

LIFE AND SETTLEMENTS DURING THE IRON AGE  
IN THE CENTRAL JORDAN VALLEY:  
ASPECTS FROM THE SITE OF TELL DEIR 'ALLA AND NEARBY SITES

Zeidan A. Kafafi - Yarmouk University

*This study aims at discussing the way of life and the settlement patterns at the Central Jordan Valley during the Iron Age. The presented informations are based on the results of surveys and excavations conducted by Jordano-Dutch teams during the last decades at the following three sites: Tell Deir 'Alla, Tell el-Hammeh and Tell Damiyah.*

*Generally speaking, the inhabitants of the Jordan Valley conducted during the period ranging from about 1200 to 539 BC different economic practices such as cultivation in principal, pastoralism, trade and industry. Actually, these economic activities have been changed during the Iron Age. For example, it has been assumed by the first excavators of the site of Tell Deir 'Alla that the settlers of the site were pastoralists during the beginning of the Iron Age I. The results of the last excavations however proved that this assumption must be reconsidered. The change in interpretation is based on the type and function of the architecture and other archaeological material dated to the end of the Late Bronze Age and the beginning of the Iron Age (ca. 1300-1100 BC).*

Keywords: settlement patterns; Iron Age; Jordan Valley; Deir 'Alla; chronology

#### 1. INTRODUCTION

The area under discussion is situated between the Wadi Rajeb in the north, the Wadi az-Zarqa in the east and south and the Jordan River in the west. It measures approximately 72 km<sup>2</sup>. The Wadi Rajeb and Wadi Kufrinjah to the north consists a natural northern border to the area of our study. The Wadi Rajeb, like the Wadi Kufrinjah to the north of it, forms a distinctive boundary line across the Jordan Valley (fig. 1). The area extending between Wadi Kufrinjah and Wadi az-Zarqa is divided into the following two geographic areas:

1. Ghor el-Belawneh: this the area extending between Wadi Kufrinjah in the north and Wadi Rajeb in the south. It is a very fertile region, largely irrigated.

2. Ghor Abu 'Obeideh: the Wadi Rajeb separates the Ghor el-Belawneh from the Ghor Abu 'Obeideh to the south of it. The Wadi Kufrinjah forms in turn the south boundary line of the Ghor el-Wahadneh.

These three sections of the Middle Jordan Valley, listing them from the north to the south, namely the Ghor el-Wahadneh, the Ghor el-Belawneh and the Ghor Abu 'Obeideh, are separated by the Wadi Kufrinjah and the Wadi Rajeb. The Wadi az-Zarqa forms the south boundary line of the Ghor Abu 'Obeideh, with the Ghor ed-Damiya and esh-Sheqaq, whose most prominent site was Tell Damiyah to the south of it.

The lands extending to the south and southwest of Ghor Abu 'Obeideh, are no less rich agriculturally than these other parts. To the east of it, there is only a small, fertile plain, which soon runs into the broken Kattar hills overlooking the west side of the rich little Zor of the Wadi az-Zarqa, whose lands, in turn, are irrigated and cultivated wherever possible.

After leaving its canyon in the eastern mountain hills, the Wadi az-Zarqa wanders in its own little Zor, which cuts through its own valley till it reaches the Jordan River. It is the

union of the az-Zarqa valley with the Jordan valley that makes for one of the broadest, cultivated areas in the entire Jordan valley.

The strategically located Tell Deir ‘Alla, guarding the approaches to and from the Wadi az-Zarqa River benefiting naturally from the general agricultural and economic advantages of the rich country-side around Tell Deir ‘Alla, was bound to become the seat of rich settlements that thrived on agriculture and trade, and to a degree also on industry (fig. 2). In the Ghor Abu ‘Obeideh, where Tell Deir ‘Alla is located and functioned as a center, many smaller Iron Age I-II sites were registered, sounded and excavated. Below a brief discussion for some of the major sites belonging to the period ranging in date between 1300-1000 BC.

## 2. CHRONOLOGY

Scholars approaching the archaeology of Southern Levant ascertained that the Iron Age should be divided into sub-periods based on the historical changes and material development (tab. 1). They have suggested the following chronological table:

ARCHAEOLOGICAL PERIOD	SUB-PERIOD	ABSOLUTE DATE
Iron Age	Iron Age IA	ca. 1200 - 1150 BC
	Iron Age IB	ca. 1150 - 1000 BC
	Iron Age IIA	ca. 1000 - 900 BC
	Iron Age IIB	ca. 900 - 700 BC
	Iron Age IIC	ca. 700 - 586 BC
Babylonian Period		ca. 586 - 539 BC
Persian Period		ca. 539 - 332 BC
Hellenistic Period	Early Hellenistic	ca. 332 - 167 BC
	Late Hellenistic	ca. 167 - 63 BC

Tab. 1 - Chronological table of Southern Levant across the ages.

However, other scholars e.g. Lorenzo Nigro,<sup>1</sup> proposed another chronological table claiming that it minimizes the differentiations between the “sets of data and interpretations put forward by scholars, but also to match archaeological periodization based upon stratigraphy and material culture with historical reconstruction”.

## 3. IRON AGE SITES AND SETTINGS IN THE GHOR ABU ‘OBEIDEH REGION

### 3.1. *Iron Age Sites*

As is explained below, the archaeology of the Jordan Valley, including the Iron Age, is known through a number of studies. Mo‘Awyah Ibrahim<sup>2</sup> presented a fruitful discussion

<sup>1</sup> Nigro 2014, 263, tab. 1.

<sup>2</sup> Ibrahim 2003, 21-23.

about the Jordan Valley in the Iron Age and the evidence from the site of Tell Deir 'Alla. Ibrahim argued that there was a smooth transition from the Late Bronze Age III to the Iron Age I and the Jordan Valley did not witness any changing of the ethnicity of its inhabitants. This is clearly seen by most of the Late Bronze Age III major sites continued to be occupied during the Iron Age. In fact, we agree completely with Ibrahim's argument, as it is reflected in the information presented in the table below (tab. 2). Moreover, he added that the excavated material culture of the Iron II indicates strong ties with the Ammonite Kingdom.

Geographically speaking the Wadi Rajeb guards the entrance to and exit to the hill country of Ajloun from the Jordan Valley.<sup>3</sup> Several major archaeological Iron Age tell sites were registered and many of which have been either surveyed, sounded and excavated. Actually, Eva Kaptijin<sup>4</sup> divided the registered Late Bronze and Iron Ages sites into three categories, and as the followings:

1. Tell sites;
2. Off-site areas sub-divided into two groups:
  - a. areas without any finds;
  - b. areas with a low off-site density.

Moreover, Kaptijin<sup>5</sup> argued that the area located to the west of the Kattar hills was not intensively used during the Late Bronze and Iron Age. The same situation is applied to the area located alongside the eastern foothills of the Ajloun Mountains, extending between the villages of Dhirar to al-Ruweiha. She added that "the off-site distribution is not directly linked to the tell sites rather reflects separate human activity of some sort".<sup>6</sup> This assumption is not acceptable since it is based only on the density of the pottery sherds collected from these off-sites. In our point-of-view, such sites were used as cultivated fields farmed by the inhabitants of the Tell sites.

The archaeological surveys conducted in the Ghor Abu 'Obeideh region registered 20 Iron Age sites belonging to the two major sub-periods, I and II, including the site of Tell Deir 'Alla. We believe that most of which, if not all, continued to be occupied from the Late Bronze Age through the end of the Iron Age without any interruption, and best examples could be visible at Tell el-Mazar and Tell Deir 'Alla (tab. 2). Moreover, the result of the Nelson Glueck's survey<sup>7</sup> pointed to the same conclusion as it reflected in the table below.

The increase in number of Iron II sites in the area under study has been attributed to the presence of a rural communal system in the Jordan Valley in general, but we believe that this is not completely the case. This deduction is based on that the same town sites of the Iron Age I stayed in use during the Iron Age II A-B (ca. 1000-750 BC) (tab. 2). Moreover, the result of the recent of the archaeological excavations conducted at both Tell el-Hammeh (Iron II A-C) and Tell Damiyah (Iron II B-C) pointed out settled communities at both sites.

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<sup>3</sup> Glueck 1951, 297.

<sup>4</sup> Kaptijin 2009, 191-197.

<sup>5</sup> Kaptijin 2009, 194.

<sup>6</sup> Kaptijin 2009, 196.

<sup>7</sup> Glueck 1951, 297-333.

The inhabitants of Tell el-Hammeh were blacksmiths and those of Tell Damiyah, traders, priests and warriors.

SURVEY	LATE BRONZE AGE II/III	IRON AGE I	IRON AGE II
Glueck 1951	Tell el Qos (LB II - Iron I-II), Tell Mazar, Tell Ghazala (LB II - Iron I-II), Tell Deir 'Alla, Tell Qa'dan, Tell el-Ekhsas (few sherds), Tell Abu Nejrah, Tell Meidan, Tell Damiyah  <b>9 Sites</b>	Tell el Qos, Tell Mazar, Tell Ghazala, Tell 'Adliyah, Tell Deir 'Alla, Tell Qa'dan, Tell el-Ekhsas, Tell Abu Nejrah, Tell el-Hammeh, Tell Meidan, Tell Rekabi, Tell 'Asiyeh, Kh. Miqbal er-Remeileh, Tell Zakari, Umm Hammad esh-Sharqi, Tell Damiyah  <b>16 Sites</b>	Tell el Qos, Tell Mazar (predominant), Tell Ghazala, Tell 'Adliyah, Tell Deir 'Alla, Tell Qa'dan, Tell el-Ekhsas, Tell Abu Nejrah, Tell el-Hammeh, Tell Meidan, Tell Rekabi, Tell 'Asiyeh, Kh. Miqbal er-Remeileh, Tell Zakari, Umm Hammad esh-Sharqi, Tell Damiyah  <b>16 Sites</b>
Mellaart 1962	Tell Deir 'Alla  <b>1 Site</b>	Tell Deir 'Alla, Tell Damiyah  <b>2 Sites</b>	Tell Deir 'Alla, Tell el-Hammeh, Tell Damiyah  <b>3 Sites</b>
De Contenson 1964	-	Tell Deir 'Alla, Tell Meidan  <b>2 Sites</b>	Tell el Qos, Tell Ghazala, Tell el Khessas, Tell Deir 'Alla, Tell Meidan  <b>5 Sites</b>
Petit <i>et al.</i> 2006	Tell 'Ammata  <b>1 Site</b>	Tell 'Ammata  <b>1 Site</b>	Tell 'Ammata  <b>1 Site</b>

Tab. 2 - Late Bronze and Iron Ages major sites documented by surveys.

One of the most important Iron Age sites established on Wadi Rajeb and dominating our area under study is Tell el-Qos (Gluck's Site 175). It might be assumed that during the ancient times the inhabitants of the Tell el-Qos had always controlled in effect the westward flow of the waters of the Wadi Rajeb, which was used diverted for irrigation purposes, making possible a flourishing agricultural economy, varying only according to the dynamism of the inhabitants and their ability to preserve peace. Today, too, extensive areas on both sides of the Wadi Rajeb are irrigated into rich productivity with its waters.

The archaeological surveys and excavations conducted in Ghor Abu 'Obeideh yielded many important Iron Age sites, among which we can mention: Tell el-Qos, Tell 'Ammata, Tell Mazar, Tell Ghazala, Tell 'Adliyah, Tell Deir 'Alla, Tell el-Ekhsas (Khasas), Tell el-Hammeh, Tell Zakari, Tell Umm Hammad and Tell Damiyah. Below, we present a discussion of the setting of the major Iron Age sites located at Ghor Abu 'Obeideh (fig. 3).

Tell Deir 'Alla is situated in a central location of several Iron Age sites. Nelson Glueck<sup>8</sup> argued that it is one of the most prominent sites in the entire Jordan Valley. The Tell is

<sup>8</sup> Glueck 1951, 308.

visible from far distances, dominating one of the richest, widest, and best watered areas of the entire Jordan Valley, namely the Ghor Abu 'Obeideh. A whole series of irrigation ditches and water channels bring water from the perennial stream of the Wadi az-Zarqa to a broad region of fields and satellite or suburban tells connected with Tell Deir 'Alla, in the area of the Ghor Abu 'Obeideh. This area is most intensively cultivated. The lands extending to the south and southwest of Tell Deir 'Alla, however, in the Ghor Abu 'Obeideh are no less rich agriculturally than these other parts of this region.

The site was first excavated during the sixties of the last century by a Dutch team under the directorship of the late Henk Franken (fig. 4), then it has been continued as a joint project between Leiden University and Yarmouk University under the directorship of Gerrit van der Kooij, Mo'Awiyah Ibrahim and Zeidan Kafafi.

Tell el-Hammeh is located about 2.5 km east-southeast of Tell Deir 'Alla, overlooking the north side of the Wadi az-Zarqa. A very small plain on the east and north sides of the site separates it from the Jerash and Ajloun mountains from the east and northeast sides (fig. 5), consequently. The tell occupies a strategic point overlooking the perennial stream of the Wadi az-Zarqa leaving its bed in the canyon to the east and begins to flow west through a widening Ghor, which merges with the Valley of the Jordan to form one of the widest and most fertile area of the entire Jordan Valley.

Nelson Glueck<sup>9</sup> argued that the Tell el-Hammeh served as important site during the Iron Age I-II. He added that there were very many Iron Age I-II sherds of all kinds, as well as a considerable number of Roman-Byzantine sherds and some mediaeval Arabic ones.

Tell Damiyah is built on the plain of the Zor and located about half a kilometer to the south of the Wadi az-Zarqa and Jordan confluence and about 5.5 km south-west of the well-known archaeological site, namely Umm Hammad. It is situated in the fertile land of the widened Zor of the east side of the Jordan River, which has become merged with the widened Zor of the Wadi az-Zarqa. It occupies a commanding position, guarding to the west the bridge that spans the Jordan and the road that leads up the Wadi el-Far'ah to Nablus, and to the east the road that leads to the city es-Salt in the hill country of Balqa. The site also occupies a very strategic position with regard to the north-south roads on both sides of the Ghor of the Jordan Valley.<sup>10</sup>

The plain of the Zor, in which Tell Damiyah stands, is very fertile, being well irrigated by waters diverted both from the Wadi az-Zarqa and Jordan streams. Even without considerations of strategic location, the rich farm lands around Tell Damiyah would inevitably have furnished the basis for the establishment of a sedentary settlement there or nearby. The archaeological surveys and excavations conducted at the sites yielded a large number of sherds, some of which belong to the Late Bronze Age II and others to the Roman and Byzantine periods, but with the largest quantity belonging to Iron Age I-II.<sup>11</sup>

The Jordanian-Dutch expedition conducted seven seasons of excavations between 2004 and 2016 at the site of Tell Damiyah.<sup>12</sup> The main goal was to study the Late Iron Age

<sup>9</sup> Glueck 1951, 313.

<sup>10</sup> Glueck 1951, 329-321; Petit - Kafafi 2016.

<sup>11</sup> Glueck 1951, 331; Van der Steen 1998; 2001; Kafafi 2013.

<sup>12</sup> Petit - Kafafi 2016.

levels and to relate the findings to other Iron Age sites in the vicinity. In addition to the Iron Ages archaeological material and architectures more evidence of the Persian/Hellenistic pits and graves from the Byzantine and Ottoman Period were uncovered.

### 3.2. *Iron Age Sites Settings*

It has already been published<sup>13</sup> that two geomorphological features were of big influence on human activities and on settlements in Ghor Abu 'Obeideh region and these are:

1. the Wadi az-Zarqa system;
2. the widely spread of Ruwayha alluvial fan.

As regard to the Wadi az-Zarqa River system, Hourani<sup>14</sup> identified two main alluvial terraces; he added that a third terrace which is older than these two, was found elsewhere to the north of the Ghor Abu 'Obeideh.<sup>15</sup> Based on the results of the "Settling the Steppe" project fieldwork, the earliest archaeological remains encountered in the area of Wadi al-Ghawr, just north of Tell Deir 'Alla, and runs in the Ruwayha alluvial fans is dated to the Chalcolithic period (fig. 6).<sup>16</sup>

The earliest evidence of settlements to be registered in the area extending between Wadi Rageb in the north and the confluence of the Wadi az-Zarqa with the Jordan River, in the south, has been excavated at Zaqquma (Tell Zaqqoum) which was founded on the Kattar hills and dated back to the Natufian period.<sup>17</sup> No Pre-Pottery Neolithic sites have been found yet, but, starting with the Late Neolithic period, the region under discussion has been continuously occupied without any interruption. Based on a paleo-geographical investigation in this region, it has been published that both the az-Zarqa and the Jordan beds were interconnected during the early Holocene around 8000 BP.<sup>18</sup> As a result of this separation large flooding plains, with marshlands, have been formed.

However, the type of the settlements had been changed from one period to another, but the region under discussion was densely occupied during the Iron Age. For example, only very a few sites dated to the Middle Bronze Age were registered in the Ghor Abu 'Obeideh, such as Umm Hammad el-Gharbi belonging to the Middle Bronze Age I and the Tell Deir 'Alla dated to the Middle Bronze Ages II and III.<sup>19</sup>

The Ghor Abu 'Obeideh witnessed during the Late Bronze Age an increase of the number of the settlements, which were spread all over the foothills, on the valley floor and on the Kattar hills. As it will be explained below the site of Tell Deir 'Alla might be functioned as the key-centre of these. The excavated archaeological material at the Late Bronze Age sites proved that the inhabitants during the period ranging from ca. 1550 to 1200 BC practiced several occupations such as cultivation, trade, art and crafts. Short and

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<sup>13</sup> Hourani *et al.* 2008, 427.

<sup>14</sup> Hourani *et al.* 2008, 430.

<sup>15</sup> Hourani 2002.

<sup>16</sup> Kafafi 1982; Hourani *et al.* 2008, 430; Kaptijn - Kafafi - van der Kooij 2011.

<sup>17</sup> Hourani *et al.* 2008, 433.

<sup>18</sup> Hourani 2002.

<sup>19</sup> Ibrahim - Sauer - Yassine 1976; Ibrahim - Sauer - Yassine 1988; Kaptijn - Kafafi - van der Kooij 2011.

far distances contacts among the Abu 'Obeideh Late Bronze Age settlements and the neighbourhood sites are well recognized by the archaeological data revealed at those sites.

Based on the results of the survey conducted at the Ghor Abu 'Obeideh it appears that the settlement distribution patterns continued as the same it was during the Late Bronze Age (tab. 2). Actually, the Iron Age settlements registered in this region were mostly established and concentrated on wadi banks (Rajeb, el-Ghor, az-Zarqa), meanwhile some of which were found built up on top of the open plains (Tell Deir 'Alla). Nevertheless, it might be mentioned that the central part of the Ghor Abu 'Obeideh was less occupied during the Iron Age in compare with the banks of the wadis.<sup>20</sup>

Tell Damiyah represents the southernmost Iron Age site located in Ghor Abu 'Obeideh. It has been established on the active floodplain of the Zor (fig. 7).

It also has been remarked that large areas of the entire Jordan Valley were the home for transhumant groups all through ages.<sup>21</sup> Actually, and in our point-of-view, this was the case only during the end of the Iron Age, the Persian and Hellenistic periods. This change of economy and settlement patterns may be attributed to the political instability resulted from the Assyrian, New Babylonians, Persians and Greek invasions to the eastern Mediterranean regions.

It has been mentioned by scholars that rural societies dominated all over the Ghor Abu 'Obeideh region during the Iron I and II and this system collapsed by the end of the Iron Age; most probably only mobile pastoralists inhabited the Ghor Abu 'Obeideh region. This change of socio-economy has been well remarked at major sites in the region such as Tell Mazar, Tell Deir 'Alla and Tell Damiyah. At those and other contemporaneous Iron Age sites, also during the Persian/Hellenistic period, people used only the summits of the Tells for storage purposes and stocking their animals. This means that throughout the Iron Age the Central Jordan Valley was densely populated by settled people and mobile groups by the same time.

As a matter of fact, the inhabitants of the Jordan Valley practiced during the period ranging from about 1200 to 539 BC different economic practices such as cultivation mainly, pastoralism, trade and industry. Actually, these economic activities have been changed from time to time during the Iron Age but does not mean that the economic status of whole society shifted dramatically from urban to nomadic. It might be assumed, that only part of the societies were settlers, in the meantime others were transhumance, in other words semi-nomads. For example, it has been assumed by the first excavators of the site of Tell Deir 'Alla that the settlers of the site were semi-nomads during the beginning of the Iron Age I (ca. 1150 BC), but the results of the last excavations approved that this assumption has to be reconsidered due to the discovery of architectural and other archaeological material found at the site and dated to the end of the Late Bronze Age and the beginning of the Iron Age (ca. 1300-1100 BC).

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<sup>20</sup> Petit *et al.* 2006, 182-185.

<sup>21</sup> Petit *et al.* 2006, 180; Kafafi 2008.

#### 4. LIFE IN GHOR ABU 'OBEIDEH DURING THE IRON AGE

As it has above mentioned, the people lived at Ghor Abu 'Obeideh practiced several economic practices such as cultivation, mainly, pastoralism, trade and industry. These activities might be explained as human behaviors which reflect the type of life-style. The brief discussion presented below is based above all on studying the archaeological data obtained from the excavations conducted at several sites in Ghor Abu 'Obeideh. To discuss we will start the presentation from the end of the 2<sup>nd</sup> millennium BC, corresponding to the end of the Late Bronze Age (LB III, ca. 1300-1200 BC).

##### 4.1. *Life at Ghor Abu 'Obeideh during the end of the 2<sup>nd</sup> millennium BC*

The results of the excavations conducted at the site of Tell Deir 'Alla in connection with other sites are the key of our information in explaining the way of life that the inhabitants of Ghor Abu 'Obeideh used to live during the ancient times. Tell Deir 'Alla stands on the floor of the long north-south Rift Valley. Here, the valley floor is in general 4-5 km wide, i.e. extending from the Jordan River bed (Zor) to the slopes of the eastern mountains.

This surrounding landscape has good agricultural soil in most places and the very variable, but generally limited, rainfall (average 260 mm per year at the site) can be supplemented with irrigation water, supplied from the Zarqa River. The Jordan Valley is very suitable for winter grazing, largely because of its mild temperature during that season.

The results of the excavations have shown that the site was continuously occupied from the latest phase of the Middle Bronze Age until the end of the Persian period (ca. from the sixteenth to the fourth centuries BC). The tell was re-occupied by a cemetery dated to the Ayyubid/Mamluk period (ca. 12<sup>th</sup>-16<sup>th</sup> century AD).

Based on archaeological material excavated at the site it is very obvious that Tell Deir 'Alla served as a town with a large temple with auxiliary building-storerooms, workshops and dwellings during the Late Bronze and Iron Ages and continued to be occupied till the end of the 4<sup>th</sup> century BC. The Late Bronze and Iron Ages temple dating back to the 13<sup>th</sup>-12<sup>th</sup> century BC was destroyed by an earthquake which was followed by a strong fire. A heavily burnt layer covering the whole site and dating to the transitional period between the Bronze and the Iron Ages has been excavated. It yielded structures, written tablets and other archaeological finds. From these objects we may single out a faience vase bearing the name of the Egyptian queen Tawosret (ca. 1195 BC).

After the destruction of Late Bronze Age buildings, it seems that the inhabitants lived in tents, for some time. This conclusion is supported by excavated post-holes in levels located over the Late Bronze Age ones. This means that the site might have been used only for certain times during the year, and the dwellers practiced animal husbandry and probably some farming. It seems to the excavators at the site that, while the inhabitants started to rebuild their houses, a fire broke out again. Almost immediately after that the site was occupied by bronze-smiths who used it for industrial purposes. Three furnaces built consecutively on top each other were excavated. But, it is still unknown who these smiths were.

From the end of the 12<sup>th</sup> to the end of the 11<sup>th</sup> century BC, the settlement showed a different character. Several buildings and alley-ways were constructed, but there is no clear evidence of any town wall at this stage. However, there seems to have been a flimsy

defense wall and gate between two round towers (probably to be dated to the 10<sup>th</sup> century BC). Archaeological remains dating to the 11<sup>th</sup> and 10<sup>th</sup> centuries were excavated in two separate areas close to the eastern summit of the site. The first area is occupied by a building complex, while, in the second one, two exceptional finds were registered: a storage room with fourteen large jars, twelve filled with liquid, and two smaller ones decorated with a red slip used as paint, with cross and circle motifs and a striking triangular figure; and a sequence of deposits, in places half a meter thick, containing animal bones, large pieces of pottery and chunks of the walls of bread baking ovens.

During the 1996 season, the extension of the old step-trench continued and three squares, namely B/F-G3-4, were excavated to the east, above the so-called tower of Phase K (Franken's system). A number of high wall stumps were uncovered as well as the connected courtyards and street layers. Furthermore, several noteworthy objects were found including a head of an animal figurine as well as a light fired clay figurine representing a bird and some other objects.

The 1998-2009 seasons of excavation yielded very little information about the Early Iron Age, due to the fact that work was mostly concentrated on areas dated to the other periods. However, pottery sherds dated to the 13<sup>th</sup> and 12<sup>th</sup> were found in squares excavated at the southern slopes of the tell. In addition, mud-brick walls and a pebble pavement excavated in a small test trench (C/K3) were assigned to the Early Iron Age.

An important argument to reinterpret the conclusions, an un-deciphered large building (fig. 8), clay tablets similar to the ones excavated at the northern side of the site during the sixties of the last century are newly discovered. They date to the transitional period between the Late Bronze Age and Iron Age. The presence of these artifacts indicate that the settlers of the site were not nomads at the beginning of the Iron Age I, as it previously has been thought.

Moreover, inside one of the rooms of this large excavated building, ground and grinding stones were uncovered witnessing the practice of cultivation by inhabitants during that period practiced. This way of life, according to us, dominated the whole Jordan Valley during the end of the Late Bronze Age and the beginning of the Iron Age. This is clearly proved by the results of the excavations conducted at other sites also located in the Jordan Valley, as the sites of Tell Mazar, Tell es-Sa'idiyyeh and Pella.

In addition, craft production, at the end of the thirteen and at the beginning of the twelfth centuries BC, was practiced by some people of Tell Deir 'Alla. This was ascertained by the discovery of a jewelry mould dated to the end of the Late Bronze Age at Tell Deir 'Alla.<sup>22</sup> It showed that this industry was known at the site during that particular period.

The results of several excavations proved that the life style and the economy during the 10<sup>th</sup> and 9<sup>th</sup> centuries were of agricultural, farming and industrial activities. At Tell Deir 'Alla, a collection of storage large jars dated to the 10<sup>th</sup> century BC was uncovered inside a room, perhaps used as a kitchen. The residues of the material stored inside them proved that the inhabitants of the site were farmers and lived in relative prosperity.

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<sup>22</sup> Kafafi 2009.

The Iron Age phases at the eastern top of the site of Tell Deir 'Alla were somewhat further explored during the last seasons of excavations, extending the knowledge gained from the 5 m wide test trench to the south and earlier extensions. New data appeared about the exceptional Phase VII (ca. 700 BC), with its wheel-made pottery, and Phase IX (ca. 800 BC), with, among others, a food preparation area, with stored food stuffs (liquid and solid, such as wheat) and baking area. Also traces of metal craft activities were found. The same excavation area contained new data about the latest Iron Age phases, such as buildings and courtyards in Phase IV.

Between 20<sup>th</sup> April and 20<sup>th</sup> May 2010 two excavations were conducted at two explored sites (27 and 81), registered by the team of the project "Settling the Steppe". The excavation at the site 81, identified as "Abu Nu'aym" yielded a bell-shaped pit measuring more than 3 m in diameter and 2 m deep, and had been used for several purposes such as for storing at sometimes and for burring human individuals at others (fig. 11). Inside the pit a few Iron Age I and II pottery sherds were encountered and a C14 date obtained for a botanical sample collected from the bottom of the pit and yielded a date of 2890 +/- 40 BP. 2 Sigma calibration: 1210 to 970 cal. BC and 960-940 cal. BC.<sup>23</sup>

The excavations conducted at Tell el-Hammeh, located approximately two kilometers to the east of Tell Deir 'Alla in the mouth of the Wadi az-Zarqa, yielded furnaces and other tools used for firing and hammering iron ore which was brought from the Ajloun Mountains.

To explain more about the nature of this region during the Iron Age II, one can read the Bal'am Text found at Tell Deir 'Alla, dated to the 9<sup>th</sup> century BC, in which the writer of the text describes the area surrounding the site of Tell Deir 'Alla. It reports that the region under study was fertile, several kinds of plants and of animals lived at Tell Deir 'Alla and its vicinity. This indicates that the inhabitants in the Ghor Abu 'Obeideh, practiced several types of economy such as cultivation, pastoralism, trade and industry. Unfortunately, it seems that the area was exposed to a very strong, regional earthquake that destroyed most settlements.

Based on the excavated archaeological material found at several sites in the area under study, one might claim that the inhabitants continued during the beginning of the Iron Age to have contacts with the surrounding areas and far distances.

At Tell Mazar a rectangular open court sanctuary measuring 24 m x 24 m, dated to the 11<sup>th</sup>-10<sup>th</sup> century BC was uncovered. The walls of the building were constructed of mud-brick and the outer walls are measuring 1.20 m in width. In addition, the excavator mentioned that no earlier constructions were excavated at the site.<sup>24</sup>

#### 4.2. *Iron Age II B (ca. 900-750 BC)*

The archaeological excavations conducted at Tell Deir 'Alla indicated that the site was prosperous for short times during the Iron Age II. Archaeological material dating to this period (ca. 900-750 BC) were excavated on the north-east part of the summit of the site. A

<sup>23</sup> Kaptijn - Kafafi - van der Kooij 2011, 152.

<sup>24</sup> Yassine 1984, 108-118.

large amount of archaeological remains has been recovered from Phase IX (dated to ca. 900-800 BC) and, based on several C14 dating, a fire brought this phase suddenly to an end around 800 BC as a result of an earthquake. The burnt layers belonging to this phase have been relatively untouched either by erosion or later inhabitants' digging pits. At many places, walls have been rebuilt, others demolished or added, door-way bricked up and in many rooms the roof had fallen more than once. Even the final destruction went in stages: first the roof fell in with parts of the walls, then the standing fragments of wall collapsed either due to another earthquake or were demolished by people leveling up the site.

In 1998, remains of Phase IX continued to be excavated in Area D and it turned out that the burnt layers dating to same phase in 1996 were part of Phase X and that they were cut by a very large pit excavated in 1996. This large pit could be considered as an intermediate phase or a beginning stage of Phase IX. In any case, once that this 12 m wide and 5 m deep pit was almost filled by slow natural processes, a small building was constructed in its center.

The remains in the partly excavated two rooms represent a varied use of space, including a separation inside one of the rooms. Several kinds of objects were excavated in these two rooms including some pots, grinding stones and loom-weights of different shapes and weights.

In general, the excavated area of the site dating to the 9<sup>th</sup> century shows a complex of flimsily constructed rooms, connected together, most of these rooms were used for domestic purposes such as storing fuel dung and food, and also for preparing meals in which the use of all sorts of local herbs played an important part beside wheat and pulses.

Inside the rooms, weaving went on in many places. It is quite possible that textiles were only made for home use as needed, even if the large number of excavated looms may still indicate a trade specialization.

Various artifacts indicate not only cultural contacts within a wide radius, but trading relations too. Part of the pottery has been manufactured by more or less local potters. But there was also special pottery in use in the settlement which must have come from elsewhere. On the other hand, there are elements indicating that the local inhabitants of the 9<sup>th</sup> century BC of Tell Deir 'Alla had their own cultural identity even though it was linked to that of other groups of people. A clear example of this is their use of writing system. It has been argued by some scholars that this may have been a branch of the Aramaic traditions coming from the north.

Phase VIII dating to the 8<sup>th</sup> century BC is only known from a small area. It is represented by a building with large and yellow mud-bricks (found in Squares B/C-D7-8 during the 1996 season), some walls and courtyard layers. In order to construct the walls of the building, the excavators noticed that the rubble of Phase IX (9<sup>th</sup> century BC) was partially leveled. However, the upper diameters of this accumulation (Phase VIII) had suffered from an enduring fire, causing a whitish and lightly-colored appearance. Unfortunately, nothing correlate with Phase VIII was found during the 1998 season.

Most of the scanty remains belonging to Phase VII and related to the 7<sup>th</sup> century BC, have been preserved to a height of only about 15 cm, and it is partly composed of the debris left by a fire. The specific character of Phase VII appears clearly in the way the walls were constructed. There is an unusually tight connection between the bricks, which caused some

walls collapse, leaving the mud bricks in a vertical position. The pottery excavated in the strata of this phase was found mainly smashed and spread over ashy floors and stone pavements. The inventory of this pottery includes storage jars, jugs, bowls and cooking-pots.

In addition to these general characteristics, in 1996 season more information about this phase were obtained from the excavations in Squares B/D-F-9 and B/F7 located on the southern part of the eastern summit of the tell. There, a large wall running E-W, in a way bordering the settlement to the north, but with a room attached to it. Moreover, other objects were found during this season, as a sand core glass bottle and a large amount of carbonized wheat and barley.

During the 1998 season, features of Phase VII (ca. 700 BC) continued to be found especially of the large store for wheat, including the wood and the reed containers. Close to this, an unusual tannur was uncovered, with sherds of tannur instead of pottery and a layer of clay insulation.

#### 4.3. *Iron Age II C (ca. 750-586 BC)*

The period between the 8<sup>th</sup> and 5<sup>th</sup> century BC is well illustrated at Tell Damiyah, located directly south of the confluence the az-Zarqa River with the Jordan River. Architecture and material retrieved in the site suggest that it functioned as a trade and religious centre. Within and next to a building with a cultic function, several artistic objects, such as human and animal figurines, were excavated.

At Tell Deir 'Alla and with the help of the C14 dating method, a date of 750 BC for the beginning of this period has been established. The date proposed on material culture data push it at the end of the 8<sup>th</sup> century BC (the beginning of the Assyrian domination). In fact, the Ammonite jug with black and white bands and Assyrian bottles are characteristic of the pottery found in this phase. The inhabitants of the site during this period began to carrying on a large scale leveling activities before to build up large walls and structures.

The oldest ostrakon was found in a wash or leveling off stratum of the ruins. Beautiful terracotta figurines were also found there.

After a fire broke out at the site, no more buildings were constructed, except the case of a courtyard. In it, several large pits were dug with a diameter of 5 m and a depth of at least 7 m. Their sloping walls were made of large stones and mud bricks. The excavators argue that it is possible that they were used for dwelling purposes. Then these pits were also abandoned and new courtyard deposits covered them. A great number of pear-shaped pits were dug, apparently exclusively for storing fodder's. Furthermore, a chance find in 1996 season was an "Attic" bowl with two handles and purple paint on and below them as well as on the lower part of the body and the bottom, it can be probably dated to the 4<sup>th</sup> century BC.

At Tell Mazar the excavator mentioned that the uppermost stratum of the tell is dated to the first half of the 4<sup>th</sup> century BC and consisted of deep and circular pits and silos built of lining mudbrick preserved to a nearly height of 3 m. He added that some of which were used to store chaff and others, the rounded shape (barreled) with conical-shaped roof

suggest that they were also use to store grain.<sup>25</sup> Stratum II, dated to the 5<sup>th</sup> century BC yielded several buildings consisted of an open central courtyard enclosed on two sides by rooms some of which contained Tawabeen (Tabouns) constructed adjacent to one of the walls of the room.

The 7<sup>th</sup>-6<sup>th</sup> century BC at Tell Mazar is represented by a large structure consisting of a massive and most impressive building crowning the centre of the site, which has been identified as the “Palace Fort” by the excavator and was used as a residence for the governor.

In addition to the Palace Fort a complex of many rooms consisting several architectural units, one of which is a large rectangular podium measuring 10 m x 15 m and encircled by a thick mudbrick wall. To the north of it, a large stone paved open courtyard was found.<sup>26</sup> Another unit, representing the latest use of the construction was uncovered, and consisted of several rooms functioned as the following: store-rooms, kitchen, weaving room and a meat preparation room. It has been suggested by the excavator that Tell Mazar served during the 7<sup>th</sup>-6<sup>th</sup> century BC as an Ammonite either a garrison or an administrative centre rather than a large settlement, based on that an Ammonite King’s name (HSL) was written on one of the ostraca revealed at the site.<sup>27</sup> However, this building was put to fire and all rooms were burned to ground. It seems that the main cause of the destruction was the Babylonian conquest which brought an end to the independence of the different states in the region. Yassine<sup>28</sup> also assumed that the site served during the 8<sup>th</sup> century BC as a centre for administration, but it had been destroyed by Senncharib’s campaign in ca. 701 BC.

To conclude, during the Assyrian domination on the eastern Mediterranean countries, Ammon, Moab, and Edom were, as other lands, in the area nominal Assyrian vassal, but they were permitted to have their own rulers without the presence of an Assyrian provincial governor. This means that those three Jordanian political unities enjoyed internal administrative freedom.

At Tell Damiyah the remains of a large public building burned down at the start of the 7<sup>th</sup> century BC.<sup>29</sup> Several objects, among them a clay bulla with cuneiform signs and Assyrian Palace Ware, found during a previous season, point to a relationship with the Neo-Assyrian Empire, but also some Egyptian, Cypro-Phoenician and Ammonite ceramics and objects were encountered. The interior walls of the rectangular building were plastered as was a platform against the most western wall. Several figurines, both of horses (fig. 9) and females (fig. 10), were discovered in and outside this building and cultic activities can be assumed. Especially the excellent condition of those figurines and the remains of two anthropomorphic statues are unique objects that have only a few parallels.

During the 2016 season, the excavators did continue investigating this important building and the occupation below. Furthermore, attention was given to the lower elevated area towards the southwest. The square at the foot of the site were re-opened to investigate

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<sup>25</sup> Yassine 1983, 498.

<sup>26</sup> Yassine 1983, 505.

<sup>27</sup> Yassine 1983, 506.

<sup>28</sup> Yassine 1983, 510.

<sup>29</sup> Petit - Kafafi 2016.

the possible existence of a so-called lower town. Work in 2015 resulted in the discovery of several graves, which dates are still under debate, and evidence of an industry employing fire in the production. This season we re-opened one square to recheck the possibility of a built-up area, with little success. On the summit, students and archaeologists of both institutes uncovered beside Ottoman and Byzantine graves, important information about the Persian-Hellenistic period and the Iron Age. The south western corner and southern courtyard of the large public building was excavated. In the southernmost square, 8<sup>th</sup> century levels were reached. The remains of several buildings were encountered as well as a courtyard with a taboun and restorable pottery. The co-directors suggest that Tell Damiyah was a significant and international centre for worshipping during the Late Iron Age (8<sup>th</sup> and 7<sup>th</sup> centuries BC) along two major trade routes and close to one of the few fords crossing the Jordan River.

##### 5. BURIAL CUSTOMS BETWEEN THE 13<sup>TH</sup> AND THE 4<sup>TH</sup> CENTURIES BC IN GHOR ABU 'OBEIDEH

As is above mentioned the site of Tell Deir 'Alla was a very important settlement during the 13<sup>th</sup> century BC and functioned as a town. Unfortunately, neither burials nor a cemetery dating to the period ranging from ca. 1300-1000 BC, belonging to the dwellers of the site of Tell Deir 'Alla, were found at the site or in the close neighbourhood. However, scholars argued that the uncovered Late Bronze Age II (ca. 1400-1300 BC) graves at the site of Kataret es-Samra, located only 6 km to the southeast of Tell Deir 'Alla may belonged to the dead people of the site that time.<sup>30</sup>

To mention, in 2010 a Jordanian-Dutch team sounded the site (81) registered by the "Settling the Step Team", situated between the villages of Sawalha and Abu Nu'aym belonging to the Deir 'Alla municipality. A bell-shaped pit was revealed below the surface soil which widened out to a 3 m in diameter and reached to 2 m in depth (fig. 11). The excavators uncovered fragmentary human remains inside this pit, which were dated to the Iron Age I A C14 date from a botanical sample excavated at the bottom of the pit yielded a date of 2890 +/- 40BP, 2 sigma calibration: 1200-970 cal. BC and 960-940 cal.<sup>31</sup>

In 1977 the cemetery of Tell Mazar, situated ca. 3 km north-northwest of Tell Deir 'Alla, was found in an area located only 220 m to the west of the main tell.<sup>32</sup> The cemetery consisted of Iron Age I architectural debris ranging between the 11<sup>th</sup> and mid 10<sup>th</sup> centuries BC, which formed a mound rising ca. 1.80 m above the surrounding farm land, and sloping to the north and south directions. Inside this accumulation 84 graves clustered on the summit and its northern part were dug. Unfortunately, the cemetery does not exist anymore, this is due to the cultivation operation. The material excavated inside the graves pointed out to the Iron Age II C period (ca. 700-586 BC). Dead people were buried in one meter or a little more deeper graves.<sup>33</sup> The following types of graves were identified at the cemetery:

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<sup>30</sup> Kafafi 1977.

<sup>31</sup> Kaptijn - Kafafi - van der Kooij 2011, 151-152.

<sup>32</sup> Yassine 1984.

<sup>33</sup> Yassine 1984, 111.

plain interments, pits lined with bricks, graves lined with stones on one side, jar burials and clay bathtub burials.<sup>34</sup>

Funerary objects were put with the dead, the kind and type of gifts are enlightening about the social status of the deceased/buried people. Funerary equipment consisted of metal such as pins, fibulae, daggers, swords, knives, arrowheads, spearheads, bracelets, armlets, belts, anklets, seals, scarabs, beads, and pottery vessels.

## 6. CONCLUSION

Although the results of the excavations at Tell Deir 'Alla did not reveal that much archaeological data from the second half of the Iron Age I (ca. 1100-1000 BC), it seems that Tell Deir 'Alla and adjacent sites flourished culturally during the later Iron Age (ca. 1000-586 BC).

The excavated archaeological Iron Age site in Ghor Abu 'Obeideh indicated a high presence of Ammonite culture. This might reveal that this part of the Jordanian Valley consisted a part of the Ammonite Kingdom during the 7<sup>th</sup> and 6<sup>th</sup> centuries BC.

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<sup>34</sup> Yassine 1984, 113-114.

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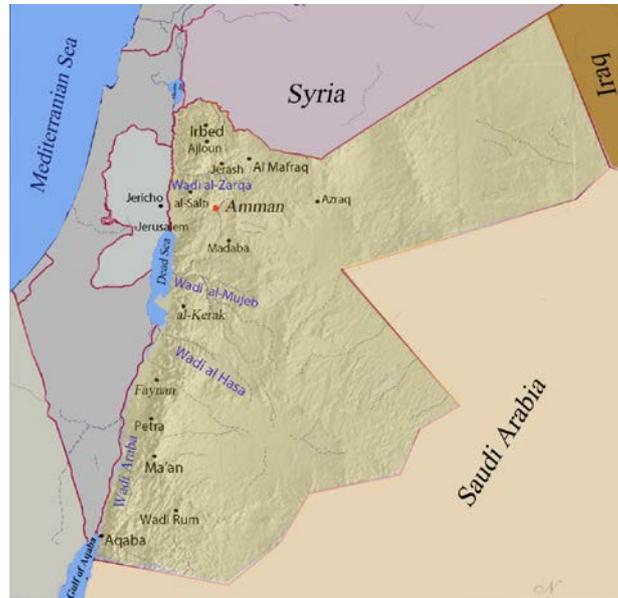


Fig. 1 - Wadis meandering into the Jordan River.

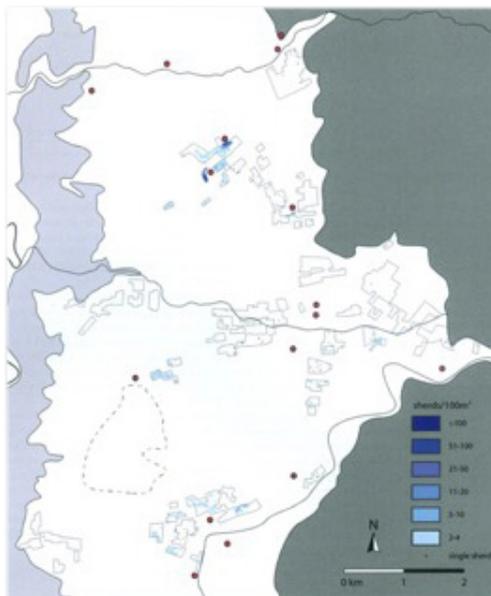


Fig. 2 - Late Bronze Age and Iron Age tell sites (after Kaptijn 2009, fig. 4.134).

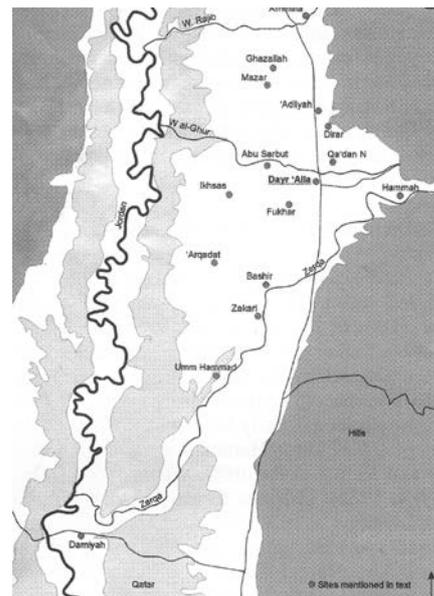


Fig. 3 - Map of the Deir 'Alla Region (after Petit *et al.* 2006, 179).



Fig. 4 - Henk Franken and Father Pierre de Vaux at the site in 1964 (Courtesy of G. Van der Kooij).



Fig. 5 - Tell el-Hammeh General (photo by Yousef Zoubi).

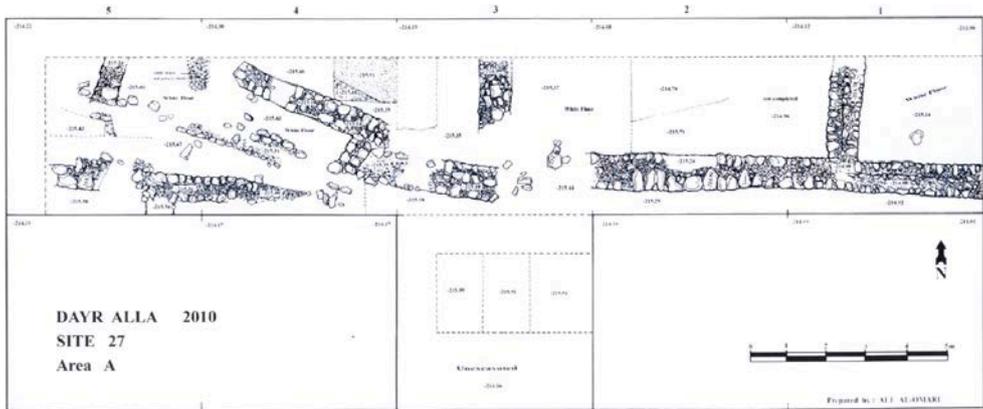


Fig. 6 - Chalcolithic architecture excavated at the Ruwayha alluvial fans.



Fig. 7 - A general view of Tell Damiyah (looking west, photo by Yousef Zoubi).



Fig. 8 - A large Civil Complex excavated at the Southern Slope of Tell Deir 'Alla.



Fig. 9 - Horses figurines excavated at Tell Damiyah (photo by Yousef al Zoubi).



Fig. 10 - Female figurines from Tell Damiyah (photo by Yousef al-Zoubi).



Fig. 11 - A bell-shaped pit used as an Iron Age tomb excavated at the site of Abu Nu'aym (photo by Yousef al Zoubi).