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"The Times They Are A-Changin'": The Built Environment as a Resilience Marker of Social Identities in the Transjordan

Introduction

The final verses from one of Bob Dylan's most famous songs, "The Times They Are A-Changin," sparked a heated debate on the profound meaning behind his lyrics, in particular the word "a-changin." Was it simply a bizarre way of writing "a changing," meaning that the zeitgeist of a society, and therefore its institutions, is in a continuous state of flux, or was it meant to be interpreted that nothing really changes? This particular term and the discussion it evokes has particular relevance for how Middle Eastern societies in the past, across time and space, dealt with different sort of "crises" (environmental, political, or economic), and in particular how (resilience) strategies manifested themselves within the built environment of archaeological sites. Some sites are entirely abandoned, while others shrank in size but continued to be occupied. At the same time, other sites continued to be occupied over a long period or experienced cases of reoccupation after a short period of abandonment.

Investigating these multifaceted and diverse strategies, what form they take on a site, and interpreting how the various factors (and perhaps "crises") may have influenced or tested these strategies is challenging. However, we may begin to carefully reconstruct patterns through cross-chronological parallels in some identifiable recurring features in the built environment of several sites across the Middle East. This paper will present some of the preliminary results of the postdoctoral project conducted by the author in 2018 at the Annemarie Schimmel Kolleg at the University of Bonn, which examined various patterns of spatial change and continuity on sites in the Transjordan and their relationship to the phenomenon of reoccupation and to potential social phenomena including "crises." specifically, it will be argued that despite

the onset of crises, the social structures of local rural communities, and their building traditions, might have helped to endure and survive them. In particular, the social flexibility of the "segmentary structures", i.e., societies "formed by several lineages which consider themselves as descending from a common ancestor" (Fabietti 2010: 349), and the economic adaptivity of so-called "pastoral" groups are two key elements that help explain the recurring reoccupation of sites in the Transjordan, following shortterm breaks in their occupation, and the maintenance of their organizational and spatial principles. It is important to underscore that the idea of continuity across periods of "crises," such as the Byzantine-Early Islamic Transition or the arrival of the Mamluks. This continuity should not be viewed as a complete "absence of change," as appears to be suggested in some scholarly literature, since evidence of change itself is ever present within settlements. The physical evidence for both continuity and change lies in what structures and features were maintained, which can possibly be understood in the light of socioeconomic identities, and reveal the reasons why such changes in the built environment may have (or not) occurred.

Patterns of change and continuity have been studied mostly in urban settlements, largely neglecting rural settlements. In this respect, Tall Ḥisbān represents a privileged case-study, for a number of reasons. The excavation of a series of residential complexes from the site of Tall Ḥisbān, near Mādābā, was an integral part of this research and represents the core data of this present study.¹

This methodological approach is particularly useful when trying to reconstruct re-occupational patterns and looking into a wide spectrum of possible causes. However, additional comparisons with better preserved sites, such as Jarash and Umm al-Jimāl, will allow us to draw some more information on patterns of spatial continuity and discontinuity, which are more difficult to discern at Tall Ḥisbān.

"Crises" and the Built Environment

"Crises" in various forms are recurring themes in archaeological research. Military invasions and other political shifts, extreme weather events (e.g., earthquakes, plagues, or droughts), socioeconomic changes (e.g., "nomadisation," "sedentarization," or the arrival of new social groups) are often presented as turning points in the history of a site or of an entire region. The ancient Greek term krísis has multiple meanings, most commonly interpreted as "decision or choice;" it was also used as a medical term meaning the "turning point in the course of a disease."2 The word, as well as the verb it derives from, implies the division between two or more different possibilities or states, without a positive or negative acceptation. In the case of an illness, the crisis represents probably the highest level of suffering, after which the patient either recovers or passes

with a recognized urban status: it was a *polis* in 2nd century AD under the Roman administration of the province of Arabia and later became a medina during the 16th century during the Mamluk occupation of the Balqa. Furthermore, the site was and still is investigated with a markedly interdisciplinary approach, taking a wide spectrum of archaeological evidence into account. I am particularly grateful to Prof. Bethany J. Walker (Rheinische Friedrich-Wilhelms-Universität Bonn; co-director of the Tall Ḥisbān excavation) for having me involved in the Tall Ḥisbān project since 2016 as a square supervisor and architectural surveyor and to the Annemarie Schimmel Kolleg for awarding me the one-year postdoctoral Junior fellowship, allowing me to participate on field work.

¹ Tall Ḥisbān was occupied almost uninterruptedly from the Iron Age until the Late Islamic period. It underwent frequent fluctuations in settlement strategies, with periods characterized—functionally and morphologically—by a more marked urban orientation, while others with a predominant rural orientation. Tall Ḥisbān was a predominant urban center in the region at least in two phases of its history,

² *Treccani Encyclopedia*, translated from Italian by the author: "crisi."

away. In this acceptation, it might be worth reconsidering the common understanding of the term within archaeological debates, opening to richer and more complex view of transitional phases rather than a strictly negative connotation.

This more nuanced conception of what a crisis connotes is particularly relevant to how we may perceive change(s) that occur within a settlement, especially those which were occupied over long periods of time. The built environment, including buildings and the other structural features present in a settlement, like roads and other infrastructure, carries the physical marks of change and can reflect the complex developments a site endured during its history. It therefore represents, with all its combined components, a precious resource to try to understand and possibly disentangle these complex and diversified developments and re-occupational patterns. As the medical use of the term "crisis" suggests, the changes undergone at a settlement in themselves do not have a positive or negative connotation. On the contrary, the transformation of settlement features is proof of dynamicity and activity, potentially indicating a positive improvement of former conditions. The debate on the Late Antique transformation of the urban built environment has more recently explored this hypothesis (Kennedy 1985; Di Segni 1995; Shboul and Walmsley 1998; Di Segni 1999; Avni 2014: 40-106), diverging from the former catastrophist views about the end of the Classic city (see for instance Ward-Perkins 2005).

More than a simple turning point, the term "crisis" often carries a negative connotation for a settlement due to the idea of a clear-cut disruption, often for the worse, between the periods before and after it. The topic of transition between two phases that are clearly distinguishable from one another, thanks to some sort of crisis, is frequent in the scientific literature and can be mentioned for several different chronological horizons.

There are several "crises" related to the transition between Byzantine and Early Islamic periods (among which: Donner 1981; Walmsley 2012; Sijpesteijn 2013; Avni 2014; Fowden 2014; Harper 2017: 199–287), which are particularly relevant for the present paper, for which a broad range of explanations have been offered. The debate around these transitional periods and crisis centers around the matter of discontinuity or continuity between them and prompts an important question: how disruptive was an event or a specific series of events?

In more recent discourse, absolute or monocausal explanations tend to be avoided to explain changes in the material culture of settlements, both urban and rural, as a result of a specific event or series of events, and more attention has been devoted to the identification of coexisting elements of "continuity" and "discontinuity" within the same transitional phase, questioning the use of the term "crisis" itself (see in particular Avni 2014: 300-53). It is beyond the scope of the present paper to consider the debate on "crises" during the Byzantine-Early Islamic and Middle Islamic transitions or to provide a detailed history of the respective periods in detail. Investigating rural settlements, though often understudied and thus less present in the debate, yields much useful data also for the interpretation of the urban evolution in respect to settlements' continuity and/or discontinuity when faced with periods of transition and crises. As recently suggested also by the author (Pini 2019a; Pini 2019b), rural settlements show evident signs of dynamicity during the last period of Byzantine occupation across the Middle East, especially between the 5th and the 7th centuries. This dynamicity is materialized in the development of a particularly consistent intermediate level of settlement that is not entirely urban nor entirely rural. The discontinuity with the earlier occupation phase is present in several Jordanian sites, including Tall Hisban and

Umm al-Jimāl, is particularly marked, since the earlier Hellenistic and Roman architectonical phases are almost entirely erased by the Byzantine developments. The newly created built environment, however, maintains a certain degree of dynamicity, particularly evident on the domestic level and when looking at blocks and quarters (see discussion below). At the same time, though, other sites and/or chronological phases—for instance the Late Byzantine-Early Islamic transition in almost all the case studies—show a less radical degree of transformation, without the systematic destruction of the previous architecture and urban features.

Despite the specificity of each single settlement and the multiplicity of possible developments that sometimes occur at the same time within the same site—as it will be shown for the Middle Islamic occupation of Tall Ḥisbān—the paper will draw attention to the two most recurring phenomena in the case studies: the "conjunctive" development of the built environment (i.e., the progressive accumulation of structures to previous constructions) and the systematic re-occupation of previous complexes, mostly in the form of reuse of pillaged building materials. A further element of interest is to recognize the same or similar patterns in chronological phases distant from one another, namely for the Classical and Late Antique phases and much later periods such as the Middle Islamic phase, when several sites experienced a renewed, or at least archaeologically more visible, architectural activity. The core of the archaeological evidence presented here will discuss the Middle Islamic re-occupation of earlier structures, showing an incredibly vast variety of forms. The comparison between the following case studies attests that the built environment in the Middle Islamic periods underwent changes following similar patterns that occurred during the Byzantine period. In some sites, the systematic re-use of earlier structures is spotted possibly at an

even higher rate during the Middle Islamic than in previous phases, with diversified patterns occurring even within the same site. Tall Ḥisbān, in light of its long occupation and its massive Byzantine and Middle Islamic remains, is an ideal case study to further investigate this systematic re-use of structures and place these patterns within the context of potential (resilience) strategies and facing crisis.³

Tall Ḥisbān, Crises, and Resilience Strategies in the Built Environment

The archaeological site of Tall Hisban (Hisbān in MEGA-J; reference number: 2735), north of the modern town of Mādābā, lies on top of a hill dominating a vast and fertile plain to the East and a wādī leading to the Jordan Valley to the West. The first archaeological investigations planned within the context of the Madaba Plains Project-started in 1969, with a series of archaeological excavations and regional surveys on and around the socalled "acropolis" of the site, the proper tall. Despite the privileged focus on the Biblical period, a major effort was reserved to the reconstruction of a general chronology of the settlement, or at least of the portion of the ancient site that is now enclosed by the fence of the archaeological park (Ferch et al. 1989; LaBianca 1990; Walker and LaBianca 2003; Walker 2013a: 161ff; Walker et al. 2017a; 2017b; Walker and LaBianca 2018).

Øystein LaBianca's "Food Systems Theory" (LaBianca 1990) was the first theoretical and systematic attempt to

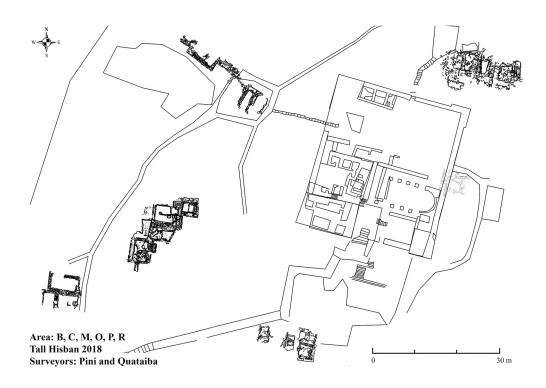
³ Most data on Tall Ḥisbān presented in the present paper were gathered during the 2016 and 2018 field seasons and are preliminary results of the study; the archaeological excavation is still ongoing and further campaigns are planned for the coming years. The results thus far have allowed to address the issue of re-occupation patterns within a site and represent an indispensable foundation on which future study and analyses can be based upon.

explain the settlement's dynamics and changes within the settlement across its long and almost uninterrupted occupation since the Iron Age until the final Ottoman phase. He described the site's history based on the first archaeological data gathered through excavation and regional surveys, as a constant fluctuation between "Low and High Intensity" phases, in which the site and its hinterland respectively testified either a more subsistence-oriented, pastoral and rural site or a marked urban, marketoriented and sedentarized one. The Iron Age, Byzantine, and Mamluk phases were already recognized from this first study as periods of major expansion and more intense occupation of the site, and possibly were more represented in the archaeological record.

The fluctuations in the settlement's built environment appear to follow the

different socioeconomic orientations the site assumed in the course of the site's history. It is not entirely surprising that most of the architectural remains on site are dated to the Byzantine and Mamluk periods, albeit it is impossible to precisely determine how the later re-occupations have affected our perception of earlier phases. It is indeed well attested, through both historical sources and numismatic finds, that from the 3rd century, the site benefitted from its official urban status being recognized as a polis (Mitchel 1992: 95-124). This is an impression that is also evidenced by large monuments-most notably a temple on top of the hill and a monumental stairway conducting to the acropolis-whose building materials were reemployed in later structures.

In more recent field seasons, and in particular from 2013, a new series of excavations focused on the area of the site



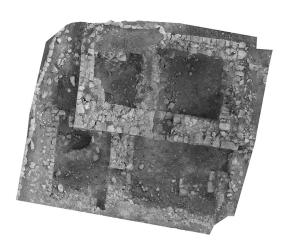
1. Plan of the site of Tall Ḥisbān (by the author and Quataiba; courtesy of Prof. B.J. Walker).

extending over the western slope of the hill (Fig. 1), where most of the Mamluk settlement has been documented so far (Walker 2013b; Walker et al. 2016; 2017c; 2018). This part of the slope was already noted as an area of interest during the first archaeological probes in the 1970s (Field C), which reported a series of terraces on top of which a scattered cluster of dwellings was set. One small, one-room structure is still visible at the site. However, apart from documenting the presence of such terraced spaces in the settlement, not much information was gathered on the exact evolution of the built environment at the time. One of the main goals of the recent excavations was to establish a more consistent chronology and description of the Islamic occupation of Tall Ḥisbān, especially in relationship to the previous phases of the settlement. Two fields have

been the primary focus of the fieldwork: Field P and Field O, where excavation is still in progress.

Field P is an isolated farmhouse, built on a rather flat area in the southern part of the western slope of the tall (Fig. 2). Excavations reported that the Mamluk structure rested entirely on the foundations of a previous, completely demolished Byzantine dwelling, of which a series of architectural features among which a consistent number of tesserae of a mosaic—have been recognized. In its original phase, the Mamluk dwelling consisted of a small, fenced courtyard, extending in front of the only entrance to the house. The type of this structure fits perfectly within Hirschfeld's "simple house" form of dwelling (Hirschfeld 1995: 24-44). In a later moment, possibly during the Late Mamluk period or even in the Early Ottoman, either the courtyard or the single room of the house





Tall Hisban 2018 Field P Surveyor: Nicolò Pini

0 5 m

2. Field P, Tall Ḥisbān (by the author).



3. Plan of Field O, Tall Hisban (by the author; courtesy of Prof. B.J. Walker).

were subdivided, while still maintaining the single entrance of the previous phase. A hypothesis proposed for the courtyard is that the subdivision of the space allowed the dwellers to keep different kind of animals. Excavations could not offer a more definitive explanation for the subdivision of the house in two rooms, which could have followed an increase in the number of dwellers or the appearance of new functional spaces. However, such developments are not rare in the site and do have several parallels in other settlement across the Middle East in different chronological phases (see discussion below).

Field O extends further north of Field P and consists of an extended cluster of farmhouses (Fig. 3). The distribution and the exact extension of the cluster is still yet to be determined, but so far, the presumed-to-be western aisle of the complex appears to be unearthed almost entirely and its

exact evolution and chronology remains to be understood. Presumably, the northern limit had also been identified, but the east and southern boundaries are still unknown. Despite our limited knowledge of the organization of the cluster, few features can be recognized and are particularly relevant for the topic of the present paper. The remains described are predominantly from the Mamluk period, with limited evidence but yet attested—of later Ottoman occupation of the complexes. However, recent excavations produced an increasingly consistent evidence of pre-Middle Islamic occupations, in particular dating to the Early Islamic period. Still, however, it was not possible to relate the finds from this period with certainty, especially a series of glass fragments dated to the Abbasid period, to standing structures (Walker et al. 2016; 2018). Similarly, in limited areas of the field, even earlier materials have been excavated, suggesting a probable, and not surprising, presence of activity already in the Late Byzantine period. Only further investigations will clarify the chronology of the cluster, as well as point out eventual reoccupation patterns.

Nevertheless, a general, relative chronology of the unearthed structures has been determined. First of all, the western aisle, and the general evolution of the structures discovered until now, show a similar development through progressive addition of structures to previous standing buildings, either still in use or ruined. Based on the architectural remains, it was possible to identify two probable "original structures:" the southern room, which opens to a possible courtyard with underground cistern to the East and a quite massive wall—apparently a corner—in the northern end, which most likely belonged to a ruined or

entirely demolished previous building (Fig. 4). To offer a dating to these two original structures is at present not possible, but when examining the building technique as well as their orientation, they hardly belong to a single complex or even to the same period. In particular, the northern structure presents quite large and well-cut blocks that might relate to a quite imposing previous building, similar to those found on the site in structures from the Roman or Byzantine periods. The southern room, on the other hand, presents features closer to the Mamluk structures and might be the first Middle Islamic building activity in field O attested so far, even though a previous building phase that is now absent cannot be excluded.

Afterwards, these two original structures were "connected" by the creation of two further barrel-vaulted rooms, progressively added proceeding from south to north. In the northern corner, the new walls—



4. The northern end of Field O in Tall Ḥisbān, looking west. Highlighted: the earlier well-laid wall (by the author).

consisting of rather small, roughly worked stones and limited evidence of clearly reemployed materials—literally englobed the older well-laid wall. In this phase, it is also possible to date another wall running eastwards and creating the northern edge of the "new" complex: this wall ultimately abuts against another rather massive, north-south running wall *ca.* 6 m long; its date is still impossible to establish, but might relate to an early phase of the complex (Fig. 4).

After being built, at least two of the rooms underwent spatial rearrangements: square 9—the northernmost room of the east aisle—was divided in two communicating areas, probably responding to a functional differentiation of the space; and square 12, whose relative chronology appears to be particularly challenging. The space created in this norther aisle is delimited on the southern end by a short wall, maybe forming some sort of platform.

In this area, accessible through a short ramp of stairs, a consistent series of plastered and beaten-earth layers were found, and it is possible that this was a specialized area for processing agricultural products. The lowest levels dug here revealed an earlier structure, connected to or at least related to, the main channel cutting the room from north to south. The date and the function of this structure is yet to be determined. Similarly, another installation on the opposite end of the square, and exactly in a tiny space formed between the stairs mentioned above and the outer wall of the eastern aisle of Field O, has not been entirely understood (Fig. 5). This is also due to the fact that it surely underwent a radical functional change at a certain point of its use: a second re-plastering of the small basin, in fact, a channel going under the stairs and possibly connecting the basin to the north-south main channel, was cut off and consequently



5. Basin in square 12, Field O in Tall Hisban (by the author).

filled. A hard but crumbly, reddish layer was found on top of the installation and is still under analysis: it might be informative on the second use of the installation.

Thus far it has only been possible to construct a relative chronology of the structures, with a limited chance to have precise dating: foundation levels have been reached only in small probes and the results are not conclusive. One of the goals for the next seasons is indeed to dig to foundation level of the already unearthed structures as well as determine the exact extension and spatial arrangement of the complex. However, the evidence gathered so far allows us to recognize at least two phenomena, which are understood as a recurring pattern not only in Field O, but in Field P as well, and also in other parts of the site, although not systematically recorded yet. The conjunctive development of the structures, i.e., the progressive addition of new rooms to already standing buildings and the internal re-arrangement, spatial and functional, of already existing areas. Both developments necessarily rely on the exploitation of earlier buildings. Nevertheless, the modalities, as shown by the two fields in Tall Ḥisbān, may differ consistently. In certain cases, earlier structures are simply englobed or modified to fit the new arrangement or function. This is the case of the well-laid wall in Field O or the northern room with installations in the same area. In other circumstances, the construction of new buildings follows a complete demolition of whatever structure that might have preceded it: this is well documented in Field P and likely in the southern room off Field O.

On the basis of what is possible to document at Tall Ḥisbān, and possibly further supported by the evidence discussed in the comparative case studies below, something can be said about the possible actors involved in the above-mentioned process. All the data suggest that the process of the development of the domestic house,

and to a certain extent the re-occupation patterns, are family driven. The diverse approach to pre-existing structures points to the hypothesis that, as argued elsewhere by the author (Pini 2020), the built environment in this area appears to follow a certain degree of flexibility that appears to characterize local communities that rely prevalently on pastoral—and more or less nomadic—socioeconomic strategies, as the population of Tall Hisban appears to have never entirely abandoned (LaBianca 1990).4 The process of the increase of habitable space might indicate that a major portion of a pastoral group needs to settle down in the settlement for longer periods of time. In addition, the creation of/conversion to new productive areas, especially when including installations, might suggest a more specialized economic strategy, yet still not at an industrial level.

Built Environment and "Change" in the Transregional Context

Similar ways of organizing the domestic and of developing residential complexes, in particular as far as reoccupation patterns are concerned, can be documented in several places across the Middle East and in different chronological horizons. The so-called "conjunctive" house has been described, among others, by Wirth as a direct evolution of an Assyrian type of dwelling (Wirth 2000: 359ff). Such typology appears to be particularly frequent in rural settlements, or at least in settlements that do not entirely belong to the urban sphere. In the latter case, they appear to be predominant from the 5th century onwards, with examples attested also in proper cities, which underwent important transformations in this period (Kennedy 1985; Di Segni 1995; Shboul

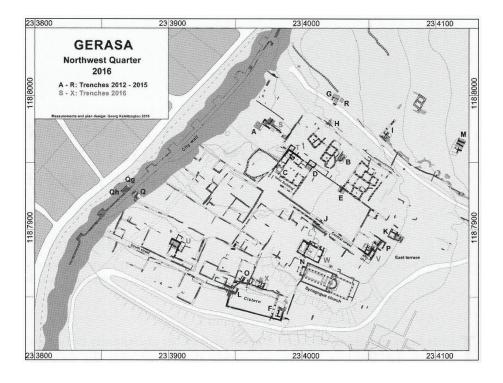
⁴ For a general discussion on adaptability and flexibility of pastoral communities, see for instance: Marx 1996; 2005.

and Walmsley 1998; Di Segni 1999; Avni 2014: 40–106). However, it is striking to recognize how a similar way of organizing the built environment was maintained over an extremely long period, with several examples from the Middle Islamic period that re-propose exact spatial patterns and architectural developments.

In this respect, Jarash represents a particularly useful term of comparison to Tall Ḥisbān for many reasons. Most interestingly, it shows how even in the case of a major classical *polis*, the status of the settlement can be continuously subjected to changes through time, following—or followed by—changes in the built environment. While it was one of the most important urban centers in modern Jordan at least from the Late Roman until the Abbasid period (*e.g.*, Lichtenberger and Raja 2018a; 2018b; Walmsley 2018), it was occupied as

a small village during the Mamluk period. Furthermore, it is possible to recognize the same "conjunctive" way of organizing and developing the domestic space for different chronological horizons. Within the general remodulation of the ancient classical city of Gerasa, the appearance of new residential complexes which can be described as "conjunctive" has been documented already from the 5th century (Gawlikowski 1986).

However, for the purposes of the present paper, it is more relevant to refer to more recent investigations undertaken in Jarash, which unearthed the remains of the Middle Islamic settlement of Jarash. Architectural remains from the Mamluk occupation thus far have been identified in two areas: the Zeus Sanctuary and the Northwest quarter. In particular, the development of a new small hamlet in the Northwest quarter of the ancient *polis* follows the same processes



6. Plan of Northwest Quarter, Jarash (Lichtenberger and Raja 2018a: 146 fig. 10.3; Courtesy of the Danish-German Jarash Northwest Quarter Project, Universities of Aarhus and Münster).

documented in Tall Ḥisbān (Fig. 6), offering a direct chronological and typological parallel. In general, the occurrence and the frequency of re-occupations of earlier structures is particularly striking as well as the progressive addition of structures that formed conjunctive houses and clusters of farmhouses (Kalaitzoglou 2018). The organization of the Middle Islamic village appears to be quite scattered, according to the available finds and surviving structures. Architectural remains from the Mamluk occupation thus far have been identified in two areas: the Zeus Sanctuary and the Northwest quarter.

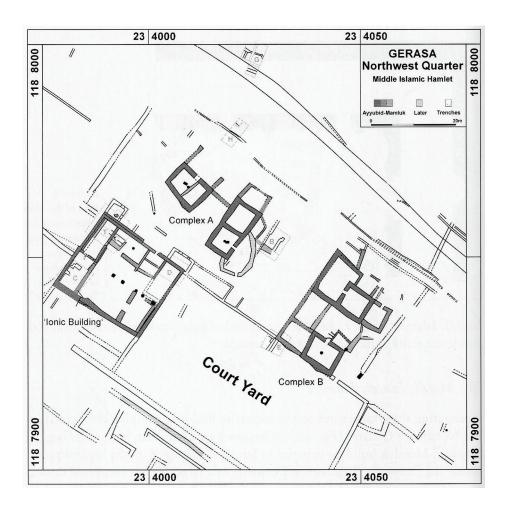
The major urban sanctuary of the Roman city, also known as the Zeus Sanctuary, was later re-occupied by domestic structures, which reused the still standing walls of the lower terrace (Rasson-Seigne et al. 2018; Kalaitzoglou 2018: 99-101). It is clear that the presence of the earlier structures of the sanctuary deeply influenced the Mamluk occupation on a "quarter" level: no clear clustering of different households can be detected, but the Middle Islamic structures are sparsely intermingled with Roman remains. However, the dwellings-at least four different complexes with rooms and sheepfolds-closely resemble the "simple" houses and small conjunctive houses described at Tall Hisban, in particular in Field P. In this particular case, it seems that the choice of re-settling this area of the site in this way was mainly influenced by the ability to take advantage of the large, standing structure still in place, which was also conveniently situated in a strategic and easily defendable position.

The Northwest quarter shows another more "standard" way of occupation with a cluster of different conjunctive houses (Kalaitzoglou 2018: 101–7). Additionally, in this circumstance, the re-employment of building materials and the re-occupation of a few surviving structures can be observed and is particularly evident in the so-called

"Ionic building," a complex named after two Ionic capitals re-used in the courtyard. The most interesting aspect of this small hamlet is not only the domestic architecture that consists of houses that resulted from the progressive addition of rooms around a courtyard (Kalaitzoglou 2018: 104 fig. 6.5), but the organization of the quarter itself. In fact, in addition to small private courtyards belonging to the single houses, a larger common courtyard was created, directly connected to the "Ionic building" and "Complex B" (Fig. 7). This "shared" space has been explained by a possible functional differentiation of the buildings composing the quarter (Kalaitzoglou 2018: 106f), where the "Ionic building" would have served a more public and administrative role, as suggested by its direct connection to the large courtyard, the size of the house, the probable presence of benches inside the rooms, and lastly the more regular plan.

It was also noticed that while the other complexes of the quarter developed outwards, by contrast the development of "Ionic building" proceeded inwards. The addition of new rooms to the "Ionic building" always took place within the limits of the already existing building or by subdividing the space's existing structures. This development resulted in a more rectangular and regular plan in respect to the two other complexes, where each new room, which never communicate directly with the earlier rooms, is explained by the addition of a new nuclear family in the building (Kalaitzoglou 2018: 106).

This hamlet and in particular its development might offer important hints for understanding Field O in Tall Ḥisbān. It is possible that in an earlier phase there was a series of "isolated" complexes, later connected by new rooms to form a single unit organized around a shared courtyard. Given the evidence from Middle Islamic Jarash, it can be also considered the eventuality of an evolution in the built



 Plan of Middle Islamic Hamlet in the Northwest Quarter, Jarash (Kalaitzoglou 2018: 102 fig. 6.4; Courtesy of the Danish-German Jarash Northwest Quarter Project, Universities of Aarhus and Münster).

environment dictated by some sort of functional differentiation.

Jarash and Tall Ḥisbān present features that are also regularly encountered in other regions in modern Jordan and Syria. For the purposes of the present paper, it is worth discussing one final site, Ummal-Jimāl, which will allow to highlight the geographical and chronological diffusion of the phenomena described earlier. Umm al-Jimāl is one of the most famous examples of the Hauranian architecture, characterized by the almost exclusive use of basalt as building material.

While there are other sites in Jordan and Syria that could have also served as worthy comparisons to Tall Ḥisbān and Jarash for their similarities in the spatial organization in the domestic architecture, ⁵ Umm al-Jimāl was chosen as it allows for the examination of a multiplicity of topics that are crucial for the argument presented here. In my opinion, the site represents the perfect example of a semi-urban or semi-rural settlement, a type

⁵ Such as the Syrian sites Mseikeh (Guérin 2008) and Sharah (Clauss-Balty 2010).

of settlement also described by Avni as a sort of urban hub in the countryside (Avni 2014: 194–6).

The appearance of this kind of settlement seems to particularly characterize the later Roman period and mostly Late Antiquity—especially the 5th century—in the ancient provinces of Siria, Arabia, and Palaestina (Pini 2019b): Umm al-Jimāl is indeed one of those cases. However, as the Middle Islamic settlement of Tall Hisban shows, the appearance is not limited to that period. This "intermediate" role of the settlement has a deep impact on its built environment, especially in term of functions that are required: rural features (i.e., elements that might relate more clearly with the process of agricultural products and/or orientated to a more subsistence economy) are side by side a clear mark of "urbanity" (administrative buildings, signs of socioeconomic stratification as well as traces of market-oriented production). Umm al-Jimāl's apex seems to take place in the later phases of the Byzantine period: the development of the site erased the previous settlement almost completely, whose remains are rare and scattered, but yet enough to certify the existence of a Roman-if not earlier-Umm al-Jimāl (for a comprehensive analysis of the site: DeVries 1998). For the most part, this first Byzantine development recalls closely what was documented at Tall Ḥisbān in Field P, where the Mamluk dwelling determined the complete destruction of an earlier Byzantine structure, or in Field O with the survived well-laid wall in the northern end of the complex. At the same time, Umm al-Jimāl exemplifies the coexistence of this way of reoccupying earlier site/structures, with a less destructive approach, where single buildings or rooms are functionally or spatially modified without a complete demolition of earlier structures—see for instance the socalled "Praetorium." In this process, as well as in the following Byzantine developments,

a particularly important role is played by the "conjunctive" way of organizing and modifying the built environment. The same seems to be described for later phases of Umm al-Jimāl, for which recent studies are gathering an increasing set of data (Osinga 2017: 105-41). In general, and this is not limited to Umm al-Jimāl, under a strictly architectural and spatial point of view, it is hard to distinguish clearly a Middle Islamic "conjunctive" house or cluster of farmhouses from a Byzantine one, not only in terms of morphology, but also in terms of the kind of possible developments the built environment might have undergone during the occupation of the building.

As mentioned earlier, Jarash and Umm al-Jimāl are just two case studies that show how some features and developments that are also documented in Tall Hisban are extremely widespread geographically and chronologically. In particular, the frequency of the "conjunctive" development of the built environment and the (to a certain extent) connected phenomenon of re-occupation of earlier structures. The evidence offered here is extremely limited, and more instances of re-occupation could be found, even within the sites presented, but it gives a first look at these phenomena. Like in Tall Ḥisbān, the built environment in Jarash and Umm al-Jimāl appears to undergo an extremely diversified fate over their long periods of occupation. In particular, it is interesting to document in both sites the co-existence in the same chronological horizon of the two general re-occupation patterns described earlier. One attesting the complete destruction of earlier structures, as in the case of the majority of the structures in the Northwestern quarter in Jarash or for the most part of the Byzantine development of Umm al-Jimāl. The other showing evidence for earlier structures that were re-employed and englobed in the new structures, such as in the Middle Islamic occupation of the Zeus sanctuary in Jarash or the "Praetorium" in

Umm al-Jimāl. It is also interesting to note the frequent connection between these patterns and the occurrence of the "conjunctive" houses (i.e., the progressive addition of new rooms or buildings to already existing and still inhabited complexes). This typology appears to be particularly frequent-even if not exclusive—in settlements inscribable in the "intermediate" semi-urban or semirural level. It is not entirely surprising, for instance, that even in the case of a clearly urban center like Jarash, this typology is documented for the first time in Late Antiquity, when the classical organization of the city was undergoing radical changes in morphology and function, suggesting to some scholars the idea of a "ruralization" of the polis (for a general discussion: Pini 2019a: 207-13). The issue of the type of settlement, or to be more precise, of its rank in a hierarchy, might appear abstract and too theoretical, but it has indeed important consequences on our interpretations, especially in our understanding of the actors at play in the development of the built environment.

Currently, the challenge is to offer a plausible explanation for the patterns just described. In my opinion, an important role played by social structure, most notably family groups, seems to be likely: considering a society and in particular to family-groups as the main actor(s) in the development of the built environment in sites of this region, especially in the rural or not entirely urban context, can indeed offer some potential answers to the questions not only surrounding resilience in a settlement during a certain period, but also on the maintenance over long periods of similar ways of organizing and modifying the built environment. Secondly, it might offer some hints as well to understand re-occupation patterns.

In this respect, the challenge is now to understand the reasons behind these different re-occupation patterns, which

seem to change not only within the same site in the same period, but even within the same complex. The data are thus preliminary and the present paper aims ultimately to problematize a topic that has been considered almost entirely on the regional and macro-levels or, on a more detailed level, in terms of the reemployment of building materials, which is in my opinion only one possible appearance of the re-occupation phenomenon. For now, it is only possible to bring forward a few working hypotheses, which may be confirmed by the archaeological record with additional data from further excavations. Convenience is most likely a guiding idea for several architectural strategies in antiquity, especially in a rural context like Tall Hisban; know-how is one further possible way of approaching the issue, even though gathering data might be a particularly challenging. Finally, possible ideological and cultural meanings need to be taken into account. Re-occupying already standing buildings surely represents an advantageous solution under an economic perspective, cutting costs in terms of time, labor, and building materials. However, building anew with reused materials architecturally and simply restoring a still standing structure, which requires limited interventions, are two radically different approaches, suggesting different knowledge and possibly different social and political networks connected to patronage systems. At the same time, reoccupation can be also culturally and ideologically loaded: perhaps a way of expressing and imposing cultural supremacy over the earlier owner or dwellers of the site or, on the contrary, the result of a resilience strategy adopted by local communities to face changes (political, socioeconomic, or even environmental) taking place on a broader scale than the single site. Pragmatism, different knowledge, and cultural resilience do not necessarily exclude each other, but the different relative

relevance of each one of them in this "triadic system" determines the differences in reoccupation. This "triadic system" is also tightly connected to changes in the role and function of the site within the regional and transregional contexts. Future investigations at the site will better define the issue, theoretically and methodologically, and attempt to offer more concrete answers to this extremely complex topic.

Conclusions

Were the built environments of rural settlements in the Transjordan then "a changin'" or "a-changin'?" The enigma formulated by Bob Dylan fits well into the main question raised by the analysis of the built environment in Tall Hisban and the other case studies. How can we explain the recurrence or maintenance of similar spatial patterns and ways of developing the built environment over a long period, in some case also after episodes of temporary abandonment? As mentioned earlier, the idea of continuity in forms of spatial organization, on different levels-from the single dwelling until the settlement in its entirety—is not in contrast with the idea of changes taking place in the built environment. Architecture and urban space have in their dynamicity one of the primary forms of resilience in order to meet the developing needs expressed by the inhabitants as well as in response of events taking place on a larger scale (e.g., political and administrative shifts). Change is therefore a constant feature in any living settlement. However, the continuity in some sites also determines the recurrence of similar forms of organization, pieces of "a-changing" evidence that are sometimes hard to explain.

The present paper presented a specific case-study with the intent of problematizing the issue of reoccupation of sites, which is a discussion that has been often dealt with on a limited scale, meaning single buildings,

and with an almost exclusive focus on the reuse of building materials form earlier complexes. It was shown how the reuse of building materials is only one aspect of the phenomenon of reoccupation, which in turn requires an extensive and systematic analysis, on a local, regional, and ultimately transregional scale.

Tall Ḥisbān was an ideal case study to start designing a method to approach this complex topic, by first identifying the main actors at play in determining different forms of organization of the built environment and in decision-making in relation to the reoccupation patterns. The evidence is necessarily limited to only one small portion of the site and requires further investigation, as well as the identification of further comparisons and a wider coverage of sites in the hinterland of Tall Ḥisbān; this is one of the goals that is intended to be pursued over the next field seasons.

The first results of this study strongly suggest an important role of society and social identities in the process of determining the forms of the built environment. The maintenance or the recurrence of similar family structures—yet, not necessarily the presence of the same families—in particular those described as "segmented," might have determined the survival of very similar forms of spatial organization over long periods, also after episodes of more or less prolonged abandonment of the site. In addition, other factors need to be taken into account and might have played an important role as well; economic conditions appear to be the most influential also on a family level. Adaptation to different economic strategies—one of the most characterizing traits demonstrated by so-called "pastoral" groups—as well as the improvement or shrinking of prosperity are likely to leave clear marks on the built environment, not unlike from other sorts of material evidence collected archaeologically. The flexibility that characterizes such "segmented" social

groups and "pastoral" economic strategies is clearly reflected in the architectural remains and might be explained as well as a form of resilience by local communities to face temporary crises.

It is not entirely surprising that the persistence of similar spatial forms or of similar ways of developing the built environment especially affect the domestic architecture, where the impact of more circumscribed family groups is almost exclusive: the chronological and geographical diffusion of the so-called "conjunctive" house is a clear hint to this respect. This type of dwellings is indeed the most easily modifiable, well-fitting the flexibility shown by segmentary and/ or pastoral groups. Following this idea, it might well be suggested that the complete abandonment of a site or a complete disruption of the former built environment not only physical but more importantly conceptually-intervenes exclusively when the resilience of the local societies is overwhelmed and brought beyond the survival limits. Circumstance for such disruptions can be different for time and modalities, ranging from a single, temporally limited but extremely intense event (e.g., the complete reconstruction of a settlement following an administrative change, military invasion followed by a radical replacement of people, or incredibly destructive earthquakes) or, and that is in my opinion the more frequent case, by a rapid succession of small "crises." In conclusion, this paper represents a first attempt to problematize a series of topics in particular related to re-occupation patterns—which have not been considered systematically so far on rural settlements. It has shown how "a-changin" and "a changin" are ultimately two faces of the same coin. Within continuity in the built environment, manifesting itself for instance in the uninterrupted occupation of a site, there are elements of discontinuity, such as

functional morphological changes. At the same time, even within the morphological and functional changes, and in different period, the way the built environment is modified presents recurring features and patterns, as demonstrated by the persistence of the "conjunctive" type of houses and the frequency of the same re-occupation modalities.

Postscript

At the time that the article was written, the author was at the University of Bonn. At time of publication, he was conducting postdoctoral research at the Centre de Recherches en Archéologie et Patrimoine (CReA-Patrimoine) of the Université libre de Bruxelles (Belgium). The research project, "The different fates of architecture: reoccupation patterns in the Madaba Plains (Jordan)–ReMaPla," was performed under the supervision of Prof. Agnes Vokaer and funded by the IF@ULB Marie Skłodowska Curie COFUND action, September 2020–August 2022.

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