemporary materials such as CMUs and concrete, rather than traditional limestone.

4.4 Traditional Building Practices

Vernacular buildings in Aleppo are typically constructed with ashlar or dressed quarry stone walls using mortars of mud and straw. Large walls and buildings utilize stone foundations, digging at least one meter into the earth. Stone walls are commonly filled with rubble and soil, ranging between 70 and 80 centimeters in thickness. While most Ottoman and pre-Ottoman buildings in Aleppo are built of stone, elsewhere in Syria, wood frame, mud, rough stone, and rammed earth walls are more prevalent.

A variety of window and door openings can be found in Aleppo, including pointed archways, rounded archways, and flat lintels. Internally, many historic buildings utilize masonry vaulting to create passageways inside structures. Domes and cupolas are also quite common in the city, topping many mosques and minarets. The most common traditional flooring materials are stone and wood, while walls are traditionally coated in lime-based plasters if not left in their natural state. While the above denotes the common historic elements of buildings, many additions, hybridizations, and alterations exist throughout the historic Old City of Aleppo due to modernizing needs, costs, and functions. Additionally, a decline in skilled craftsmen threatens traditional building practices throughout the country.

Prior to the Syrian War, Aleppo had numerous preservation issues. Degradation to sites was usually the result of water or sewage leakage from old underground infrastructures, a lack of maintenance, a shortage of funding, or the lack of skilled labor. While efforts have been made to combat these issues in Aleppo, top-down preservation strategies severely hinder the speed and transparency of the process and does not take into consideration the needs nor opinions of Aleppans. Additionally, the government sanctioned targeting of sites in

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106 Ibid., 19.
107 Ibid., 19-25.
108 Ibid., 15.
109 Ibid., 31.
the historic district suggests that protective measures by Syrian-backed institutions may not carry any long
term preservation weight.\textsuperscript{110}

\textbf{4.5 Historic Alterations}

During the twentieth century, urban planning and renewal produced a tempered level of civic
destruction ensued throughout Aleppo. Frequently, older neighborhoods were deliberately eroded in order to
provide space for urban parks, gardens, wider streets, and more modern buildings. While such acts can be
fine in moderation and of their era, Aleppan officials had difficulty balancing these developments. Proposals to
designate the Old City of Aleppo as a World Heritage Site were deferred numerous times by UNESCO, who
wanted the city to “adapt an urbanization policy analogous to that advocated in the report of the UNESCO
mission to Aleppo.”\textsuperscript{111} The city was eventually added to the list in 1978. One area that suffered from
revitalization was the Bab al-Faraj district in the Old City, which was a 1970’s archaelogical site. One of
Aleppo’s first preservation projects, Bab al-Faraj was a city gate on the western part of the historic Old City
which was destroyed in 1904.\textsuperscript{112} This dig project began in 1978 and aimed to create an archaealogical park
with the remains of the gate as the main feature. However, in order to establish this park, 10 hectares of
historic urban fabric had to be demolished.\textsuperscript{113} The project was ongoing, but has since been indefinitely halted
due to the war.\textsuperscript{114}

\textbf{4.6 Legislating Built Heritage}

Aleppo has effectively preserved the fabric of its built heritage. The Ottoman Code of 1884 made the
destruction of buildings and monuments punishable by law. This code was improved upon in 1938 by listing
specific sites of cultural significance, such as the Citadel and the Great Mosque. During the contemporary
preservation movements of the 1960’s, the Syrian Ministry of Antiquities passed Law 222, which aimed to

\textsuperscript{110} Ibid., 32.
\textsuperscript{114} Yasser, *Constructions of Power*, 20.
further document, record, and protect cultural heritage and antiquities throughout the region. Law 222 has been subsequently amended in recent decades.\footnote{CORPUS Levant, \textit{Handbook for Maintenance and Rehabilitation}, 27.}

While law 222 remains the country’s keystone of preservation legislation, it is not without controversy. For objects to be considered “heritage,” they need to be at least 200 years old, unless otherwise exempt by the DGAM. While this timeframe may seem logical given Aleppo’s long history, it ignores the city’s recent histories, including the late Ottoman Empire and entire twentieth century. On one hand, this provision prevents the entirety of the city from being frozen in time, allowing for flexibility and urban growth. On the other hand, it makes it difficult for any event that occurred within the past few generations—including sites associated with such events—to be seen as significant in the legal sense. This threatens places like the recently damaged Old City of Aleppo. Damaged buildings and evidence of the war may not be thought of as historically important and is therefore at risk for eradication, as if the war did not happen at all.

Additionally, Law 222 designates two distinct categories of heritage: moveable and immovable. This means that heritage is either an artifact (a painting, pottery, jewelry) which can be feasibly relocated, or a site (building, landscape) which cannot be moved. While logical, this categorization is a perplexing definition of heritage because of the significant oversight on intangible heritage. Ceremonies, cultural traditions, and ways of life are not, according to Law 222, considered relevant to the heritage of Syria. However, if one removed such intangible heritage, is the place-ness of the city not altered? Aleppo has been a bustling merchant city for hundreds of years—isn’t the purge of that function and its people detrimental to its heritage? While western preservation regulations acknowledge concepts of intangible heritage, Syria’s narrow categorization of heritage by Law 222 is detrimental to its own cause.
4.7 Historic Sites

4.7.1 The Great Umayyad Mosque

Built in the 8th century A.D. (715-717), the Great Umayyad Mosque (also known as the Great Mosque) was founded by Sulaiman ibn Abd al-Malik, an Umayyad dynastic caliph. The site of the mosque was occupied previously by a church, and even earlier by a Roman agora. Rectangular in plan, the large central courtyard (riwaq) of the mosque is surrounded on all four sides by colonnaded porticos (iwans). One of the most notable features of this mosque was the minaret. Minarets, which are used for the daily call to prayer, are generally circular in plan. However, the minaret of the Great Mosque is square in plan. Built in 1094 during Seljuk prince Tutush’s reign and designed by Hasan ibn Mufarraj al-Sarmini, the minaret of the Great Mosque was decorated with a variety of Arabic inscriptions. The rest of mosque was originally adorned in marble and mosaics but these were destroyed in 962 CE and were replaced with intricate moldings, pilasters, trefoil and polyfoil arches.

This mosque has a very tumultuous history, having been built, rebuilt, and added onto many times. For instance, towards the end of the Crusades, the mosque was leveled by Mongols and then rebuilt by the Mamluk sultan. This was after having suffered damage from a fire during a Byzantine raid of the city. By 1285 CE, the original colonnades, prayer hall, and arcades had all been reconstructed. While still standing, the mosque has suffered severe damage from the battle over Aleppo. Before it toppled in April of 2013, the minaret was used as a crows-nest for snipers, with the bottom of the structure serving as storage for artillery and ammunition.\textsuperscript{117}

The Great Umayyad Mosque is significant to Aleppo and to Syria. According to a state report issued February 1, 2017, president Bashar al-Assad had recently “formed a committee to undertake the rehabilitation project [of] the Umayyad Mosque with the...Director of Aleppo Antiquities.”\textsuperscript{118} The site is also symbolic in the way that it is embodies many values of the city. As a religious institution, it stands as a symbol of piety, while its age makes it historically noteworthy as per Law 222. But it also stands as a symbol of change. From agora to temple to mosque, the site has shifted along with the city. The Great Mosque also acts as a gateway to the historic Souk al-Madina to its south, maintaining a direct connection to the history and vitality of Aleppan craft and commerce.


\textsuperscript{118} Kutiefan and Abdulkarim, State Party Report, 23.
Figure 104. *Great Umayyad Mosque Minaret, 1955.* Photograph by Machteld Johanna Mellink.\(^{119}\)

Figure 105. *Souq al Madina, March 3, 2011.* Photograph by REUTERS.  

Figure 106. *Souq al-Madina Damage.* Screengrab from The Antiquities Coalition.  


4.7.2 Souq al-Madina

Surrounding the Great Mosque is the historic Souq al-Madina, the old city bazaar of Aleppo. During Aleppo’s golden era, souqs and khans were vital to the city’s function as a trade hub along the Silk Road. Souq, souk, suq, or suk is Arabic for marketplace. Khans function as merchant quarters and are supportive space to the souqs. With inns, hostels, storage space for merchants, workshops (caeserias), stables, bath houses (hammams), mosques and other places of worship, khans operate as small commerce districts within the city.

The Souq al-Madina functioned as a bustling marketplace until the Syrian War, selling textiles, spices, and soaps to locals and tourists alike. Unfortunately, souqs and other public spaces were targeted in bombing raids during the war. The Souq al-Madina suffered immense damage due to such raids. Figures 28 and 29 depict the Souq al-Madina before and after the war, respectively.

4.7.3 The Citadel of Aleppo

Rising from the heart of the Old City of Aleppo is the Citadel. At 50 meters tall, this 323 meter by 450 meter elliptical plateau has been in use since the middle of the third millennia, BCE. Historically, it is believed

that Abraham, a religious figure, climbed to the top of this plateau to milk his cow. Aleppo was originally called Haleb, which translates to milk in Arabic.

Like the Great Mosque, the Citadel has been built and rebuilt many times in the last five thousand years. During the Ayyubid Dynasty, the plateau was fortified as a military base with a moat and new entrances and towers. During the Mamluk period, a ceremonial hall was added above the main gate. While other cities, such as Cairo, Damascus, and Athens, were founded around a large plateau as well, the Aleppan Citadel is unique in its continual use throughout history. Temples, mosques, churches, palaces, baths, arsenals, grain stores, deep wells, royal residences, and gardens have inhabited the citadel grounds. The Citadel was an active archeological site until it was adaptively re-used by warring parties during the recent conflict. UNESCO emphasizes the city as an emblem of twelfth century military architecture.123

123 UNESCO, “The Ancient City of Aleppo.”
Chapter 5: Mapping Aleppo

The following chapter visually analyzes the tangible and intangible qualities of Aleppo through a series of mapping studies. By studying key facets of the city, these maps allow one to gain a better understanding of Aleppo on an urban scale. This section also provides clues regarding where architectural interventions could be located, aiding in the design of Alternative Aleppo. This section cannot encompass the entirety of the city in all of its intricacies, but hopes to shed some light on the war in Aleppo.

5.1 The Whole City

Aleppo can be categorized as a radial planned city, which grew outwards in both size and population. The Queiq River cuts throughout the city. Due to recent droughts, the Queiq is less a river than a stream. Highway systems to ring the city, like a bullseye. Towards the center of the city lies the Old City of Aleppo. Periphery developments are planned orthogonally, while interior streets and buildings meander in a more medieval fashion.

The city is divided into many districts which become larger in size as they move outwards from the center. Due to the speed of growth of Aleppo’s population, many of these periphery districts are informal in nature (see Figure 35). Rebels first began to inhabit the eastern informal settlements as early as 2012. In 2010, the city undertook a major study in coordination with the German Technical Cooperation Agency (GTZ) in order to understand these areas in more detail. The report suggests that the growth in population and the need for housing was a result of the country’s 2006 drought, when many farmers and their families relocated to the city in search of employment. Figure 34 depicts the extent of damage in Aleppo. Notice how this damage is more severe in the informal settlements and Old City of Aleppo. This damage map correlates with changing battlefronts of the war.

5.2 The Old City

The structure of the World Heritage site is visible in Figure 36. Within the Old City lie twenty-seven small districts. The Citadel and the al-Madina Districts were major tourist sites before the war. Most of the eastern land use of the Old City is residential or mixed residential, while large boulevards and areas around the
citadel are mixed use and commercial (Figure 37). Many mosques, churches, and other historic sites are also located within the Old City. The line of heaviest damage corresponds to the borderline between rebel and regime forces during the war (Figure 39).


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Figure 109. (left) Damage Map of Aleppo. Adapted from UNITAR.

Figure 110. (right) Informal Housing Settlements of Aleppo. Adapted from madinatuna.com.
Figure 111. (left) Map of the Old City of Aleppo. Adapted from UNESCO.127
Figure 112. (right) Land Use Map. Image by author.

Figure 113. (left) Neighborhoods in the Old City of Aleppo Map. Image by author.
Figure 114. (right) Damage Map of the Old City. Source: Adapted from Conflict Urbanism.128

Chapter 6: Tactics of Conflict Intervention

This thesis reconsiders typical discourse of architecture and preservation as it pertains to havoc. As such, multiple deliverables were produced to garner an overall system of intervention. This system considers general tactics for havoc as well as specific tactics for Aleppo, at a variety of scales. The duality of this project allows for the tactics to be applicable for multiplicity of conflict scenarios while Aleppo tactics take on a finer degree of specificity. Aleppo is the testing grounds for how the fields can become more active in conflict.

Given the current state of Aleppo, however, it is nearly impossible to intervene without this project becoming about rebuilding and post-havoc response. Therefore, this project rolls back of the clock to a moment when war was still being waged in the city. In doing so, I have established an alternative reality for Aleppo (Alternative Aleppo) which imagines a revolutionary outcome for Aleppan civilians. This thesis is speculative, and therefore will not attempt to claim that Alternative Aleppo or that the tactics of intervention solve the problem of war or havoc. Rather, this thesis imagines the ways in which the fields could begin intervene in future conflicts.

The following chapter presents the tactics of conflict intervention derived from the case studies of Chapter 2. Chapter 7 dives directly into the illustrated story of Alternative Aleppo and how the following tactics can enable agency. Overall, this story attempts to depict, both visually and verbally, the struggle of civilians amidst chaos to establish real democracy through architectural and preservational strategies.

6.1 Project Outline

After studying a plethora of case studies, it is evident that tactical interventions must maintain a few key characteristics so civilians are able to implement them during conflict. For instance, during times of war, capital is often scarce, so cheap to no-cost materials are essential. Therefore, it is necessary that tactics be resourceful, using ‘found’ or readily-available provisions. Additionally, tactics must involve fast, easy assembly in order to be effective and efficient. Long construction times make interventions risky as they could become targets for aggression. Tactics should also be versatile and expandable, functioning on sites of varying sizes, shapes, and conditions. This allows tactics to be flexible both spatially and programmatically. Finally, these
tactics should be subversive and discreet. The agency of an architecture of havoc is in its ability to survive and continuously undermine assault. Camouflage, diversions, and faux structures are all common tactics of warfare.

The next step in establishing such tactics is to consider where they might be located. Figure 40 analyzes possible locations for interventions in relation to an individual building; inside, outside, above, below, beside and between. After figuring out where a tactic can go, the next step is to deduce the primary function of these tactics such as block, hide, support, protect, or connect. These functions depend on a group’s overarching goals and needs, and the conditions of havoc. Finally, form and materiality should be determined so that a tactic can be fully operational. During conflict, restrictions in site, need, and materials will dictate the order of the above decision-making processes.

![Figure 115. Locations of Interventions Diagram. Image by author.](image)

### 6.2 The Four Phases of Warfare

It is critical to consider these tactics not simply as stagnant architectural entities, but as adaptable, re-configurable components that can work within existing systems over varying periods of time. Therefore, each tactic was conceived within an arc of four phases of war:

**Phase I** focuses on the essentials of survival. Tactics during this phase are meant to protect, conceal, or connect the civilians and architectures within the city. This phase occurs during in the earlier stages of war, before all-out battle encapsulates the city, and is meant to be very subtle, if not undetectable, in appearance.

**Phase II** takes place during more extreme periods of war, when civilians must organize and reconfigure the internal logistics of the city for their own means. Re-programming buildings, expanding networks, and undermining assault are the key functions of this phase. Phase II is when the pivotal battles are being wages and tactics must support civilians in their quest for safety, security, and political autonomy.
Occurring at the crux of conflict, Phase III is when tactics become more extreme and fully operate as autonomous systems within the city for the civilians. No longer can tactics be subtle; they must assert dominance within the skyline and overtly undermine the onslaught of havoc.

The final phase of war is resolution. Within this phase, interventions may be removed or reused for peace-time purposes. Rebuilding and repairing the destroyed and damaged city-scape is important for both the morale of the people and the needs of the city. Phase IV reconsiders how the city’s war-time operations and reconfigurations can be incorporated or reused for its future vitality.

### 6.3 Tactics of Conflict Intervention

#### 6.3.1 Blockades

Blockades, or barricades, on city streets are defensive measures against assault. Fabric and other types of sheet material can perform very well as visual blockades. Such materials can be easily manipulated and deployed in a city. One may also consider the power of sheet-like material in reflecting (space blankets), disguising (mesh camouflage), or confusing (mirrors) depths of perception from above. Remnants of industrial materials and discarded vehicles may also serve as effective, low-cost blockades, though; large, bulky items may be more difficult to maneuver without the proper machinery.

Another system of visual blockade that does not require much in the way of physical material is fire. This tactic has been effectively used civilians in Syria, who have burned rubber tires and garbage in order to produce large clouds of dark smoke. This smoke creates temporary no-fly zones, making air visibility so poor that regime forces cannot fly their aircrafts. Such a strategy can be used independently or in conjunction with other, more construction-heavy tactics, so that opposition forces cannot see or target urban sites.
6.3.2 Tunneling

Tunneling can covertly connect disparate sites within a city. The idea of subtracting from the built environment, especially in a historic city center, may be viewed by some as potentially inappropriate, however, during moments of extreme war, tunneling may be necessary for survival. This tactic can also penetrate existing infrastructures, such as disused water or sewage lines underground, making the tactic far less labor
intensive. London Underground stations were repurposed as bomb shelters and factories during World War II, and became sites of unique cultural exchange. In Aleppo, some rebel militia used tunneling was to conduct assaults on government-held buildings. 

Tunneling also has potential of extend networks within and between buildings. Strategic openings can carve internal pathways between adjacent buildings, as seen in Figure 43. Such an act inverts the cityscape, allowing once-private buildings to operate as transportation networks instead of the roadways. According to Eyal Weizman, this is exactly what occurred during the 2002 occupation of Nablus in the West Bank by Israeli forces. Military troops carved networks into and between buildings to invert the public and private spaces and ambush rebel forces. Tunneling in Aleppo could be used by civilians to create hidden pathways to and from resources and for spaces of safety and organization.

![Image of Londoners taking refuge in the Underground during World War II.](http://www.keywordsuggests.com/)

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129 Kutiefan and Abdulkarim, State Party Report, 22.
6.3.3 Scaffolding

Typically used adjacent to construction sites to protect pedestrians from hazardous debris, scaffolding is an innovative and versatile tactic for conflict intervention. First, scaffolding is able to operate at numerous scales and for a plethora of programmatic needs. It can perform as an interior or exterior support structure for an existing building. Because of this feature, scaffolding is an ideal tactic to temporally and sensitively stabilize damaged historic structures without causing irreversible harm.

Scaffolding can also be used to protect a building or site that is at risk of damage. During World War II the French erected supportive scaffolding around some of their immobile heritage before the Nazis invaded. Sandbags were then stacked within the scaffolding in order to protect the monument. This way, scaffolding
acted as a structural system to hold the protective sandbags in place. The simplicity of scaffolding is that it can operate as an individually or in conjunction with an existing structure. Scaffolding can also be infilled with a variety of found materials, like sandbags, which can help to protect both people and place. Scaffolding can also operate as an extension of an existing space by adding floor surface or serving as a vertical circulation mechanism (Figure 44). Thus, scaffolding can create, protect, support, and extend space while also being sensitive and adaptable to numerous conditions. Figure 45 depicts this versatility of scaffolding in section.

Figure 119. *Scaffolding Tactic.* Image by author.

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6.4 Systems of Operation

These architectural tactics must be conceived of as part of a system of deployment and operation. This thesis considers the systems within which these tactics function. Systems of intervention include how civilians are organized and supported, how materials are funded, and how basic building and preservation knowledge may be taught or distributed. By understanding them, designers can plug architectural tactics into systems of chaos.

We have already studied the ‘players’ or ‘actors’ of the Syrian conflict (see Figure 22). This type of analysis should also extend to any proxy participants that may be involved including governments, religious groups, grassroots activists, NGO’s, non-profits, and international organizations. For Aleppo, numerous grassroots groups are involved in the helping civilian survival, including the Syrian Civil Defense, also known as the White Helmets, and citizen journalists. Such systems analyses should consider non-human actors, including the built environment.

6.5 Specified Construction Details

The following series of diagrams depict how tactics could be deployed more specifically. Each drawing takes into account the base tactics and attempts to detail them into an “Ikea-manual” format that could be understood across varying cultures and languages. These ideas are meant to suggest how drawings
could be created and disseminated for havoc-ridden areas to provide clear, and informative materials to those in need. Such documents would aid civilians and local humanitarian workers with site specific strategies based on the type and severity of havoc.

6.5.1 Aid Delivery

During disaster, external institutions (Red Cross, UNICEF, etc.) provide aid, including food, water, and medicine, to those in need. Aid is typically made via air-drops, caravans, or through the dispersion of relief workers. Unfortunately, during times of havoc like war, conditions are often deemed too hazardous for workers, leaving aid distribution and dissemination to the civilians or grassroots organizations. Air-drop sites and aid distribution centers also risk attack by thieves and yet are critical, life-saving infrastructures. Therefore, it is important for on-the-ground organizations to quickly, efficiently, and fairly distribute supplies as they arrive.

A possible aid delivery system supported by the scaffolding tactic is shown in Figure 46. Supplies from drop sites can be quickly loaded onto vehicles where, en-route, they are divvied up. The scaffolding unit, in this situation, is adjusted to accommodate the size of these vehicles to create a covered loading dock. The scaffolding serves a dual purpose here. On one hand, it acts as a protective covering for the aid vehicles. Secondly, scaffolding can act as a vertical circulation mechanism for both people and supplies. In the case of damaged structures, such a scaffolding system can replace or support existing interior circulation while also operating as a stabilizing mechanism for the building.
6.5.2 Tunneling How-To

The tunneling tactic may also be incorporated into the existing fabric of a city. With a minimal amount of primitive equipment, civilians can easily carve networks into their metropolis. While tunneling should be considered for less-historic sites, it can be done delicately and precisely if need be. This tactic creates subtle conduits for goods and people to transverse, though it must utilize stabilizing scaffolding to avoid structural collapse.
6.5.3 Rubble Walls

If placed close together, scaffolding can act as a framework to create multipurpose, low-cost spaces. Figure 48 depicts such a possibility. Inspired by the Pilosio Building Peace Organization in conjunction with architecture Pouya Khazaeli and Cameron Sinclair, this system devises affordable, energy efficient buildings for refugee camps in Jordan.\textsuperscript{132} By building a cage from scaffolding and metal grids, these thin structures may then be infilled with rubble to produce an opaque wall surface. Such a system has the potential to conceal space within heavily rubbled areas and take on a variety of sizes and forms. Other possible fill materials include compacted earth, woodchips, recycled plastics, and fabric.

6.5.4 Network Coverage

Surface materials, such as fabric, can be used in conjunction with the scaffolding tactic. Figure 49 details how such a system can hide or distort views from above. This strategy uses a simple carabiner system to pull taut textiles or reflective sheet material, such as space blankets, in order to confuse potential attackers. This tactic may also conceal openings into networks. More solid paneling mechanisms may also be applicable for this strategy integrated into this system. For instance, solar panels can establish autonomous energy networks throughout a city where base infrastructures have been damaged or destroyed. This tactic recalls vernacular aspects of Middle Eastern design, where textiles and awnings are used to create shade in warm climates. However, this kind of assembly could become a target if used too sparingly. Such a strategy may be more appropriate for large-scale endeavors, covering numerous building and streetscapes during the third phase of conflict.
6.5.5 Faux Walls

War-stricken communities may need to employ subversive tactics in order to survive. Figure 50 depicts one potential scenario, where a hidden entry is created by means of a fake, rubble wall. By erecting stabilizing scaffolding on the interior of the existing building, this secondary structure may then be extended to become the support system for a faux rubble pile. Such a construction could be nestled so closely to a building that, at first glance, it blends in with surrounding destruction. Secretly, however, this faux wall could allow civilians entry into the existing a hidden network. This system could go one step further, creating faux rubble piles near recent devastation which could then be internally configured to house or protect civilians.
6.5.6 Repair and Restore

Tactics should also protect built heritage. The use of scaffolding, both internally and externally, is critical for the stabilization and repair of buildings. Figure 51 depicts such a system, which uses two independent scaffolding systems to brace the ruins of a structure. Because erecting scaffolding is a relatively easy endeavor, civilians could learn such a process from professionals either before or during the war. This way, a community can contribute to the protection of their built environment. After all, the quicker the response to destruction, the greater the chance of saving a historic site.
Figure 126. Using Scaffolding to Repair and Stabilize Damaged Structures. Image by author.
Chapter 7: Alternate Aleppo

It was the middle of April, 2011 when the revolution first hit Aleppo. There were murmurs, of course, but no one was really sure what it might amount to. They had watched the news about Tunisia, Egypt, Iraq, Libya...the list goes on, but such broadcasts were muffled under the weight of the government. Despite their systemize fears, however, they gathered en masse, calling for political reformation; demanding their civil rights; hollering against the inhumanity of aggression and arrest. Their protests were small but powerful indicators of the much larger battle they were about to embark upon. They couldn't realize how pivotal a moment it was; how much pain and anguish they would face for the next seven years. But, nevertheless they marched on, they shouted aloud, and they were dignified when detained. Though Assad tried to stifle their words, he couldn’t erase their voices. It was a potent time full of gruesome moments and riveting rebellion.

And so began the Aleppan quest for an alternative life, away from the horrors and totalitarianism of the Assad regime. This was the moment when they fought for what was theirs, for their freedoms, and to create for themselves an autonomous world—separate from the hard-lined, top-down, status quo. Arab, Kurd, Assyrian, Armenian, Circassian, Turkmen, Sunni, Shia, Druze, Ismaili, Christian, Jew, Yazidi; together they would save Aleppo, one of the most beautiful, historic, and influential cities of Syria. They would make it their home—a home where they could live in a harmonious coexistence free from oppression. The following is the story of the Aleppan struggle for autonomy and real democracy in the city of Aleppo.

7.1 Hidden Islands (Phase I)

In early 2012, the rebels infiltrated Aleppo from the outside, overtaking neighborhoods on the northwest fringes of the city. Working their way to the Minnegh military base, these combatants hoped to disarm Assad’s militia, who were infiltrating the city to fight the now-frequent protests against the regime. In local squares, parks, and municipal institutions, these activists gathered to voice their concerns. But while the

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public sphere was a platform for political resistance, a much more subtle rebellion began to emerge in the private realm.

UNESCO, who had been keeping a close eye on the uprisings throughout the region, was taking several precautions to preserve the Syria’s cultural heritage. In Aleppo professionals quickly documented hundreds of historic sites as well as their immediate contexts. This way, if sites were affected by the conflict, international and local communities would have a means to assess damages and repair them accordingly. However, as demonstrations across the country were met with more and more violence by the regime, UNESCO, in conjunction with local Aleppan communities, became more actively engaged in the protection of heritage properties. Syria had yet to ratify the 1954 Hague Convention protecting cultural resources during armed conflict, so UNESCO erected scaffolding systems around historic sites such as the Great Umayyad Mosque, the Citadel, and the Souk al-Madina. By engaging with the local preservation and architecture communities, UNESCO was able to train hundreds of locals in the best practices for documenting, preserving, and protecting their built heritage. Teachers, construction workers, shop owners, students, and even librarians learned how to assemble these scaffolding systems and created localized task forces to best determine where protection was needed the most. Training generally took place at night in local school buildings, mosques, or community centers. UNESCO’s work even went so far as to create preservation catalogues in order to disseminate knowledge quickly and efficiently.

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One of the most monumental maneuvers by international parties was to amend the 1954 Hague convention to more directly address the protection of historic sites during times of conflict. A key element of this revision was the creation of cultural heritage sanctuary spaces. This meant that sites, such as the Great Umayyad Mosque, would be monitored by the international community so that anyone could enter the space provided that they were unarmed. This amendment was similar in nature to the Blue Shield initiative, which protects cultural heritage sites during times of unrest, but was more supported by international law in scope, scale, and implementation. In the event that a sanctuary space or person within a sanctuary space was assaulted, international forces would be obligated to intervene. Unfortunately this law could not hold up throughout the entire World Heritage City of Aleppo. Therefore, only particular monuments and critical infrastructures could operate as sanctuary entities. Scaffolding began to pop up across the skyline.

In conjunction with UNESCO’s efforts, the International Criminal Court developed an app for smartphones which would allow civilians to record videos and imagery about the state of affairs in Syria. This geo-located information could then be sent to the ICC with just the click of a button. The intent of this app was to enable everyone within the grips of conflict to report inhumane acts to international courts for their proper documentation. In the event that the courts found proof that a criminal act had occurred, these photos and
videos would become evidence for future prosecution. Additionally, such information would be shared with international bodies, such as the United Nations, so that peacekeepers may intercede in the matter.\textsuperscript{137}

Due to the escalating protests and influx of militant groups surrounding the city, international aid organizations also began to create stockpiles throughout the city. Such supplies—which contained mostly food, water, and medical provisions—in addition to UNESCO’s building materials, were stored in a variety of places, such as the sanctuary sites. Such sites were scattered about the city’s many districts and local, non-state affiliated, community leaders were charged with their organization and distribution.

In July of 2012, tensions mounted, leading to first regime-led shootings of protesters in the city of Aleppo.\textsuperscript{138} UNESCO’s preservation professionals, along with many non-Syrian visitors, began to vacate the city, leaving many locals to contemplate the imminent threat of war. As fear spread, the groups of local district leaders convened secret meetings to strategize how they might cope with the war. While the international community’s efforts had been appreciated, many Aleppans were vastly more concerned about their family’s safety, the security of their livelihoods, and the future of their country. Many had already made plans to leave, however numerous civilians, especially those within the historic districts and in the informal settlements, couldn’t afford to leave their homes and jobs behind. While sanctuary sites conceptually provided safe spaces for all, many feared that such a nuanced law could not stand up during war.

What were these Aleppans to do? They wanted political reform yet most rebel militias were highly unorganized, lacked power and provisions, and were battling extremists as well as the Assad regime. There seemed to be no way that the rebels could win a war against the government and their allies without major international support.

Perplexed, district leaders began to formulate a plan to use their newfound preservation skillsets to construct their own covert sanctuary spaces within the city’s existing urban fabric. Using the densely packed structure of the city, civilians began to create hidden islands within select non-historic structures of their

\textsuperscript{137} Sir Richard Goldstone, "New Frontiers in the Protection of Cultural Heritage," April 5, 2017. The ICC is currently developing this software.

districts. Communities fortified these enclaves from the inside out, erecting scaffolding to support roofs, walls, and floors. As building supplies were limited, focusing on key nodes within the city conserved time and material. Leaders also took care to relocate essential operations of the city to these enclaves. Civilians carved out space for schools, homes, hospitals, community centers, and the aid stockpiles, fearing that such operations would become targets if the war escalated. The original spaces for these operations were emptied of their belongings in the dark of night, and acted, instead, as dummy sites. Over the course of a few months, the city was subtly inverted, transformed into a fortified metropolis where people could live, work, organize, and plan for what became an all-out war by 2013.

7.2 Networked Autonomy (Phase II)

Unfortunately, rebel and regime disputes escalated, throwing the entirety of the city into warfare. At the historic Souk al-Madina, hundreds of businesses were forced evacuate.\textsuperscript{139} Due to the intensity of fighting in this area, local enclaves began to establish a series of networks between one another. One such network was visual. High points throughout the Old City became look-out points for observing the conflict. Scaffolding was erected around the minarets of many mosques, under the guise of protecting their buildings. In fact, the

\textsuperscript{139} Ibid.
scaffolding served as a strategic way to hide observers, who took shifts keeping an eye on nearby enclaves for any signs of disturbance. If attacks looked imminent, discrete signaling techniques allowed the towers to communicate with each other. This information would then be relayed back to the enclaves.

But visual connections were not enough to keep these discreet, disparate parties safe. Traveling by foot or vehicle between enclaves was overwhelmingly dangerous; so many communities began to dig secret underground tunnel networks. These tunnels allowed civilians to travel more safely between compounds, and provided as a safe space during air raids. The tunnels usually connected with existing sewage and water lines which had been rendered useless by regime bombing. Navigating these tunnels was intentionally difficult, often detouring to dead ends for no particular reason. The designers of the tunnels were clever, and prevented threatening forces from infiltrating the system and finding the enclaves. For all intents and purposes however, the enclaves operated so well that from the outside, it appeared as if the Old City was deserted.

As the war wore on, international bodies continued to gather communications from the underground civilian networks as to the atrocities that were unfolding. Discrete, drone-led supply drops sustained Aleppans when combat had destroyed roadways to the city or damaged power and water lines. When a drone made an air drop in one of the few open spaces around the Old City, nearby high point observers would tell their enclave...
to send out a retrieval convoy for supplies. Generally, each drop point served three to five enclaves, whose teams would quickly divvy up and bring back the provisions. Depending on the distance between the enclaves and the drop points, retrieval convoys would use vehicles to transverse the hazardous road networks. To make such an act safer, numerous blockades were set up along the prescribed routes between the nodes. Often, these convoys would use alternative routes on their way back in order to avoid a potential ambush. Back in the safety of the enclave, goods would be distributed to the inhabitants, with select portions going to an emergency stockpile facility.

Throughout 2013, rebel, government, and extremist forces cut off supply and travel routes to and from the city. Battles waged throughout the Old City, but particularly to the west of the Citadel. It became extremely difficult for enclaves in this area to retrieve any supplies from drop points. To combat this, the Aleppans developed systems of autonomy, so that they could operate efficiently without the need of the larger city infrastructures. Such systems included rainwater collection, independent energy generation, discrete gardening, and garbage and recycling mechanisms. Such systems required additional reprogramming and structural adaptations to be made within the enclaves.
Adaptations to the existing fabric of the Old City had powerful impacts on the developments of the war. For instance, in April of 2013, a large battle was being waged outside of the Great Umayyad Mosque where a hidden enclave had been operating. Fearing that the minaret of the building might be destroyed in the escalating fight, another nearby enclave decided to intervene by creating a diversion, down the road, away from the sanctuary site. Distracted, warring parties retreated from the site, allowing international forces time to deploy tear-gas drones to disband the skirmish.

140 Ibid.
Figure 135. (left) Nodal Map of Enclaves, High Points, and Drop Points. Image by author.
Figure 136. (right) Conceptual Tunnel Network Between Enclaves, Growth Over Time. Image by author.
Figure 137. (left) Aid Network Between Enclaves and Drop Points. Image by author.
Figure 138. (right) Visual Networks Between High Points and Drop Points, Enclaves, and other High Points, respectively. Image by author.
Figure 139. All Old City of Aleppo Nodes and Networks, Map. Image by author.
As another year passed, the battle over Aleppo grew ever greater. Assad’s forces took to the skies, intensifying their air assault on the city. Attempts by rebels and extremists to infiltrate enclave networks also escalated, leading to the underground evacuation of a number of enclaves throughout the region. Before Assad’s Russian allies could take up arms in the fall of 2015, the enclaves had begun to expand their networks into the visible public sphere. No longer could they hide away, painstakingly watching their city deteriorate. Action was necessary.

With the advent of aerial attacks, civilians quickly deployed their scaffolding techniques across the city, blanketing the urban fabric with an intricate web of protection. Using a plethora of fabrics, sandbags, and rubble, the exterior of the enclaves, as well as a multitude of decoy sites, were refortified with new vigor. Space blankets were repurposed to distort the views from above. High point observers used mirrors and static radio waves to disorient helicopter pilots hovering over the city. Some scaffolding was even converted into chimneys under which large bonfires were set. Large plumes of black smoke coated the skies, limiting air visibility and rendering the ground conditions safer for travel.
While these efforts defended the enclaves and diminished the impact of attack, aerial assaults persisted, rendering large swathes of the city unoccupiable from the damage. Lives were undeniably lost and many civilians attempted to flee the city once again. Confident regime forces marched through the charred city streets, winding their way between the rubble and debris to the foot of Aleppo’s great Citadel. Unbeknownst to these forces, however, the world watched on. Hundreds of civilians, phones in hand, streamed the brutality of their onslaught from the confines of their enclaves. As troops made their weaponed ascent to the top of citadel an eerie tremor shook millions of onlookers.

At the top, a few hundred civilians awaited their end. Unable to escape through their collapsed tunnel networks, men, women, and children huddled together, faces peeking out between the merlons of the fortified castle walls. For the next few hours, the only sounds that could be heard were their distant cries for help.

No amount of scaffolding, decoys, or clever thinking could divert the onslaught of a brutal quest for control. Tactics, however intelligent or meaningful they were, could not end the war nor stop the violence. Aleppan tactics were not all prevailing—but that is not to say that they didn’t have power.

7.4 A Future (Phase IV)

Upon viewing the atrocities of Aleppan Citadel, foreign powers unanimously agreed to intervene in the Syrian War, overthrowing Assad’s regime. Having seen the evolution of these autonomously governed enclaves, the international community allowed Aleppo to continue to operate as an independent socio-political entity. The resilience of these self-organized people was considered phenomenal by the international community, who wished to support their endeavors to rebuild the city. They saw Aleppo as an opportunity to support a strong community in their quest to rebuild during a period of peace.

Using tactics that had gotten them through the war, Aleppans began to pick up the pieces of their city. Surviving enclaves became sites for organization, functioning as temporary shelters for those who had lost homes. Some of the defensive scaffolding structures from the end of the war were deconstructed and repurposed to stabilize other structures which risked toppling. Free food networks and schools began to pop up in places where space was made available through the clearing of debris. Bomb craters even turned into
local gardens. Of course, some things had to be removed. A section of the Souq al-Madina was so horribly damaged that repairs could not be made. Using scaffolding and rubble, a new addition was erected on the site, replacing lost storefronts.

This era of regeneration was uplifting of course. Many young people danced joyously through the streets on the one year anniversary of Assad’s topple from power. But this era was also plagued with uncertainty. Autonomy during the post-war era was a means of rebuilding and security. No one knew what the future of the city might hold or if another war was moments away. It was slow, at first, but daily life became more and more ‘normal’ over the years. Markets thrived once again. The daily call to prayer echoed through the city streets. Children frolicked about, bartering candies amongst one another. But Aleppo remained marked; rusting scaffolding and patched bullet holes etched the memory of the Syrian War into the fabric of their beloved city.
Figure 142. Visual Connection Between Enclaves and High Points, view from the Great Umayyad Mosque to the Citadel. Image by author.
Figure 143. (top) Diagrammatic Growth of Scaffolding Tactic around the Great Umayyad Mosque, Plan Series. Image by author.

Figure 144. (bottom) Growth of Enclosure Over Time, Section Series. Image by author.
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Figure 154: Full-Scale Excerpt from Section B-B (see Figure 73). Image by author.
Chapter 8: Agency in Havoc

Perhaps a city which dates back millennia will date forward tens more; then again, perhaps not. Undoubtedly, Aleppo is forever marked by the pain that it endured over the last six years, and that the country of Syria continues to endure through today. Chaotic times are the moments that history remembers the most; the moments that can define a culture or erase it completely. This thesis aims to think beyond the traditional project-based role of the contemporary designer and explore how our skillsets can be used for a greater, more humanistic goal. When it comes to havoc, needs are always in flux and conditions are ever changing, but a community’s overarching goals remain relatively static. For Syria, the goal is to establish a true democratic state in a country where injustice runs rampant. This goal, in conjunction with numerous other contributing circumstances, is what led to the havoc of the Syrian War.

Like time, place is not static, nor can it be in the midst of havoc. Architecture and preservation strategies can be interpreted as tools that can be taught to locals. Civilians can then implement such tools as they see fit, adapting them to their particular context of havoc. Over a span of time, grassroots innovation can transition cities from chaos to peace with the aid of our fields. By thinking about the role of designer as both a visionary for the future and a strategic thinker of the present, architecture and preservation can help civilians survive havoc and work for their own endeavors.

Now, such a level of agency, intent, and purpose can be applicable to many places and havocs, however, this thesis focuses on historic sites and how interventions can be both affective and sensitive to heritage. This is because historic sites, like the Old City of Aleppo, have traditionally maintained a stigma which prevents many from thinking they are adaptable. While we are globally disgusted when historic sites are damaged or destroyed, many don’t think that our professions have the ability to intervene during such times. This thesis not only asserts that the fields can intervene in havoc, but that they must.

By having a clear, human rights agenda, preserving the fabric of a historic city can be supported by a greater endeavor, the survival of a civilization and their culture. In a way, this thesis is meant to reduce our egos, leveling our sight to that of a community in need. Historic buildings are emblematic of the strength of a
place, but it is people who turn culture into heritage. Without Aleppans, Aleppo is but a shell of its former existence.

While the fields of architecture and preservation are dissimilar at times, we are intrinsically tied by three common threads; the built environment, human need, and time. This thesis has attempted to blur the lines between the fields by means of expanding upon these commonalities. By preserving cultural heritage sites we can extend our influence to help preserve and build up communities and vice versa. It is no longer about just the built environment, but about the networks, cultures, and daily lives of a people that are critical to support and protect. We can horizontally enter into the complex networks of conflict by contributing our critical expertise to on-the-ground activists in their struggle for emancipation. We can collaborate with other disciplines to protect human rights. We can imagine what an alternative future could look like. And we can choose the side of history we want to be on.
Bibliography:


Appendix I: Arabic Architecture Glossary

**Ablaq:** The striping of different colored stones in a building

**Bab:** Gate or entry into a walled area.

**Caeseria:** A workshop for craftsmen, often located close to souqs and khans.

**Caliph:** An Islamic ruler who is thought to have been a religious successor to the prophet Muhammad.

**Hammam:** A public bath house

**Haram:** A prayer hall, as in a mosque

**Iwan:** A vaulted hall open on one side, similar to a colonnade.

**Jami’** : Mosque; a place of worship.

**Khan:** Persian for a caravanserai; merchant quarters which serve as a trading base, hostel or inn, and has storage space for merchants, stables, and a mosque.

**Kishk:** An Ottoman era building feature of a protruding wooden oriel screen (kiosk) which can be found on the exterior facades of some courtyard houses.

**Khanqa:** An Islamic monastery where mystics (Sufis) lived and worked.

**Madina:** An old, ancient, or historic city (as in the Historic Medina of Aleppo).

**Madrasa:** An Islamic school

**Maristan:** An asylum or hospital.

**Mashhad:** Shrines.

**Mashrabiya:** A type of window with carved lattice-like woodwork inscribed within it.

**Mihrab:** A niche in mosque located closest to Mecca, which indicates the direction of prayer.

**Muqarna:** The honeycomb ornamentation around the doorway of a main entrance.

**Riwaq:** A courtyard surrounded by arcades.

**Satura:** A deep water well.

**Shadirwan:** A weir or a small dam over which water flows.

**Souk, Souq, Suq, or Suk:** An Arabian marketplace or bazaar for the buying and selling of goods.

**Qa’a:** A domed entry hall of residential buildings during the Ottoman Empire.

**Qibla:** The direction of prayer towards Mecca.
Appendix II: Interview with Loubna Mrie

The following is an excerpt from a phone interview conducted with Loubna Mrie on December 3, 2016. A Syrian activist and commentator on Syrian and Middle Eastern affairs, Loubna left the country in 2014. She is currently a political refugee in the United States pursuing a degree at New York University in Near-Eastern Studies. The goal of this interview was to get a better sense of the Syrian Revolution from the eyes of an activist. Specifically, I wanted to find out what revolutionaries like Loubna set out to do in 2011 and what ambitions they have for the future of their country.

EG: You attested in your interview with the Guardian in 2012, and again in the Syria and the Left discussion, that this revolution fights for “dignity and democracy.” What alternative forms of political and social organization do you think would enable and protect dignity and democracy in Syria? What type of political future do you want to see in Syria?

LM: I can’t think about an ideal democracy because people are not thinking about the future, they are thinking about survival. I have no idea how the conflict will end, but if we care about Syria, it is up to us [refugees] to help the civilians to shift [the country] from a struggle to survive to a struggle for democracy. In terms of the future and rebuilding, I feel that people who are living in exile need to focus on this. They don’t have to worry about just surviving everyday like the civilians in Aleppo do. No matter what the demonstrations will continue against the government, as they do during the ceasefires. In this way I’m not worried about the future of this country because there will always be people against Assad and his regime. No matter what, though, the killings need to stop.

EG: Can you describe some of the current humanitarian work being done by grassroots organizations during this war in Aleppo?

LM: Most of the humanitarian or grassroots groups in Syria are concerned with the day-to-day survival of people; food, shelter, aid. The other main groups are the media activists. These are local, citizen journalists  

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who became reporters, took pictures, and did research of the country during the war. They usually do not have any experience. This is unique to Syria because you didn’t really see this type of media activism in other countries like Egypt or Libya. This is how I got involved in photography and in the revolution. We do it because we need to get this news out to keep the revolution alive.

**EG:** Many have said that they want the country to ‘go back to the way it was’, but as a Syrian architect Marwa Al-Sabouni (based in Homs) has stated, that is the last thing that this country needs. She says that to go back to the way things were would be regressive, and would destroy everything that the revolution fights for. She asks ‘why not wish for better?’ What, in your opinion, is that better state for Syria?

**LM:** I think the built fabric should go back to the way it was, yes, but we cannot have a country if it goes back to the way it was politically. The only way to fix Syria is to demand accountability for all people on all sides of the conflict. There are two initial steps that need to be taken towards peace and resolution in our country. The first is to establish a ceasefire where all sides drop their weapons. The second step is to establish a system of accountability for all sides where all people who committed war crimes are held accountable. I don’t see this happening in the next 5, 10, maybe even 15 years, though. The trouble right now is that the opposition [rebel forces] is divided and doesn’t have a clear agenda; they are fighting the government and radical forces at this time.

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