NEO-LITHICS 1/07

The Newsletter of Southwest Asian Neolithic Research

Contents

Editorial

The cancellation of the 6th Conference of PPN Chipped and Ground Stone Industries, originally scheduled for March this year, reminds us not to forget the reality of our research conditions and the direct links between research agendas and political issues. Is the Neolithic Family well beyond political situations when it wants to gather with all its members in the countries we are excavating the Neolithic? We are. And this should lead us to try it again, even if the 6th Conference has had to shift to Manchester (March 2008, *cf.* this issue). We thank Elisabeth Healey for taking up the momentum, and we express our gratitude to all the Jordanian colleagues who did so well in preparing the conference.

Neo-Lithics is planning to have two future dialogue/forum issues on the topics organized by guest editors. The first is "The Domestication of Water" and the second is "Landslides in the Eastern Mediterranean Neolithic", for which preparations have started. Invitations will be circulated in the near future.

At this time we would like to thank all authors who have contributed to *Neo-Lithics:* our newsletter is flourishing, and the editor-author feedback is developing amazingly well. Neolithic research in the Near East is doing splendidly, despite all the clamour and distraction.

Hans Georg K. Gebel and Gary O. Rollefson

New Data on the Epipalaeolithic and Neolithic of the Homs Gap: Three Campaigns of Archaeological Survey (2004-2006)

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Introduction

Three campaigns of archaeological survey (2004, 2005, and 2006) carried out by a Syrian-Lebanese-Spanish Mission working to the west of Homs have resulted in the discovery of 162 archaeological sites. In this paper we deal with the Epipalaeolithic and Neolithic sites, relating the discoveries to the current state of our knowledge on the beginning and development of the Neolithic in this area of the northern Levant.

In order to complete the gaps of our archaeological knowledge to the west of Homs, a joint mission was established in 2004, when the General Directorate of Antiquities and Museums of Syria, the Saint-Joseph University of Beirut and the Spanish University of Cantabria signed an agreement for co-operating in an archaeological survey project. This project is directed by M. Al-Maqdissi, M. Haïdar-Boustani and J.J. Ibáñez. The area of survey lies between the city of Homs to the east, Qala'at al-Hosn (Krak des Chevaliers) to the west, the parallel of latitude 3852.28 to the north and the frontier with Lebanon to the south (Fig. 1). The project area covers around 560 km^2, which is composed of different environmental zones: the Orontes River Valley, the basalt landscape (plateau and hills) and the Bouqaia Basin.

The project is especially focused on two main topics: 1) the origin and development of the Neolithic in the area and 2) the urban organization in the region at the end of the Early Bronze Age (middle of the 3rd millennium B.C.).

We chose a survey methodology based on the visual detection of the main sites and on a selective survey of those areas where last hunter-gatherers and first farmers could have most probably been settled down, such as small hills dominating the landscape, near water sources or flint outcrops, etc. (Haïdar-Boustani *et al.* 2005; in press). The localization of the archaeological sites was based on an analysis of the Corona satellite photography (Philip *et al.* 2002), the study of the topographic maps, the toponymy, direct archaeological survey, and inquiry among the villagers. In this paper we deal with the Epipalaeolithic and the Neolithic data revealed during three survey campaigns (2004, 2005, 2006).

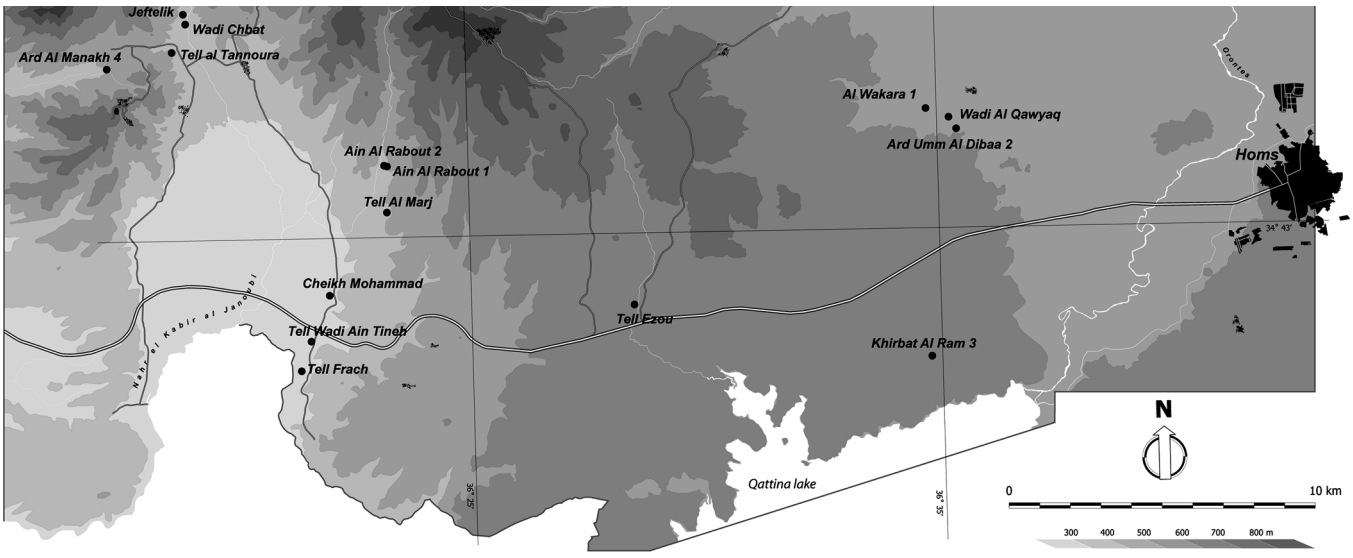

Fig. 1 Map with the Epipalaeolithic and Neolithic sites in the survey area.

The Epipalaeolithic-Neolithic Gap in the Area

The neolithization process is well documented in certain regions of the Levant, such as the Middle Euphrates and the Jordan Valley (Aurenche and Kozlowski 1999). However, we have very scarce information on how this process took place in the extended geographical area that lies down between the two rivers. The recent excavations in Tell Aswad have shown that the older levels that had been previously attributed to the PPNA correspond in fact to the Early PPNB (Stordeur 2003). This evidence has deepened the gap of knowledge for the earliest Neolithic in the central Levant, stressing what apparently seems to be a mutual isolation between the Jordan and the Euphrates during the PPNA. New data on Tell 'Ain el-Kerkh would indicate that the site, located in the Rouj Basin, was first occupied during the Early PPNB (Tsuneki *et al.* 2006).

Does this mean that the cultural changes associated with the PPNA only took place along the two river valleys, being later spread to the other zones of the Levant? This could be the case, but some evidence does not fit well with this explanation. Cultural changes taking place in the Jordan and Euphrates valleys from the Natufian to the Late PPNB show clear similarities, both in the nature of the cultural changes and in their chronological appearance. This would indicate that some cultural contacts between the two regions existed. These contacts would be very difficult to explain if the extended geographical area lying between the two rivers would not have experienced similar cultural novelties. Moreover, the archaeological sequence observed in Nachcharini Cave (northern Anti-Lebanon highlands) (Schroeder 1976) seems to point out that a similar process of cultural change was taking place in other regions of the Levant outside of the Jordan and Euphrates valleys.

The lack of knowledge on the earliest Neolithic in the extended region between the Euphrates and the Jordan makes it very difficult to offer a global explanation for the origin and development of the Neolithic in the Levant. The area concerned in our survey is part of a natural communication route between the northern and southern Levantine areas, so this research may help to shed some light on the relationship between the two zones of Neolithic origin.

Knowledge on the development of the Pottery Neolithic in the area is also very scarce. Compared with the PPN, we have some more data on the Orontes Valley (Arjoune; Parr 2003), the northern Beqa' Valley (Tell Labwe; Kirkbride 1969), the Syrian coast (Tabbat Al Hammam; Hole 1959) and the Lebanese coast (Byblos; Dunand 1973), but there is a void of information for the area west of Homs.

The results of three survey campaigns have allowed us to collect some data on the Epipalaeolithic and the Neolithic in this area, which are discussed in this paper, though there are still many open questions that should be dealt with in future work.

The Sites

Most of the Epipalaeolithic and Neolithic sites recovered during our survey are located around the Bouqaia Basin (Fig. 1). This valley is part of the Rift Fault and seems to be a basin that was deeply filled with Holocene sediments. This is probably the reason why no sites older than the Hellenistic period have been found inside the valley itself. The Epipalaeolithic and Neolithic sites are situated in the hills surrounding the Bouqaia Basin to the north and to the east. Nowadays, and surely it was also in the past, it is a fertile and humid area, drained by the Nahr Al-Kebir river. Most of our survey area, between the Orontes river and the Bouqaia Basin, shows a volcanic geology, so flint outcrops are lacking. However, at the northwestern hills surrounding the Bouqaia Basin, in the Marmarita area, there are limestone outcrops rich in flint veins. The presence of this flint source must have conditioned the prehistoric occupation of the area. In the Nahr 'Ain Al-Aajouz valley, which is transversal to the Bouqaia and is located at the base of the Marmarita hills, several open-air sites show abundant flint-knapped mate-

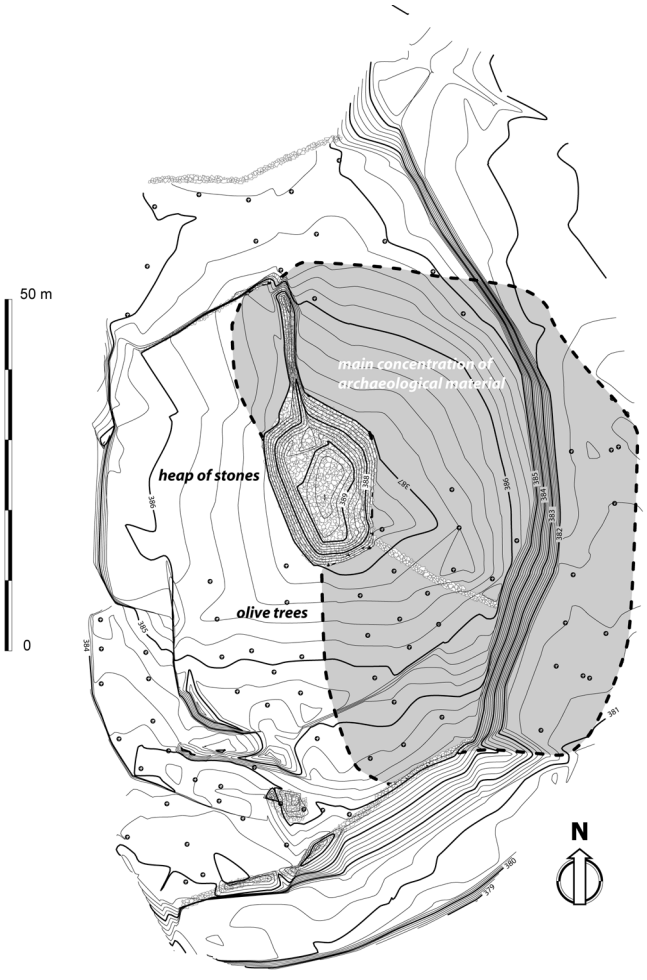

Fig. 2 Topography of the upper part of Jeftelik.

rial. We found handaxes, Levallois cores and products, unipolar blades and blade-cores and one bipolar core. In these sites, cores and unretouched blades and flakes are very abundant, while retouched tools are scarce. They resemble what have traditionally been called "flint workshops," and they were used all through the Palaeolithic and even during the Neolithic.

The site of Jeftelik (Fig. 2), dating from the Epipalaeolithic period, is located at the Western bank of the Nahr Al-Kebir River, at the north of the Bouqaia Valley. The site spreads across the southeastern slope of a hill, which is terraced for the cultivation of olive trees. The total surface of the site is nearly 1 ha. We found on the surface an abundant flint industry and some ground stone tools (Fig. 3). Lithic technology is dominated by flake and bladelet cores. The use of the microburin technique is documented. Among the retouched tools we found many endscrapers and burins and one glossed blade-like flake. Microlithic tools are present, although they are probably underrepresented in our sample due to the fact that we collected the objects from surface and we did not sieve the sediments. Among this microlithic industry, we can mention backed bladelets and one segment with Helwan retouch. Some fragments of obsidian bladelets have also appeared. The ground stone industry, made on basaltic stones, is also quite abundant. Many broken or complete objects exist among the stones used for building the terraces. We found one mortar, three pestles, one grinding slab, one milling stone base and five handstones. The mortar consists of a deep ovoid receptacle broken in the middle. The grinding slab was made using a big natural boulder where only the grinding surface was made, while the milling stone base was made by shaping the whole volume of the tool. We also found two discoidal pierced objects made of basalt, which are usually interpreted as stone weights intended to fit into wooden ground-digging sticks. Similar objects are known in the PPNB levels of Çayönü (Davis 1982) and Tell Ramad (Contenson 2000). It is difficult to say if these two objects correspond to the Epipalaeolithic occupation or whether they are the result of the ephemeral use of the area during the Neolithic. In fact, two other objects found at the site could be dated to the Neolithic: one bipolar blade and one chisel with a polished cutting edge.

One kilometer south of Jeftelik we found the site of Wadi Chbat. The characteristics of the lithic industry are similar to those observed in Jeftelik, with a technology based on the production of flakes and bladelets. Some isolated tools should be dated in the Neolithic, including one bifacial adze, some sickle elements, and one pressure-

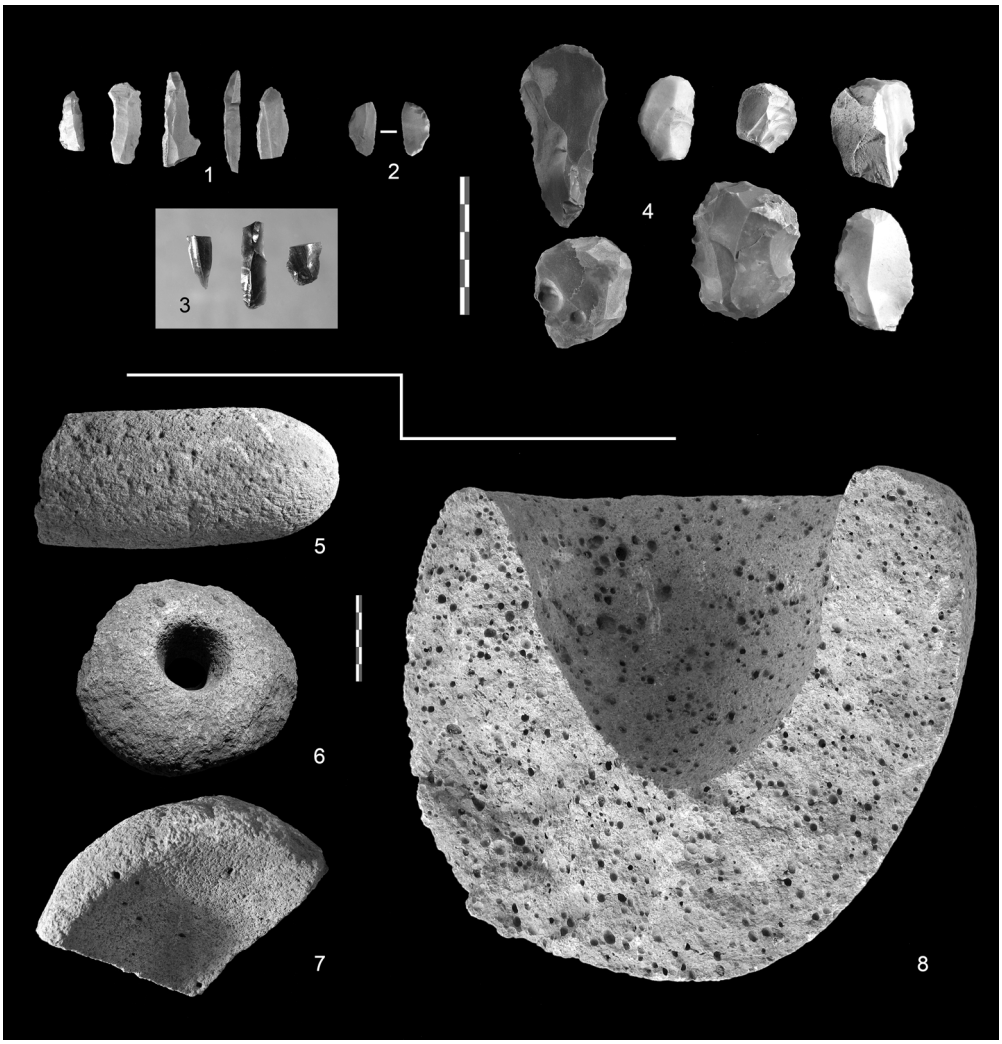

Fig. 3 Archaeological material from Jeftelik.
3.1. Backed bladelets.
3.2. Segment.
3.3. Obsidian bladelets
3.4. End-scrapers.
3.5. Pestle.
3.6. Stone pierced disk.
3.7. Fragment of milling stone.
3.8. Mortar.

flaked obsidian bladelet. Although the recovered material is not as diagnostic as the one recovered in Jeftelik, it seems that this is also an Epipalaeolithic site with some ephemeral use during the Neolithic.

Tell Al-Marj is located on top of a hill dominating the Bouqaia, in the central-western area of the basin. The existence of a long trench cutting the site has allowed us to recover many archaeological materials (Fig. 4). The site seems to have an extension of around four hectares. The small arrowheads with wings and tang correspond to the Ha-Parsa, Nizzanim and Herzliya types, which are common in the Southern Levant

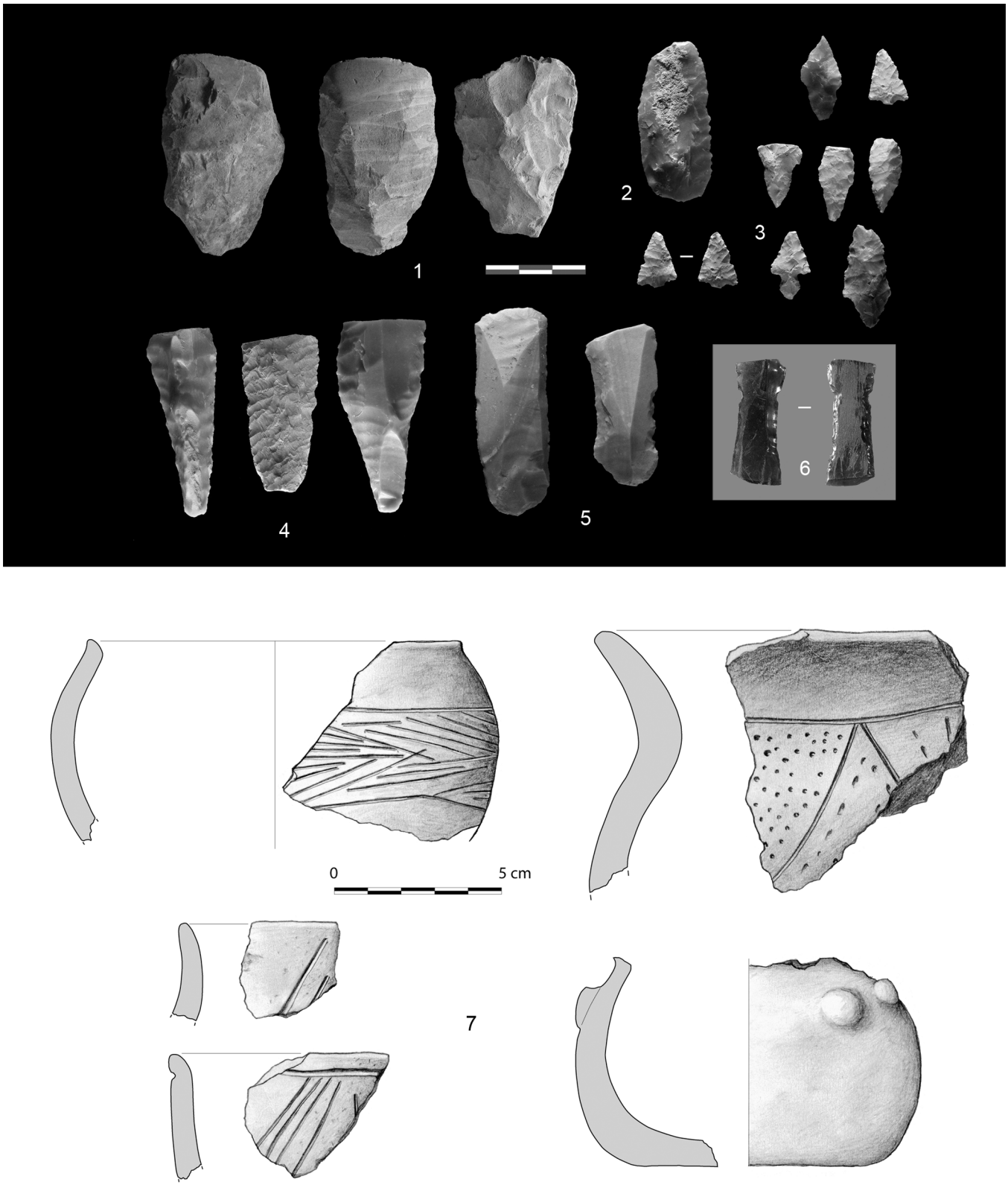

Fig. 4 Archaeological material from Tell Al Marj. 4.1. Polished adzes/axes. 4.2. Sickle element. 4.3. Arrowheads. 4.4. Basal fragments of projectile points. 4.5. Bipolar blades. 4.6. Obsidian bladelet with abrasive use-traces. 4.7. Pottery.

(Gopher 1994). Some arrowheads are similar to the type 6 (the lozenge shape) of Byblos (Cauvin 1968). Beside these types there are also some broken Amuq points. Glossed tools, most probably used as sickle elements, are usually made on blade fragments that often show the ends truncated by retouch and the edges thoroughly denticulated. Some of the sickle elements and the projectile points were shaped by pressure retouch. We also recovered two small polished axes and some blades showing the use of bipolar knapping techniques. Obsidian bladelets, knapped by pressure, are present in the site. One of them is similar to the Çayönü tools, as it shows a continuous retouch in both sides which is deeper in the central area of the edge. The abrasive longitudinal use-wear traces, which are typical of this type of tool, can be observed in the ventral face of the bladelet. The pottery of Tell Al-Marj (preliminary comments of Marie Le Mière) (Fig. 4) is more comparable in its shape and decoration to the pottery of Byblos (Dunand 1973) and to the Yarmukian Culture of the southern Levant (Garfinkel 1993) than to the northern sites such as Ras Shamra (Contenson 1992). Vessel shapes are globular with rounded or straight sides, and rims are vertical or reverted. Decoration consists of incised lines and triangles, and one sherd shows *Cardium* impressions.

Three Neolithic sites (Tell Frach, Cheikh Mohammad and Tell Wadi 'Ain Tineh) are situated on the top of small basaltic promontories at the western limit of the Bouqaia. They are relatively small, with an extension of between one to three hectares. The abundant flint material shows the use of simple methods for obtaining flakes. The most diagnostic objects are sickle elements, pressure-knapped obsidian bladelets and some bifacially knapped adzes. Some handmade pottery sherds found in these sites could correspond to the Neolithic occupations.

Tell Ezou is another interesting Neolithic site located in the central zone of our survey area. The abundant archaeological material spreads along the slope of a hill, covering more than five hectares. The characteristics of the material indicate that the site was occupied during several Neolithic periods (Fig. 5). What we have called Zone 3 was probably occupied during the end of the PPNB. In this area no pottery sherds can be found. Among lithic tools we can point out the presence of Byblos and Amuq points and one basal fragment of an Ugarit point. In this area, obsidian bladelets knapped by pressure are very abundant. Other areas of the site would have been occupied during the Pottery Neolithic. There, pottery sherds are common. Pots were made by hand and most of them show the use of chaff temper. One small arrowhead on flint with wings and a tang is comparable to

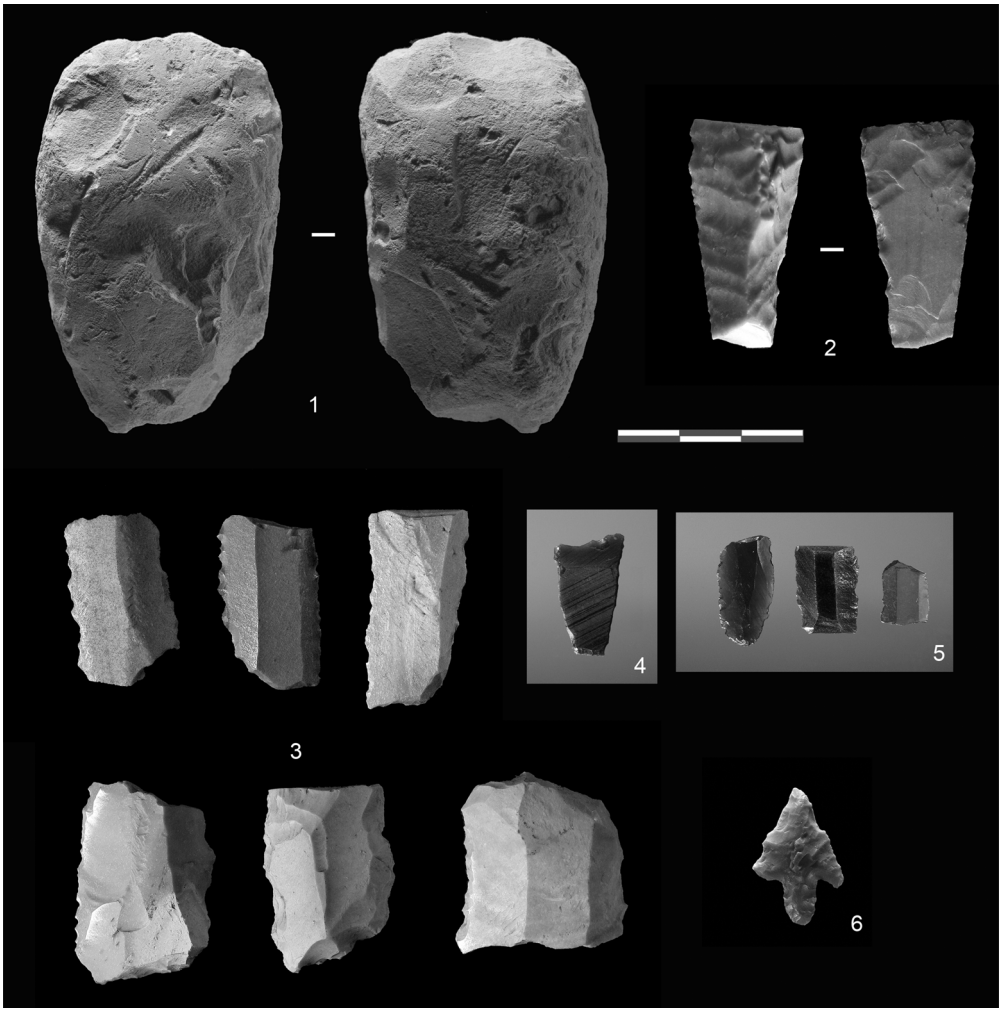

Fig. 5 Archaeological material from Tell Ezou.
5.1. Polished adze/axe.
5.2. Basal fragments of projectile points.
5.3. Sickle elements.
5.4. Transversal obsidian arrowhead.
5.5. Obsidian bladelets.
5.6. Arrowhead.

those described in Tell Al-Marj. One transverse arrowhead, made in obsidian, is similar to the flint exemplar, which was found in the *néolithique récent* levels of Byblos (Cauvin 1968). Obsidian bladelets from Tell Ezou bear black, grey and green colours, probably indicating their provenance from different sources.

Discussion

Natufian sites are well known in the southern Levant around the Jordan Valley (Bar-Yosef 1998). Regional varieties of the Natufian culture have been identified in the Negev (Goring-Morris 1991) and in the Middle Euphrates (Cauvin 1991; Moore *et al.*, 2000). Some Epipalaeolithic sites attributed to the Natufian have been found in the central Levant, more precisely, in the Beqa' Valley (Schroeder 1991), the northern Anti-Lebanon highlands (Schroeder 1976), and the Yabroud region (Conard 2002). Jeftelik shares some of the characteristics of these sites, and we think that it can also be attributed to the Natufian. The extension of the site, the quantity and diversity of the lithic industry, and the presence of heavy duty tools suggests that this is an important and probably long-lasting occupation. Up to now, Natufian sites were not known in our survey area or in the nearby regions. The presence of Jeftelik tat the west of Homs fills an important gap with respect to the Natufian, reinforcing the image of this culture as a phenomenon prior to the Neolithic and characterizing the whole Levant.

There is no evidence in our survey area of the earliest stages of the Neolithic. No PPNA site has been discovered until now. Only some of the archaeological levels of Tell Ezou would date from the PPNB; most probably this place was occupied since the end of this period. On the other hand, twelve Pottery Neolithic sites have been found. There is a lack of information from the Natufian to the Late PPNB, while in the Pottery Neolithic the number of sites clearly increases. This fact, observed in our survey area, seems to reproduce, at a minor scale, what can be observed in a more extended area comprising northern Lebanon and western Syria. No PPNA sites are known, while several Neolithic sites begin to be occupied during the Late PPNB. This is the case of Tell Labwe, in the northern Beqa'; Byblos, on the Lebanese coast; and Ras Shamra on the Syrian coast. During the Pottery Neolithic this extended region seems to be more populated as the quantity of sites grows, including, beside the three aforementioned, Arjoune and Tabbat Hammam (Hole 1959).

Taking into account that we have not found Neolithic sites older than the Late PPNB, our current data seem to support the hypothesis suggesting that the origin of the Neolithic in this part of the northern Levant is tributary of other areas (Jordan and/or Euphrates valleys). The spread of the Neolithic in this area would have taken place in the Late PPNB, at the end of the 8th millennium cal BC (Cauvin 1997). However, we are dealing with preliminary information and the survey will go on, trying to fill the gap corresponding to the period dating from the PPNA to the Late PPNB.

The results of our survey may also suggest some reflexions on the nature of the Pottery Neolithic in the area. The typology of the majority of arrowheads and the pottery is more related to the south than to the north. These objects look similar to the ones found in Byblos (Dunand 1973) and to the Yarmukian Culture of the southern Levant (Garfinkel 1993). These data could be a result of more intensive cultural contacts taking place to the south than to the northern sites, like Ras Shamra or Amuq.

References

Aurenche O. and Kozlowski S.K.
1999 *La naissance du Néolithique au Proche-Orient, ou le paradis perdu.* Paris: Éditions Errance.

Bar-Yosef O.
1998 The Natufian Culture in the Levant, Threshold to the Origins of Agriculture. *Evolutionary Anthropology* 6: 159-177.

Cauvin J.
1968 *Les outillages néolithiques de Byblos et du littoral libanais,* Fouilles de Byblos, tome IV. Paris: Librairie d'Amérique et d'Orient, J. Maisonneuve.

Cauvin J.
1997 *Naissance des divinités, naissance de l'agriculture: La révolution des symboles au Néolithique.* Paris: CNRS Éditions Empreintes. Nouvelle édition corrigée et augmentée.

Cauvin M.-C.
1991 Du Natoufien au Levant Nord? Jayroud et Mureybet (Syrie). In O. Bar-Yosef and F.R. Valla (eds.), *The Natufian Culture in the Levant:* 295-314. Ann Arbor: International Monographs in Prehistory.

Conard N.J.
2002 An Overview of the Recent Excavations at Baaz Rockshelter, Damascus Province, Syria. In R. Aslan, S. Blum, G. Kastl, F. Schweizer and D. Thumm (eds.), *Mauerschau: Festschrift für Manfred Korfmann:* 623-639. Remshalden: Verlag B.A. Greiner.

Contenson H. de
2000 *Ramad site néolithique en Damascène (Syrie) aux VIIIème et VIIème millénaires avant l'ère chrétienne,* Bibliothèque archéologique et historique, tome 157. Beyrouth: Institut Français du Proche-Orient.
1992 *Préhistoire de Ras Shamra. Ras Shamra-Ougarit VIII.* Paris: Éditions Recherches sur les Civilisations.

Davis M.K.
1982 The Çayönü Ground Stone. In L.S. Braidwood and R.J. Braidwood (eds.), *Prehistoric Village Archaeology in South-Eastern Turkey: The Eighth Millennium B.C. Site at Çayönü: Its Chipped and Ground Stone Industries and Faunal Remains:* 73-174. Oxford: British Archaeological Reports – International Series 138.

Dunand M.
1973 *L'architecture, les tombes, le matériel domestique, des origines néolithiques à l'avènement urbain,* Fouilles de Byblos, tome V. Paris: Librairie d'Amérique et d'Orient, Adrien Maisonneuve.

Garfinkel Y.
1993 The Yarmukian Culture in Israel. *Paléorient* 19/1: 115-134.

Gopher A.
1994 *Arrowheads of the Neolithic Levant.* American Schools of Oriental Research, Dissertation Series, vol. 10. Winona Lake: Eisenbrauns.

Goring-Morris N.
1991 The Harifian of the Southern Levant. In O. Bar-Yosef and F.R. Valla (eds.), *The Natufian Culture in the Levant:* 173-216. Ann Arbor: International Monographs in Prehistory.

Haïdar-Boustani M., Ibáñez J.J., Al-Maqdissi M., Armendáriz A., González Urquijo J. and Teira L.
2005 Prospections archéologiques à l'Ouest de la ville de Homs: rapport préliminaire, campagne 2004. *Tempora,* Annales d'Histoire et d'Archéologie, Université Saint-Joseph, Beyrouth, vol. 14-15 (2003-2004): 59-91.
In press Prospections archéologiques à l'Ouest de la ville de Homs: rapport préliminaire, campagne 2005. *Tempora,* Annales d'Histoire et d'Archéologie, Université Saint-Joseph, Beyrouth, vol. 15-16 (années 2005-2006).

Hole F.
1959 A Reanalysis of Basal Tabbat al-Hammam, Syria. *Syria* 36 (3-4): 149-183.

Kirkbride D.
1969 Early Byblos and the Bakaa. *Mélanges de l'Université Saint-Joseph* 45: 43-60.

Moore A.M.T., Hillman G.C. and Legge A.J.
2000 *Village on the Euphrates: From Foraging to Farming at Abu Hureyra.* Oxford: Oxford University Press.

Parr P. (ed.)
2003 *Excavations at Arjoune, Syria.* Oxford: British Archaeological Reports – International Series 1134.

Philip G., Donoghue D.N.M., Beck A.R. and Galiatsatos N.,
2002 Corona Satellite Photography: An Archaeological Application from the Middle East. *Antiquity* 76 (291): 109-118.

Schroeder B.
1976 The Anti-Lebanon Cave of Mughara en-Nachcharini: A Preliminary Report: 1-13. *9ème Congrès International des Sciences Préhistoriques et Protohistoriques, Nice.*
1991 Natufian in the Central Beqaa Valley, Lebanon. In O. Bar-Yosef and F.R. Valla (eds.), *The Natufian Culture in the Levant:* 27-42. Ann Arbor: International Monographs in Prehistory.

Stordeur D.
2003 Tell Aswad. Résultats préliminaires des campagnes 2001 et 2002. *Neo-Lithics* 1/03: 7-15.

Tsuneki A., Arimura M., Maeda O., Tanno K. and Anezaki T.
2006 The Early PPNB in the North Levant: A New Perspective from Tell Ain el-Kerkh, Northwest Syria. *Paléorient* 32/1: 47-71.

Field Report

Sixteen Years of Archaeological Investigations in the Euphrates Valley and the Djezireh: Tell Halula, Tell Amarna, and Chagar Bazar

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In 1991, a new line of investigation concerning the study of the first agricultural societies in northern Syria was begun by the Autonomous University of Barcelona (UAB). After working in the Syrian arid steppic region (El Kowm –Palmyra area) during the 1980s, our main objectives were to investigate the process of Neolithisation in the more arboreal steppic region. The excavations at Tell Halula (middle Euphrates Valley), carried out within the framework of the rescue archaeological works of the cultural heritage threatened by the construction of the Tishrin Dam (Euphrates Valley), have allowed us to develop different research projects that mix both the archaeological excavations and the analysis and historical interpretation of the site from the archaeological remains. Later, we expanded our archaeological works to other sites from northern Syria including Tell Amarna (Euphrates Valley), from 1996 to 1998, and Chagar Bazar (Djezireh), from 1999 to present, both of them in the framework of our cooperation between the UAB and the University of Liège (Prof. O. Tunça).

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