Natural and Cultural Aspects of the Development of the Marl Landscape East of Lake Qatina During the Bronze and Iron Ages

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إن هذا المشروع السوري البريطاني المشترك المتعدد الاختصاصات ومواسم العمل يدرس منطقة داخلية خصبة وطميّة تقع شرق بحيرة قطينة. بينت الدراسات التضاريسية للأرض أن الطبقة الفيضية الخصبة شكلها فيضانات النهر والذي يجري في أرض صلبة وصماء في العصر البلوستونسي والذي أعطى شكل مجرى نهر العاصي والذي حدث في وقت قريب جدا لتشكلات العصر الحجري القديم.

إن التحليل المبدئي لعينات من قعر بحيرة قطينة أشارت إلى أن الحد الشمالي يبين بشكل واضح طبيعة مائية دائمة خلال 4000 سنة الأخيرة على الأقل ، بينما الجزء الجنوبي من البحيرة أظهر فترات منتظمة من الجفلف بسبب الاستغلال الزراعي المكثف خلال فترات طويلة وهذا ما برهنته نتائج المدونات الآثارية على أنه عانى من الانتهاك المستمر ، فالتجمعات الاستيطانية خلال عصر ما قبل التاريخ تركزت على طول نهر العاصي ويلاحظ امتدادها وبشكل واضح نحو الشرق خلال أواخر الألف الثالث قبل الميلاد.

عدد من التلال الأثارية تتوضع على طول مجموعة من مجاري الوديان الموسمية على بعد بعض الكيلومترات إلى شرق النهر والتي تظهر إشغال متقطع منذ عصر البرونز المبكر في الألف الرابع والثالث قبل الميلاد إلى العصر الهليستي وهذه التوضعات التلية ييدو أنها أهملت خلال هذا العصر الأخير حيث وجد امتداد لتجمعات متناثرة بعيدة عن التلال وهذه النماذج من التوضعات الاستيطانية استمرت خلال العصر الوماني وحتى نهايته. وهذا يختلف عن منطقة شمال بلاد ما بين النهرين وجنوب المشرق والتي ظهرت فيها أغلب هذه النماذج من التجمعات الاستيطانية في عصر الحديد.

وحديثاً ومن خلال دراسة نصوص أرشيف مدينة ماري والذي يتحدث أن تل النبي مندو مدينة قادش القديمة يمكن أن يُعرّف مع موقع قاديشا الذي لا يبعدكثيرا عن مدينة قادش والقريب من بحيرة قطينة والذي كان قلعة حصينة تدعى دور اشكي ادو وهذا التحديد يبقى غير مؤكد في الوقت الحالي مع أنه من الممكن أن يكون ذلك الموقع هو تل قطينة.

Abstract

This joint Syrian-British multidisciplinary, multi-period archaeological survey project, studies an area of marl landscape east of Lake Oatina. Geomorphological work has shown that the marls are overlain by outcrops of cemented fluvial gravels of Pleistocene date, which fill former channels of the al-Asi river, and which are closely associated with activity of Palaeolthic date. Preliminary analysis of cores from Lake Qatina indicates that while the northern end of lake provides evidence for consistently lacustrine conditions for the last 4000 years at least, the southern end revealed evidence of regular periods of drying-out. The region has been heavily exploited for agriculture over a long period, as a result of which the archaeological record has suffered considerable attrition. Prehistoric settlement is concentrated along the al-Asi, with evidence for a significant expansion to the east during later third millennium BC. A number of small tells are located along a series of seasonal wadi courses some kilometres east of the river. These show intermittent occupation from EBA III/IV through to the Hellenistic period. The tell sites appear to go out of use during the Hellenistic period, during which there is an expansion of dispersed, off-tell settlement, a pattern which continues through the Roman and later periods. In contrast both north Mesopotamia and the southern Levant reveal a major phase of settlement dispersal during the Iron Age. Recent work on the Mari texts suggests that Tell Nebi Mend/Qadesh may be identified with the site of qa-di-sa-a. Not far from Qadesh, and close to Lake Qatina was a fortress called Dur-Ishkhi-Addu, the identification of which remains uncertain at present, although Tell Qatina is a possibility.

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1. Introduction to the project

The project Settlement and Landscape Development in the Homs Region, Syria (abbreviated as SHR) is a joint Syrian-British multidisciplinary, multi-period archaeological survey project. It was designed to collect the information required to investigate long-term patterns in the development of human activity and the natural environment within what were intended as representative sample areas of the landscape of western Syria (for location map, see Fig. 1). The study areas (Fig. 2 and Table 1) were chosen to reflect the range of landscape types present in the wider region. For the purposes of the present paper, the focus is upon the results of survey in Landscape Units 1 and 4, the marls of the southern and northern study areas respectively.

2. Western Syria and the need for survey data

Until recently, the basic data for the archaeology of western Syria came mainly from a limited number of excavations, mostly of large sites. In the absence of good survey data, it has not been possible for researchers to consider in depth, the nature, scale or distribution of human settlement in western Syria, or the way in which these changed over time. As a result, the range of questions which researchers have been able to ask has been limited. However, for regions like western Syria, the problem extends beyond a simple lack of survey data. As Wilkinson et al. have remarked², even when some survey information is available, datasets from upland and lowland regions are often incompatible. This reflects differences in the availability of raw materials for construction in each area, and variations in nature and extent of both natural and cultural post-depositional processes³.

In the upper Orontes Valley, the terms 'upland' and 'lowland' refer not to absolute height but to the type of terrain. 'Upland' landscapes can be characterised as rocky and dissected regions in which the basic building material is stone. This term applies to much of the area immediately west the Orontes which is covered by a degraded basaltic pavement. In contrast, the Orontes Valley itself, and the plain to extending to the east which is composed of lacustrine marls, constitutes a good example of a 'lowland' landscape, wherein past populations would have built structures using mudbrick.



Fig. 1. General location map showing Homs and Lake Qatina.

Another point of real relevance in this case is Wilkinson's distinction between 'zones of preservation' and 'zones of attrition'4. These are differentiated by the extent to which the archaeological record has been altered, or degraded by subsequent activity in the landscape. In our case of the marl landscape appears, during many periods, to have witnessed more sustained and intensive exploitation for agriculture than has the basalt. The evidence points to heavy usage of the marls during the Roman-Byzantine and Mamluk periods, followed by a significant intensification of activity in recent decades. The latter appears to have included significant bulldozing activity connected to the creation of new field structures, the provision of roads, the creation of orchards, and the large-scale application of irrigation water, either obtained from Lake Qatina or by drilling wells to extract fossil water. Thus the term 'landscape of destruction' is particularly appropriate for the marls which appear to have undergone a proportionately greater degree of post-depositional modification than the basaltic terrain (at least until verv recent vears).

The archaeological record of lowland landscapes is dominated by the classic nucleated tell sites for which Syria is famous, and which can generally be

² WILKINSON *et al.* 2004: 202-204.

³ BANNING 1996: 25-46.

WILKINSON 2003: 41-43.

Landscape Unit No.	Study Area	Area (km ²)	Environmental Zone	Current status of irrigation
1	Southern	380	Marl	Big expansion in last decade
2	Northern	40	Alluvium	Substantial irrigation for several decades
3	Northern	120	Basalt	Limited and recent
4	Northern	40	Marl	Substantial irrigation for several decades
5	Southern	20	Alluvium	Well established, but small scale

Table 1. The main environmental units of the two study areas (see also Fig. 2).

identified through traditional survey methods. However, sites of this kind characterise only the archaeology of the Bronze Age, and in some parts of Syria, the Iron Age. As our survey has shown⁵, much of the post-Iron Age occupation is represented by small dispersed settlements which survive only as artefact scatters, and which are considerably harder to locate through traditional vehicle-based survey. It may well partly for this reason that the investigation of rural settlement during the Islamic period, and of Roman-Byzantine remains that were not built from stone, has been neglected in so many areas.

3. The formation of the marl landscape: natural and anthropogenic aspects

3.1 Introduction

The marl landscape located south and west of the present-day city of Homs (Fig. 2), can probably taken as fairly typical for much of the lowland landscape of the northern Levant. As the nature of the area has been discussed elsewhere⁶, the following represent only a brief summary.

This landscape consists of Late Miocene-Early Pliocene lacustrine marls, which were deposited in the basin of an extensive palaeolake of which the present Lake Qatina is the current, and much smaller, representative. The soft white marl bedrock extends from the southern margins of the Anti-Lebanon range in the south to Rastan in the north. However, the situation is complicated by the fact that the marls are overlain by outcrops of cemented fluvial gravels of Pleistocene date, the cementation process having been facilitated by the nature of the underlying marl deposits. Exposures show that these gravels fill former channels of the Orontes, and are sometimes interbedded with fine-grained calcareous floodplain alluvium. Clast analysis has shown the gravel to contain 20-65% chert/flint (at 16-32 mm size). These are currently



Fig. 2. Map showing the location of the Northern and Southern Study Areas and Environmental Units 1-5 as described in Table 1.

believed to represent the visible remains of a series of ancient Orontes terraces. At present at least fifteen such terraces have been documented and their distribution appears to extend from the present-day Orontes Valley in the west, to a point east of the Damascus-Homs highway, rising as much as 130 m above the present-day river channel⁷. These currently represent one of the largest terrace-series yet documented in the Middle East, and the exis-

⁵ PHILIP *et al.* 2002: 1-23; *id.* 2005: 21-42.

⁶ PHILIP *et al.* 2002: 3-6.

BRIDGLAND et al. 2003: 1080-1089.



Fig. 3. Map showing the topography of the marl landscape, including the shallow valleys and the location of the Bronze Age tells. The tells fall into two main groups, one clustering along the Orontes, the second along the more easterly wadi systems. The latter appear to form two east-west lines, with SHR 014 located between these. Note that the lake boundaries are taken from the Syrian 1:50,000 maps which depict the lake after the raising of the dam in the 1920s. The extent of the lake in the Bronze Age is unknown, but it would have been considerably smaller, with both SHR 212 and SHR 216 being located on dry land. The course of the wadi al Rabaya is indicated by the complex of contours at the bottom of the map.

tence of numerous terraces along the Orontes may require some reconsideration of the current interpretation of terrace sequences on other rivers in the region, such as the Euphrates⁸.

The presence of these terraces, and the flints and cherts which were incorporated within them is fundamental to our understanding of activity in this landscape during the Palaeolithic. While some of the Lower Palaeolithic artefactual material collected by the survey may been incorporated within the terraces, and subsequently released by their gradual erosion, it appears that stone from the gravels provided the raw material for the production of at least some of the Lower Palaeolithic and many of the Middle Palaeolithic artefacts which are readily recovered from the surface. As a result it seems likely that a large part of the latter which is mainly represented by Levallois technology, was produced in the vicinity of the terraces using the available raw material. It is possible therefore that Middle Palaeolithic material, occurring in the vicinity of terraces which were formed much earlier, represents the deflated remains of concentrations of knapping activity.

The landscape slopes gently from the south-east to

north-west, and is cut by a number of shallow vallevs (*wadayn*) which flow in the direction of the gradient (Fig. 3). These meandering wadayn probably date from the last wet episode in the Quaternary history of the area, and cut across the Pleistocene cemented gravels which in places are exposed in the *wadi* sides. However, present-day agricultural practices have modified the landscape to the extent that the *wadi* channels are poorly defined except by a gentle dip of slope and a light deposit of flint and (occasionally) marl clasts along the former direction of flow. Their lower courses in particular are therefore quite hard to recognize on the ground. Soils in the *wadayn* do not differ significantly from the surrounding slopes and plain, although it is likely that there has been movement of soil into the wadayn as a result of agriculture. Fortunately the flint and marl clasts which lie within the *wadi* beds comprise relatively high reflectance features, as a result of which the wadayn can be mapped using Corona satellite photography dating to the late 1960s. In the absence of vertical sections therefore the pattern of wadi deposition and/or erosion cannot yet be determined.

At least some of the *wadayn* appear to represent an erosional fan (possibly an avulsion fan) originating from the Wadi ar-Rabaya catchment, a right-bank Orontes tributary that drains the eastern slopes of the Anti Lebanon Mountains and runs in a westerly direction across the southern limit of the study area (Fig. 4). At the present time the flow of the Wadi ar-Rabaya is directed westwards to form a fan south-west of the present day town of al-Qusayr, and the Wadi ar-Rabaya is deeply incised, and thus captures the water that might once have gone to the *wadayn* described above. As a result, the north-west trending *wadayn* described above now carry no more than surface run-off from very localised catchments.

Soils away from the wadis range between 0.2 and 0.7 m thick and consist of reddish brown loams heavily disturbed by ploughing, and appear to be agriculturally and pedogenically re-worked Pleistocene colluvium. In many locations they tend towards the lower end of this thickness range, and the thin soil cover points to a significant degree of aeolian deflation. Confirmation that this is indeed likely comes from two palaeosols, each buried underneath ancient tell deposits.

⁸ Besançon - Geyer 2003: 7-60.



Fig. 4. The Wadi al Rabaya and its associated erosional fan. The wadi is now deeply incised and thus captures the water which would previously have flowed into the wadis marked by the letter a-e. The watercourses can be identified by differential reflectance resulting from the presence of gravels along the wadi beds. Corona image 1969.

In one location SHR 014 (Tell as-Sefinet Nebi Noah), a significantly more mature, dark red soil was preserved beneath what appears likely to be a second millennium BC rampart. Below-rampart soil was observed on three sides of the site and varied in thickness from 0.3 m to more than 1.4 m. The depth of soil preserved below the rampart suggests that there has been significant soil loss since its construction. At SHR 218 (Khirbet Kafr Moussa) a bulldozer cut revealed that palaeosols lay below the earliest occupation deposits: the site was first occupied no earlier than the Roman period.

At both sites, then, the presence of over 1.0 m of thick truncated B horizon was observed. Assuming that the two samples are providing essentially the same information, the evidence appears to point to the large-scale deflation of soils occurring no earlier than the Roman period (and perhaps much more recently), and suggests that before this, soils were largely intact from the Late Pleistocene. This data is consistent with the lack of preserved structures, and the predominance of what appear to be the bottoms of pits and scoops, in the stratigraphic record at the recently published Neolithic settlement of Arjoune. This very point had already led the excavators to suggest that the surface layers had undergone considerable erosion⁹. One obvious impact of large-scale deflation is that had there ever existed a local equivalent of the distinctive 'hollow ways' which are characteristic of parts of northern Syria and Iraq¹⁰ all trace would have been long-since obliterated. This highlights the importance of bearing post-depositional processes in mind when making comparison between what might appear to be superficially similar lowland landscapes.

3.2. Hydrology

With the exception of the Orontes River, there is little present-day evidence for year-round surface water. Most pre-modern settlements in the area appear to have been dependent upon wells. That apart, however, the marl landscape offers good potential for rainfall agriculture. On current evidence Pre-Roman settlement, as represented by tell sites, does not extend beyond the present-day 300 mm isohyet, which might suggest that there was no perceived need to settle, or even to work, the most marginal agricultural areas. Until recently agriculture was predominantly based on the dry-farming of cereals, with localised areas of irrigation around springs in the region of al-Qusayr, or close to the Orontes River, where irrigation and the associated landscape modifications have proceeded apace in recent decades.

3.3. Lake Qatina

Lake Qatina is currently one of the few bodies of long-term standing water in western Syria. In any consideration of the nature of the ancient lake it is important to understand that the lake as visible

⁹ PARR et al. 2003: 279

¹⁰ Wilkinson 1994: 483-520; Wilkinson - Tucker 1995.

today reflects the impact of two quite separate episodes of dam construction. The most recent is the raising of the ancient dam during the French mandate, a development which is believed to have raised the lake levels by some 2-3 m¹¹, from its height in the early twentieth century which was estimated at around 497 m asl¹². It is this most recent extent of the lake that is depicted in the current Syrian 1:50,000 map series, a level which, because of recent high levels of water abstraction from the Orontes, is today attained only seasonally, during very wet years.

More open to debate is the date of the ancient dam. Its construction should be regarded as a substantial investment in economic infrastructure, and thus its dating is of real significance to understanding human activity in the local landscape. The main arguments for and against a Late Bronze Age and a Roman date respectively have been reviewed by Geyer and Calvet¹³. As, however, their book was written at a time when access to the dam itself was difficult, the following additional points may be relevant.

1. The entire north (i.e. rear) face and part of the upper surface of the earlier dam is readily visible today¹⁴. Inspection suggests that while there are clearly areas of reconstruction and remodelling, the general appearance of the masonry points to a date to the Roman period, a view which appears consistent with evidence for the emergence of Homs (Emessa) as a major economic and population centre at this time¹⁵.

2. Further support for this view comes from the presence of a large curving stone wall, which runs around the south and west sides of Tell al-Bahr, the site which Gautier called Tell at-Tin¹⁶. Usually well below the water level today, the wall was recorded by Gautier when he visited the site in the late nineteenth century. It was also visible to our survey teams during 1999 when lake levels were particularly low following several very dry winters, and so we were able to confirm its nature as recorded by Gautier (Fig. 5). This wall is built of dressed basalt blocks, reminiscent of those used in the construction of the ancient dam, and it seems reasonable to assume that the construction of the wall was linked to the rise in lake levels resulting from the building of the dam at the north end. Whether this wall was intended to provide a small enclosed harbour area, or to prevent the site from erosion by the river due to changes in the water level, it seems sensible to



Fig. 5. Tell al Bahr (SHR 212) and the outline of the basalt-block wall recorded by **Gautier** (1985). The wall is visible because of the low water level in Lake Qatina. The plume of silt to the **north-west** of the tell indicates that the present course of the river passes the site on its western side.

assume that construction of this wall was broadly contemporary with the building of the dam. The site (SHR 212) has produced ceramics dating to the Bronze Age, the Hellenistic and Roman periods. However, given the presence on the site of what appears to be substantial architectural remains of probable Hellenistic date, we feel it is unlikely that the site was surrounded by water at this point, and prefer to see the final occupation of the site in the Roman period as contemporary with, or even terminated by, the construction of the dam.

3. Although the lake has not been studied systematically, preliminary indications from sediments collected by coring in the lake in 1999 indicate that the northern end of lake has seen consistently lacustrine conditions for the last 4000 years¹⁷. Coring at the southern end, in a series of locations several hundred metres north of SHR 212 (Tell al-Bahr) which currently stands within the lake, revealed only shallow lacustrine deposits (a few

- ¹² Brossé 1923: 234-240.
- ¹³ Calvet Geyer 1992: 32.
- ¹⁴ Calvet Geyer 1992: 27.
- ¹⁵ Abdulkarim 1997.
- ¹⁶ GAUTIER 1895: 441-464.
- ¹⁷ PHILIP *et al.* 2002: 14.

¹¹ Calvet - Geyer 1992: 32.

tens of centimetres in depth) below which were encountered compact shell-filled layers which appear indicative of regular periods of drying-out. This suggests that the presence of water at the southern end of the lake has been intermittent at best.

4. Settlement activity in the Bronze and Iron Ages: a provisional summary

The preliminary evidence for activity in the prehistoric and Graeco-Roman and Islamic periods has been summarised elsewhere¹⁸ and will not be repeated here. In general terms activity appears to remain focused around the Orontes River for much of the fifth, fourth and earlier third millennia BC. The first period which sees a significant presence at locations away from the Orontes Valley is EBA IV, when diagnostic ceramics, such as the distinctive Hama goblets, appear on a number of tells located along the shallow wadi systems in the more easterly parts of the study area (Fig. 3). While there is no surviving evidence for this, one might suspect that these settlements made use of check dams or silt traps along the wadi courses in order to maximize the collection of surface runoff. The existence of earlier examples of hydraulic engineering, for example at Mari in the Euphrates Valley¹⁹ and Jawa in the Jordanian Harra²⁰, provides a clear context for such practices.

The intensification of settlement in those areas further east of the river during the later third millennium BC, is consistent with recent evidence from the steppe margins to the north and east of Salamiyah²¹, Castel²², and the Mishrifeh region²³, suggesting that all these localised patterns are but aspects of a wider regional phenomenon. However the sharp abatement of settlement in the steppe margins at the end of EBA IV²⁴, is less apparent in the marl landscape around Homs, where most sites with EBA IV material show occupation also in the Middle Bronze Age.

Given the preliminary state of our ceramic analysis, and the difficulty of differentiating between MBA and LBA material from survey assemblages, the second millennium BC is best treated as a whole, and the overall indication is that throughout these periods (Fig. 3) settlement remained restricted to:

- 1. a number of tells close to the Orontes River, and
- 2. a group of smaller tells located along the relict wadi systems to the east.



Fig. 6. Tell es-Sefinet Nebi Noah (SHR 014) showing ditch, rampart and gates in opposite walls. Ikonos image February 2002.

To begin with those tells located close to the river, it is during the Middle Bronze Age that the name Qadesh makes it first appearance, in this case as *qa-di-sa-a* in the Mari texts²⁵. Furthermore these texts indicate that not far from Qadesh was a fortress called *Dur-Ishkhi-Addu*, after the then King of Qatna, and which was located close to a body of water, almost certainly Lake Qatina²⁶. The fact that troops travelling south from the fortress towards Qadesh appear to have moved along the edge of the lake would appear to rule out both an identification with the present site of Tell Nebi Mend (SHR 315), generally itself identified with Qadesh, which lies south of the lake, and also Tell

- ¹⁸ PHILIP *et al.* 2005: 38-40.
- ¹⁹ Geyer Monchambert 2003: 180.
- ²⁰ Betts 1991.
- ²¹ GEYER CALVET 2001: 61, fig. 3; id., this volume.
- ²² Cf. CASTEL, this volume.
- ²³ Cf. MORANDI, this volume.
- ²⁴ Gondet Castel 2004: 94; Geyer, this volume.
- ²⁵ Charpin 1998: 92.
- ²⁶ Cf. ZIEGLER, this volume.



Fig. 7. Tell Arquni (SHR 254) showing the small high tell in north-east corner of the site, and a large circular area of high reflectance to the west which indicates the extent of the lower settlement. Ikonos image February 2002.

al-Bahr (SHR 212) which, prior to the Roman dam would have lain either at, or beyond, the southern limit of the lake.

On archaeological grounds, the two main candidates for Dur-Ishkhi-Addu would appear to be the present Tell Oatina, a high tell with evidence of fairly continuous occupation which lies at the north end of the lake, and Tell as-Sefinet Nebi Noah (SHR 014). The latter is located some 3 km north-east of Tell Nebi Mend, and around 1 km east of the river (Fig. 3), and consists of a rectangular earthen rampart, enclosing an area of approximately 16 ha (Fig. 6). In light of the numbers of troops (in the low thousands), both friendly and hostile which are mentioned in the texts discussed by Ziegler²⁷, an enclosure of this size would be by no means disproportionate. Moreover, the site is located too far from the Orontes to be seen as a significant centre of population. In the case of a military base on the other hand, one might presume that when the site was occupied, a sufficient number of both men and animals would have been available to make the transport of water from the river feasible on a regular basis.

However, the situation is not quite so simple. The stratigraphy of SHR 014 appears to be shallow, suggesting short-lived, or intermittent activity

rather than sustained occupation, and in the present state of analysis, LBA ceramics form the main component of the surface material, although smaller amounts of Middle Bronze Age material are present. Thus while the construction of the fortress by the King of Qatna cannot be ruled out without excavation, the surface material might be read to favour a LBA date for the ramparts. At present therefore, the question of the identity of *Dur-Ishkhi-Addu* remains open.

Neither our programme of 'off-site' field walking nor the investigation of 'flat' sites has provided evidence for a significant non-tell settlement component during the second millennium BC. This fact, plus the presence of material from multiple periods on most tells highlights the strongly nucleated nature of settlement in the region, and the strong trend towards continuity of occupation in particular places. The one exception to this is the presence of a distinct area (8-9 ha) of lower settlement surrounded by a ditch, located immediately below and on the north and west sides of Tell Arquni (SHR 254) (Fig. 7). Similar off-tell occupation has not yet been recognized at other small tells in the SSA.

While all tells are located in areas within the 300 mm isohvet it is by no means clear that the eastern tells should be interpreted as small rural settlements. While certainly possible, there are aspects of the location of these, in particular the arrangement of SHR 256, 255 and 251 and SHR 265, 254 and 229 in a two rough east-west lines (Fig. 3) that suggest that intervisibility and orientation with respect to particular routes across the landscape may have been important. This possibility is further enhanced by the presence at these sites of defences which appear disproportionate to the needs of small agricultural villages. Given the alignments discussed above, it is possible that they represent defended strong points located on the eastern approaches to the Orontes Valley, and to Qadesh. However, the location of Tell as-Sefinet Nebi Noah which appears to sit almost in the middle of these two lines (Fig. 3) may not be fortuitous. If Dur-Ishkhi-Addu was indeed positioned close to the southern border of Oatna²⁸, then we may be looking at a carefully structured landscape. The currently limited evidence for Iron Age I

²⁷ Cf. ZIEGLER, this volume.

²⁸ Cf. ZIEGLER, this volume.

ceramics, suggests a decline in activity during the early first millennium BC, although this must remain uncertain until the nature of local Iron Age ceramics is better understood. However, Iron II material is well represented²⁹, and the settlement pattern appears to continue that of the second millennium BC, in that most of the eastern tells continued to produce Iron Age material. The presence of significant quantities of Hellenistic material in the upper levels of the main tell at Tell Nebi Mend, and among the surface assemblages from other tells indicates that nucleated tell-based settlement continued in the area until the Hellenistic period. However, this period also saw a clear expansion of off-tell occupation, the pattern that was to continue through the Roman, Byzantine and Islamic periods. This trend contrasts with settlement evidence from north Mesopotamia and the southern Levant, both of which appear to witness a rather earlier phase of settlement dispersal during the Iron Age³⁰.

Some of the issues raised here can only be touched upon because analysis remains at a preliminary stage. Despite this, however, I hope that the foregoing discussion has made clear the ways in which the physical and cultural dimensions of the west Syrian landscape were inextricably linked. The expansion of settlement in EBA IV appears to form part of a much wider process, one which might even have had its roots in political events centred around the growing power of Ebla. Equally, there is evidence to suggest that elements of the specific distribution of settlement during the Middle Bronze Age, in particular that of sites located away from the river, may have been linked to the activity of the rulers of Qatna. If so, it is interesting that this same settlement structure was to remain in place throughout most of the Late Bronze and even Iron Ages, long after Qatna had ceased to be the regional power, and so standing as testament to a strong 'sense of place' among ancient near eastern communities. Finally, it is interesting to note that the eventual demise of this settlement structure took place in the Hellenistic period, when a whole new political framework was coming into being. On that basis there can be no doubt that the marl region east of Lake Qatina was as an anthropogenic landscape *par excellence*.

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²⁹ WHINCOP in press.

³⁰ Wilkinson 2003: 130-134.

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