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Abstract
Damaged infrastructure and society's sense of ownership has to be rebuilt simultaneously during the aftermath of civil conflicts. Otherwise, heritage can become a barrier rather than an aid to integrated recovery. Syrian heritage is protected and monitored by the Antiquities Law; however, this law has not been updated since 1999. Thus, it is unable to deal appropriately with the post-war situation. When international actors and funders started reconstructing heritage sites in 2016, they could not rely on a central governmental heritage strategy, so many developed their strategies and agendas. The fragility of Syrian law compared to the international agendas resulted in various treatments and actions. While some projects have achieved a high quality of protection, others have not considered integration within recovery plans. This led to a research gap on the best ways to carry out heritage protection activities in Syria.

This paper fills this gap in knowledge by describing the policy environment in Syria regarding the most frequently applied treatment and action methods while differentiating the treatment models and patterns that align modern purposes with authenticity. The results include a comparative classification strategy showcasing the Syrian conservation practice, highlighting the shared ideals, aims, and parameters. The developed assessment method and classification system can be applied to objectively determine the best ways to deal with any new heritage project in the Syrian context.

Keywords
Syria, heritage, post-conflict reconstruction, classification method

1 Introduction
The asynchrony of heritage treatments and the various patterns of objects, people, and events creates tension between the contemporary and the authentic, or a paradox, namely, the possession of heritage as a symbol of modernity (Kirschenblatt-Gimblett, 2004). Promoting the correlation to the built environment (Bishop, 2014) and preserving heritage should express the relationship between people, places, and the past. Furthermore, to ensure that heritage is an aid rather than a barrier to recollection, dealing with heritage, particularly during civil conflicts, whether through restoration or reconstruction, must be centred on recovery in light of promoting people's sense of continuity (Graham et al., 2009).

The March 2011 outbreak of civil unrest and the following armed conflict in Syria was accompanied by a fluctuation in damage to the cultural heritage. The damages to the heritage landscapes, including their destruction, looting, direct shelling, and demolishing, are described in the literature (Abdulkarim and Kutiefan, 2016; Brodie, 2015; Perini and Culiffe, 2015; Qassar, 2015). Unfortunately, the conflicted parties did not consider these buildings; in fact, the opposite has occurred. Heritage buildings and sites became battlefields and were also used as military bases and headquarters (Jammo, 2015). Consequently, the effects of the crisis are evident on heritage buildings and historical sites all over Syria.

The Syrian Antiquities Law focuses on sites rather than built heritage. To fill this policy gap, each city generated its vernacular building codes that preserve its historical identity, even though these roles and building codes still require editing (DGAM, 1999). In addition to the main threat of conflict and armed action around the country, threats to proper implementation include limited territorial governance and planning, unconstrained tourism, loss of indigenous knowledge, and global changes in the economy and the environment (Garzillo et al., 2020).
Since 2016, the armed conflict started to decline in Homs and Aleppo, and various actors and funders have emerged on the ground. Furthermore, the combination of law and various actors’ indicators allows us to track restoration strategies and approaches.

A research gap exists in Syria regarding best practices for heritage protection. The Syrian community has a mutual understanding that conservation and restoration is a property repair, which may bring down the historical value of a property, especially during conflict. The fragility of Syrian law compared to the international agendas has led to different and overlooked treatments and measures from one location to another over the last decade.

This paper discusses "How to classify the Syrian heritage to conduct the best heritage protection activities?" Firstly, the paper presents an extensive literature review regarding the impact of the armed conflict and the Syrian practice in some cities as shown in Fig. 1. Secondly, an analytical observational methodology has been used to present the significant indicators featuring the built Syrian heritage during the period (2011–2021) by reviewing a group of restored or in the process of being restored buildings.

2 The relationship between conflict situations and restoration practice

The main focus in heritage recovery should be the historic cities and context rather than individual monuments once the needs of the survivors have been met. As to Bold (2018), the need for reconstruction is clear, but the requirement does not prescribe how it should be done. Since there are no templates for war recovery, each case has its issues and needs.

When reconstructing heritage, authenticity is regarded as a "contested" and "culturally contingent quality". As part of the 1994 Nara Conference on Authenticity (ICOMOS, 1994) and the 2013 revision of the Burra Charter (Australia ICOMOS, 2013), a wide range of balanced attributes are considered, such as function, memory and spirit, as well as the 2005 Faro Convention of the Council of Europe, which stresses the importance of involving everyone in the community in the ongoing process of defining and managing cultural heritage (Council of Europe, 2005).

The challenging concept is conducting Authentic Reconstruction. Heritage professionals must look beyond focusing on material fabric and comprehensive documentation if they are to position themselves as vital contributors to an accelerating trend in the built heritage. One to which external assessment is no substitute for broad understanding and engagement with the directly concerned communities and corresponding political realities (Bold, 2018).

Brosché et al. (2017) believe that a deeper understanding of the motives behind attacks on cultural property can facilitate more precise policies for managing cultural property in conflict areas. Moreover, they identify four motivations:

1. *conflict goals* where cultural property is targeted because it constitutes a key issue in the conflict;
2. *military-strategic* where cultural property is targeted in order to gain tactical benefits;
3. *signalling* in which cultural properties are targeted in order to illustrate commitment;
4. *economic*.

ICOMOS defined the post-conflict recovery reconstruction with three examples. The *modernist approach*, with the reconstruction of the cultural centre of Beirut in 1994. The *revivalist approach*, with the rebuilding of Warsaw’s Old Town, is the most faithful and comprehensive reconstruction in the history of architecture. The *symbolic approach*, as the Kaiser Wilhelm Memorial Church in Berlin (ICOMOS, 2017). On the other hand, Bold (2018) defined two vital approaches: transformative and facsimile.

Syria’s post-conflict heritage reconstruction is one of today’s most pressing challenges for returning communities and heritage professionals. Authentic reconstruction, which does not extend its reach in Syria, offers vital transferable indicators of the genre of open-mindedness and commitment needed to nurture socially and culturally sensitive outcomes.

Fig. 1 The cities that are listed in the research-map source (d-maps, online)
3 Heritage in Syria

Heritage in Syria is typically divided into two lists. First, some sites are listed by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as World Heritage Sites. These are the ancient cities of Aleppo, Bosra, and Damascus, the villages of Northern Syria, Crac des Chevaliers and Qal'at Salah Ed-Din, and the site of Palmyra (UNESCO/WHC, online). All these sites were mentioned in 2013 on the list of cultural sites in danger, either due to their direct location or being close to armed conflict locations (Alhayek, 2018; Borghese, 2015). The second list is the national archaeological sites, including archaeological hills and archaeological sites scattered in valleys, hills, the banks of the rivers, and the depth of the desert, the archaeological arches in the mountainous highlands, and the archaeological buildings spread throughout most of Syria, 127 of which date back to different periods and have different historical and archaeological significance (Abdulkarim and Kutiefan, 2016; Alhayek, 2018).

3.1 Heritage and community correlation

Many discussions in the community are about the value of protecting heritage. However, this usually refers to the role of conservation (special treatment for what is more valuable) or heritage management. The need to protect a site, monument or object is based on a shared perception of their value, which we label heritage. However, what happens when people do not know the value of archaeological sites or ancient monuments? These items are no longer understood as heritage and as needing protection (Qassar, 2015).

Many studies (Du Plessis, 2002; Qassar, 2015; UNESCO, 2003) have shown that the low level of development in many developing countries inhibits culture and historical knowledge, which blocks the progress of cultural development strategies. Consequently, the most vulnerable global heritage sites are found in countries with war and crisis, political instability, or rapid economic transformation. Losses can go undetected for many years, with sites getting little attention from the local or international community (GHF, 2010).

Usually, tourism is the most straightforward way to experience heritage and develop a sense of ownership and value. However, tourism is unaffordable for most Syrians since many sites are far from public transportation (Qassar, 2015). This creates a lack of knowledge about pre-Arab and pre-Islamic history, which in turn reduces the sense of ownership felt by Syrians. As a result, much of their cultural heritage is not appreciated and will not be protected when it is not valued.

3.2 Syrian built heritage sites

The Arab conquerors, since the Omayyad period, rather than establishing and building new cities, settled in already established cities and villages. Furthermore, Islam regulated urban society and determined the essential elements of urban culture, influencing the early formation of Roman and Hellenistic cities in Middle Eastern urban development in general. The Islamic urban approach defined the structural core of cities that still exist today; both Aleppo and Damascus are good examples of cities developed in a typical Islamic style, with features still visible Fig. 2 (Lababedi, 2008). Still, there are several exceptions to the Islamic style, like Maaloula, a Christian village that has an exceptional architecture and location (Aldaher, 2021). However, the Syrian city is typically a vernacular centre grouped within a rich heritage.

Despite its unique character and residential activities, the heritage building is still occupied by administrative, educational, religious, touristic, and commercial activities,
which creates development pressures (both urban and demographic) within cities, exacerbating and adding to existing problems (Orbašli, 2007).

The main issues before the conflict began were the destruction and degradation of old buildings, traffic, lack of parking spaces, and the fragile measures of heritage protection. Currently, conflict dynamics dominate the political scene and bring the fragile relationship between community and heritage into even sharper relief. The crisis also revealed the fragility and vulnerability of community and heritage protection in many contexts. An essential part of the challenge is recognising and addressing the full range of values inherent in historic cities (Barakat, 2021). By looking into the Syrian case during the conflict and post-conflict zones, we see that restoration and reconstruction within the vernacular fabric vary according to location, local mentality, availability of materials, and financial parties. These interventions respond to post-conflict needs and provide replacements for houses, shelters, or businesses that have been destroyed. In addition, they promote economic recovery by restoring cultural goods, services, and tourism.

### 3.3 The legal landscape of the Syrian built heritage

The Syrian Antiquities Law No. 222 was legalised on October 26, 1963. Over time, many adjustments were made; the last modification was in 1999. Chapter II of the Law concerns the legalisation of fixed antiquities and heritage constructions in the restoration and conservation section. Section 3.3 covers general topics, restoration methods, and materials (DGAM, 1999). Though the Restoration code has the same structure for all governorates in Syria, it varies to fit the primary aim of protecting as much of the original styles and scenes of every city. In general, the Directorate General of Antiquities and Museums in Syria (DGAM), in cooperation with the government municipalities and other parties, led the implementation of this approach where an improvement in the building’s appearance is considered a need to preserve its cultural and artistic value.

In the meantime, ownership issues have emerged after the internationally controversial Law No. 10 of April 2018, which enables the government to freeze assets and seize the property of (alleged) members of the opposition (Asseburg, 2020; Ministry of Local Administration and Environment, 2018). It extends the provisions of Legislative Decree 66/2012, which sanctioned the establishment of Marota City and Basilia City in the Governorate of Damascus (Ministry of Local Administration and Environment, 2012).

It does not permit the expropriation of private property. Instead, it converts a proprietor’s land ownership into shares in the new development. Once the decree has been issued, the local council authority has one week to request a list of all pre-existing owners from the competent authorities. The oddity is that owners whose interests are not recorded in the Land Registry shall declare their interests within 45 days of such notice being published via the media outlets, which is difficult in such a short period.

#### 3.4 The national and international recovery actions in Syria 2011–2021

Since Cultural Heritage is the community’s shared memory, the DGAM, national and international NGOs have appealed to keep cultural heritage out of any dispute since the crisis intensified in the summer of 2012 (Abdulkarim and Kutiefan, 2016).

Realised projects include damage assessment, improving the quality of the museum records or sites, collaboration with international and local authorities, conducting campaigns, events, exhibitions, and workshops, and creating reports and maps (Perini and Cunliffe, 2015). The Syrian Government budget provides the core funding for the DGAM projects. The grant also covers the excavation works in safe cities like Damascus, Tartus, and Sweida (Abdulkarim and Kutiefan, 2016). Local actions in the damaged cities can be seen in guarding museum properties and helping to protect heritage sites (Perini and Cunliffe, 2015). In safe cities, we can see locals restoring their properties as usual.

When the conflict started, some international actors had already been working in Syria. For instance, the German Government – Gesellschaft für Internationale Zusammenarbeit (GIZ) – was involved from 1992 in the Rehabilitation of Old Aleppo in association with the City of Aleppo and the Arab Fund for Economic and Social Development as partners. Since 2016, the GIZ has been working on the Rehabilitation plan, starting with damage assessment and supporting the locals’ return in association with all potential partners (Chibli, 2002). The Hungarian mission in Almarget and Crac des Chevaliers has the same working pattern as the GIZ, and the Aga Khan Trust for Culture AKTC works on Qal’at Salah ad-Din (Grandin, 2008). Since 2016, some other parties have also participated in the vernacular context reconstruction to speed up locals’ return to their cities. These actors often had no conservation background or a clear solution to ownership issues (Asseburg, 2020), so their work quality depended on location and contractors’ experience.

Different opinions exist regarding how Damascus handled heritage during 2011–2021. On the one hand, according to Asseburg (2020:p.7), "Syria's reconstruction broadly
represents the continuation of (civil) war with other means”. Hence, it does not respond to the standard approaches of international financial institutions, which would focus on a comprehensive nationwide programme with central planning, management and international funding. Diverse actors implement projects, mainly at the local level, that may not meet the population's needs. On the other hand, So-ufan (2018) sees that the politicisation of heritage issues in Syria is reflected in the attitudes of international organisations dealing with the issue.

3.5 A brief on the case studies
This paper presents the historical importance, issues, and treatments of three sites to present the heritage protection activity in Syria from 2011–2021 (Alsharq al-Awsat news. online).

**Damascus Citadel:** the Citadel is located in the north-west corner of the ancient walled city of Damascus, between Bab al-Faradis and Bab al-Jabiyah. Most medieval castles are located on prominent hilltops, but the Citadel of Damascus was built on flat ground at city level. Since 1979, the Citadel has been a World Heritage site that requires conservation and rehabilitation.

Issues on this site:
- the infrastructure and sewage system problems are related to the old city situation;
- due to the Syrian crisis, there has been no funding for rehabilitation;
- excavations are needed to understand the components of the castle.

Stakeholders are DGAM + World heritage committee.
Treatments on this site: the Italian Ministry of Foreign Affairs funded a collaboration initiative in the cultural project "Renovation and restructuring of the National Museum of Damascus and restoration of the Damascus Citadel" (Ottoni et al., 2008). Unfortunately, due to the sanctions, this project has been put on hold and suspended Fig. 3.

**The Roofed Souk in Homs:** a part of this souk goes back to the Ayyubid and Mamluk eras. Other parts go back to the Ottoman period. Issues on this site:
- the ownership issue played a part in preventing the people from restoring the property that they occupied before the War;
- although the restoration and rehabilitation works have been finished, the return of its owners is still slow because the destroyed shops and the interior parts were not included in the restoration project;
- the city municipality's decision to allow the transfer of the ground floors in the residential neighbourhoods to retail stores led to the dispersal of activity and encouraged the emergence of new markets.

Stakeholders are DGAM + UNDP + Homs Governorate + The executive contractors. Funders are Japan and other partners (Alsharq al-Awsat news, online). Treatments on this site:
in 2016, the project started. It was divided into four stages. It began with the rubble displacement, removing the vandalised metal roofs, installing others, and paving the floors with basalt stone. The project included 890 shops Fig. 4.

The new regulation plan of Ruad Island: the Island has historical importance as it is mentioned in many historical sources, such as the tablets of Ebla, the Torah, the Al-Amarna letters, and the annals of the kings of Assyria (Rey, 1871):

- the project will cut the visual connection between Amrit and the historic part of the island, as the tourism project occupies the entire eastern facade;
- the impact on the ancient castles' value is due to the permission of the third floor for residential buildings.
- the proposed plan did not address the problem of population expansion in the long term, and the most critical challenge on the island is the limited space in return for the population increase;
- a social imbalance resulted from the functional changes proposed in the new plan, which were based on the needs of tourists and not the needs of the residents.

Stakeholders are The Ministry of Housing + Ministry of Tourism + the designing company. Funder is Ministry of Tourism (SANA news, 2016). The applied items of the plan till 2021 are the permission to build the additional floor and allocate the dumpster Fig. 5.

3.6 Summary
Section 3 is a literature review presenting aspects of the Syrian heritage. The purpose has been to interrogate the gap in heritage protection during conflict and conflict aftermath to find commonalities and links to close this gap. Besides the funder agendas, the legal landscape and the community correlation with this heritage have a role in shaping the recovery actions made between 2011–2021.

The result is the creation of a milestone methodology on heritage classification that identifies key shared factors and indicators to investigate proper treatments in case of new restoration projects.

4 Methodology
Based on the review of twenty-two buildings and sites, covering most of the state's materials and construction methods that shape the heritage activities in Syria during the period 2011–2021. These buildings were selected from Damascus, Aleppo, Homs, Tartous, and Latakia (Fig. 1). The review recognised the major indicators defining heritage treatments and actions and grouped the buildings according to these indicators. Although, some other vital points and indicators are challenging to measure because of the crisis and its aftermath.

4.1 The major heritage indicators
We defined nine indicators. The measured indicators are as follows:

1. Community Participation (CP);
2. Cultural Promoting (CuP);
3. Modernism (M);
4. Progression during the crisis (P);
5. Recovery Response / post-conflict needs (RR);
6. Ensuring Safety and needs (ES);
7. Budget Limits (BL);
8. Function Compatibility (FC);
9. Location Type (LT);

The reviewed levels of the indicators are listed in Table 1.
4.1.1 Community Participation

Community participation is spontaneous or organised initiatives independently of institutional parties. Local actors' involvement aids in the recovery of local capacity. They are also more reactive to the community's demands. Local responses are competitive in utilising local materials and skills, restoring dignity, confidence, and faith in local capacities (Kousa, 2018). People at this action level do not ask for rewards since they are aware of their contribution to the larger picture of their cities' recovery (Aldaher, 2021; Cimadomo, 2015).

CP is rated in three levels: community initiative, partly participating community or no community participation.

4.1.2 Cultural Promoting

Every monumental intervention has a twofold significance. Besides preserving the building professionally, a missing piece of the community's identity must also be restored (Toshikj and Zsembery, 2019). CuP can be achieved first by recognising that replacement and conservation can be incorporated into restoration (Barakat, 2021). However, there is always a commonly perceived conflict of interest between protection and replacement, namely, whether to restore pre-built environments to the extent possible or to clear space for new improvements (Dimelli, 2019).

Moreover, whether in the case of conflict recovery or not, the Syrian restoration code and the SAL emphasise conservation to restore identity (DGAM, 1999), which makes heritage a barrier to local communities and property owners. At the same time, the replacement or improvement of the interior may provide buildings with a better future than abandoning them due to the complexity and cost of the full restoration process (Henry, 2013). According to Wijesuriya (2008), steps should be taken to require the documentation of all heritage activities to ensure that the community's needs are respected.

4.1.3 Modernism

Although the Syrian people value and preserve their heritage, the post-conflict reconstruction phase is plagued by challenges due to deteriorating economic conditions (Abdulkarim and Kutiefan, 2016). In creating reconstruction plans, it is necessary to deal with building within its historical context, not only as individual elements. So they have the potential to become one of the tourist attraction points, not only as isolated structures (ICCROM, 2016). However, as conflict responses, they can be erased and reconstructed for peace-building, mitigating conflict impact, or just modernising (Toshikj and Zsembery, 2019). Hence, several touristic projects have been announced and approved that may change the entire appearance of vernacular cities or locations. Modernism can be seen in areas and places with relatively old historical contexts that have already lost many historical features. Consequently, the heritage suffers from neglecting and competing with the structuring of multi-stories where there is a new commercial urban regulation plan (Chmutina et al., 2020).
4.1.4 Progression during the crisis
The government is usually the primary funder of restoration projects. Therefore, priority is given to repairing structures and places damaged by war and conflict to allow the return of displaced people to their cities. As a result, projects in cities uninfluenced by the armed conflict, like Tartous and Latakia, are more likely to be suspended. Ruad Citadel is an example of buildings that need maintenance, but at the time being, it cannot be considered a priority. On the other hand, structures or buildings on World Heritage sites are suspended due to the country's political situation and international sanctions. As such, the Damascus Citadel witnessed an integrated restoration project suspended due to the War (Ottoni et al., 2008).

4.1.5 Recovery Response / post-conflict needs
This indicator is found mainly in areas affected by the crisis. Many international actors and donors participate in large-scale reconstruction projects using huge resources and capacity (UNDP-Syria, 2017). Besides the professionals working hard to achieve high-quality restorations, some actors have no expertise in conservation. In these projects, swift and rapid labour leads to neglecting or ignoring local concerns and a restricted interpretation of heritage, especially in a place or city with political, religious, and social issues.

4.1.6 Ensuring Safety and needs
Despite the heritage importance, sites and cities, there is a lack of awareness about the qualities and how to preserve heritage (Qassar, 2015). There is even a lack of interest in preservation, mainly since the tourism industry decreased drastically after the conflict began (Abdulkarim and Kutiefan, 2016). Some emergency restoration of historic structures has been poorly carried out using modern materials incompatible with the original and historic urban fabric (DGAM, 1999).

4.1.7 Budget Limits
There are recognised limits on state budgets to support the built heritage (UNESCO, 2022). Even before the crisis, financial resources were finite, and most governments could not provide as much funding as needed for heritage protection (Soufan, 2018). Today, this limited funding is initially directed toward structures and places directly impacted by the conflict and whose repair is a societal necessity (Abdulkarim and Kutiefan, 2016). As a result, restoration work for buildings outside the destroyed areas was reduced to those most critical.

4.1.8 Function Compatibility
Heritage reuse is a challenging parameter to be measured during the conflict. The study estimates the reuse type. FC is evaluated as follows: the project's objective is to keep the original function, apply a new function, the implementation is affected by the crisis, or the restoration has been done, but the building has not operated yet.

4.1.9 Location Type
This indicator is fundamental since it affects most other indicators, especially in conflict zones. This indicator is related to funding, community, heritage lists, and risk factors. The building could be located on a site with more than a characteristic, like the Umayyad Mosque of Aleppo. Location characteristics in Syria are:

- world heritage sites like the Salah Ad-Din Citadel;
- areas have a relatively vernacular context, where there is still a living heritage, like Tartous old city;
- areas affected by the crisis, like the old city of Homs.

LT is evaluated in the following way: the location is a World Heritage city affected by the crisis, vernacular city affected by the crisis, or vernacular or World Heritage sites that are not affected by the crisis.

4.2 The chosen heritage sites
Twenty-two projects have been selected as case studies to measure the Syrian practice during the most challenging times. All the projects are affected or influenced by the ongoing conflict, but none have been completely destroyed. The buildings were selected from Damascus, Aleppo, Homs, Tartous, and Latakia, as shown in Fig. 1. The interventions that occurred on most of these buildings were major and contractive, except for the Art Studio, the DGAM Department, Al Margat museum, al-Madrasa ash-Sha'baniyya, and Al-Midmari mosque. The selected case studies present different historical periods and have different scales and shapes. The materials and building methods cover all the state regions except for the earth architecture of the northern-eastern side since there were no projects covering that type in the targeted period. At least one of the examples represents each of the original classified typologies (residential, commercial, religious, governmental, and cultural). These examples have been intensely investigated in light of the selected indicators. The data was collected from field visits, municipal reports, observations, and journals about the case studies, in addition to interviews with the architects in charge.
Table 2 presents the chosen case studies with basic information about them Fig. 6.

4.3 Analysis and discussion
The analysis is based on the relation between the CuP and M, considering the other indicators and the needs arising from this relationship. This process has derived nine groups of projects, as shown in Fig. 7, which form a base to classify new restoration projects in Syria. The classifying will method the enhancement of the Syrian built heritage. All the groups show that the decision maker should emphasise the idea that heritage buildings are especially worthy of passing on to future generations because they are a combination of original mass and meaning. For this study most of the suggestions are influenced by Heritage Council of NSW and Government Architect NSW (2019), which is a design guide for Heritage, as shown in Table 3.

5 Conclusions
In dealing with heritage, the Syrian landscape reveals a need to develop quantitative methodologies to reconnect and overcome the protection gap. Departing from this assumption, this article aims to provide indicators to frame the built heritage treatments. The analysis of these parameters and indicators is visualised and grouped based on similarity.

Furthermore, the research shows that these indicators could be divided into leading and extended factors. Community participation, Cultural promotion, Modernism, and Budget Limits are the leading factors. Progression during the crisis, Recovery Response / post-conflict needs, Ensuring Safety and needs, Location Type, and Function compatibility are the extended factors.

The paper demonstrates that, in practice, the fragile capacities of measures and rules with the community’s lack of appreciation for heritage cause violations related to CuP indicator when the funder is either private or non-specialist. These violations could be found in all LT indicator types. These violations could be found in all locations.

Measuring the mentioned indicators shapes an assessment method that could be objectively applied to any new project. This is a straightforward step to encourage locals to be sustainable and integrate work with their properties by providing a tool to access heritage projects. On the other hand, the conducted projects’ grouping simplifies suggestions on how to deal with projects belonging to each group.

<table>
<thead>
<tr>
<th>City</th>
<th>NO</th>
<th>Project</th>
<th>Type of ownership</th>
<th>Function before reuse</th>
<th>Reusing function</th>
<th>Source types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homs</td>
<td>1</td>
<td>Umm Al-Zinnar Church</td>
<td>Religious</td>
<td>Church</td>
<td>Church</td>
<td>b-c</td>
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<tr>
<td></td>
<td>2</td>
<td>Homs' dream</td>
<td>–</td>
<td>Vernacular context</td>
<td>–</td>
<td>c</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>The Roofed Souk</td>
<td>Public</td>
<td>Souk</td>
<td>Souk</td>
<td>a-c</td>
</tr>
<tr>
<td>Tartous</td>
<td>4</td>
<td>Serail Altojuman</td>
<td>Private</td>
<td>13 dwellings</td>
<td>Hotel</td>
<td>d</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Ottoman Bakery</td>
<td>Private</td>
<td>Bakery</td>
<td>Bakery</td>
<td>d</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Local's house no 1758</td>
<td>Private</td>
<td>2 dwellings</td>
<td>1 dwelling</td>
<td>a-d</td>
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<td></td>
<td>7</td>
<td>The DGAM Department</td>
<td>DGAM</td>
<td>Dwellings</td>
<td>Governmental</td>
<td>a-d</td>
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<tr>
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<td>Art Studio</td>
<td>Private</td>
<td>Store</td>
<td>Store</td>
<td>a-b</td>
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<td></td>
<td>9</td>
<td>Torossa Café</td>
<td>Private</td>
<td>No use</td>
<td>Café and restaurant</td>
<td>a-c</td>
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<td>Al Margat museum</td>
<td>DGAM</td>
<td>No use</td>
<td>Museum</td>
<td>a-b</td>
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<td></td>
<td>11</td>
<td>The Grand Hall Besetment</td>
<td>Private</td>
<td>No use</td>
<td>Multiple uses</td>
<td>a-d</td>
</tr>
<tr>
<td>Damascus</td>
<td>12</td>
<td>Hotel Beit Al-wali</td>
<td>Private</td>
<td>Dwellings</td>
<td>Hotel and restaurant</td>
<td>a-c</td>
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<td>13</td>
<td>AKCT’s Project</td>
<td>Private</td>
<td>Dwellings</td>
<td>Hotel and culture centre</td>
<td>a-c</td>
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<td></td>
<td>14</td>
<td>Damascus Citadel</td>
<td>DGAM</td>
<td>Mosque</td>
<td>Mosque</td>
<td>a-b-c</td>
</tr>
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<td>Aleppo</td>
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<td>Al-Midmari mosque</td>
<td>Religious</td>
<td>Mosque</td>
<td>Mosque</td>
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<td>The Umayyad Mosque</td>
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<td>Mosque</td>
<td>Mosque</td>
<td>a-c</td>
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<td>Souk al-Saqatiyya</td>
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<td>Souk</td>
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<td>a-b-c</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>al-Madrasa ash-Sha'baniyaa</td>
<td>Religious</td>
<td>Islamic Madrasa</td>
<td>Islamic Madrasa</td>
<td>c</td>
</tr>
<tr>
<td>Ruad</td>
<td>19</td>
<td>Albarj A’Fayubi</td>
<td>DGAM</td>
<td>No use</td>
<td>Café</td>
<td>a-b</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Ruad Citadel</td>
<td>DGAM</td>
<td>No use</td>
<td>Museum</td>
<td>a-d</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>The new regulation plan</td>
<td>–</td>
<td>Vernacular context</td>
<td>–</td>
<td>a-c</td>
</tr>
<tr>
<td>Latakia</td>
<td>22</td>
<td>Salah Ad-Din Citadel</td>
<td>DGAM</td>
<td>Archaeological site</td>
<td>Archaeological site</td>
<td>a-c</td>
</tr>
</tbody>
</table>

Source types: a: visit; b: from the architect in charge; c: literature review; d: personal practice
Fig. 6 The chosen heritage sites; 1: Umm Al-Zinnar Church (Wikimedia(b), online); 3: The Roofed Souk (by the author); 4: Serail Altojuman (by the author); 5: Ottoman bakery (by the author); 6: Local's house no 1758 (by the author); 7: The DGAM Department (by the author); 8: Art Studio (by the property owner); 9: Torossa Café (DGAM, 1999); 10: Al Margat museum (Wikimedia(c), online); 11: The Grand Hall Besetment (by the property owner); 12: Hotel Beit Al-wali (by the author); 13: AKCT's Project (DGAM, 1999); 14: Damascus Citadel (DGAM, 1999); 16: The Umayyad Mosque (Wikimedia(d), online); 17: Souk al-Saqatiyya (DGAM, 1999); 18: al-Madrasa ash-Sha'baniyya; 19: Albarj Al'ayubi (DGAM, 1999); 20: Ruad Citadel (DGAM, 1999); 21: The new regulation plan of Ruad (DGAM, 1999); 22: Salah Ad-Din Citadel (DGAM, 1999)
Fig. 7 Analysis diagrams of heritage groups A, B, C, D, E, F, G, H, and I
<table>
<thead>
<tr>
<th>Group</th>
<th>Included projects</th>
<th>Location</th>
<th>Issues</th>
<th>New project recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>Projects with community participation CP</td>
<td>Conflict locations</td>
<td>Misunderstanding of heritage protection</td>
<td>Encouraging the appropriate usage of traditional and contemporary materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Using contemporary materials like building 18 from Table 3</td>
<td>The decision makers should intervene to correct the proposed design when the indicator M measured as severely modifying the historical context</td>
</tr>
<tr>
<td>Group B</td>
<td>Projects that are a CuP, but they modify the historical context and surroundings</td>
<td>All locations</td>
<td>The new function sometimes is not accepted by the community</td>
<td>Group A recommendations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ensuring the community acceptance of the project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Involving ongoing community consultation with Elders, youth, government agencies, and the land council</td>
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<td></td>
<td></td>
<td>Applying restorative work through traineeship programmes</td>
</tr>
<tr>
<td>Group C</td>
<td>Typical restoration projects, which are CuP, and the modified parts are within the property borders</td>
<td>Not a conflict locations</td>
<td>Community participation is needed</td>
<td>The designer should be able to analyse the opportunities and constraints of the existing structure and environmental system in terms of sustainability and adaptability</td>
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<tr>
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<td></td>
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<td></td>
<td>Maximise passive heating and cooling and waste and water management</td>
</tr>
<tr>
<td>Group D</td>
<td>Projects containing a high level of the CuP</td>
<td>All locations</td>
<td>Community participation is needed</td>
<td>Ensure the community acceptance of the project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Preserve and sustain the heritage context and surrounding components</td>
</tr>
<tr>
<td>Group E</td>
<td>Projects of M that harm heritage</td>
<td>All locations</td>
<td>The best areas are selected for the establishment of contemporary activities</td>
<td>Limiting urban expansion on these sites</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Heritage is neglected since there is no budget to execute the proposed project</td>
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<tr>
<td></td>
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<td></td>
<td>Educate the people and decision-makers about the archaeological and geological importance of the site</td>
</tr>
<tr>
<td>Group F</td>
<td>Projects that have resulted in the loss of historical value</td>
<td>Conflict locations</td>
<td>The interventions do not respect historical value</td>
<td>To avoid classifying a new project as Group F</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Consider their character and history, and identify opportunities for the project and the heritage context to communicate through the design and selection of materials and details</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Explore how the project can add value for the community as well as the client and owner of the heritage site</td>
</tr>
<tr>
<td>Group G</td>
<td>Presents the buildings that the DGAM owns</td>
<td>Not a conflict locations</td>
<td>Limited budget</td>
<td>Create a business plan that can reduce the net costs associated with maintaining a heritage building by upfront investment that facilitates a more active role and future for a heritage site</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Community participation is needed</td>
<td>Need of supporting works</td>
</tr>
<tr>
<td>Group H</td>
<td>Presents the buildings that the DGAM owns</td>
<td>Not a conflict locations</td>
<td>No or limited budget</td>
<td>Group B recommendations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No community participation</td>
<td></td>
</tr>
<tr>
<td>Group I</td>
<td>Projects with no major supporting and restoration works</td>
<td>All locations</td>
<td>Community participation is needed</td>
<td>Designer should consider how the project can help promote equitable access and walkable communities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Group C recommendations</td>
</tr>
</tbody>
</table>


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