Iranian-French Archaeological Mission in Bam, Kerman: Summary of Field-seasons 2016-2017

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Abstract: In this article we present the scientific objectives and results of the first two field-seasons in 2016 and 2017 of the Bam Archaeological Mission (BAM), a new Iranian-French joint field research project in the Bam-Narmashir Region, Kerman. During these two field-seasons, we surveyed this region and recorded about 250 sites mostly dating from the Palaeolithic period to the Iron Age. One of the most significant results from this survey is the discovery of two substantial settlements, one dating to the Neolithic period and the other one relating to the fourth millennium BCE Aliabad archaeological culture. These settlements are probably among the highest concentrations of sites dating to these periods reported so far from the south-eastern Iranian Plateau. In 2017, we also resumed excavation at the Neolithic site of Tell-e Atashi. We opened test-trenches at various locations at this site as well as a new stratigraphic trench near the excavation that had been opened in 2008. With new radiocarbon dates, we were able to confirm that at least a large part of the occupation levels at Tell-e Atashi dates to between the second half of the sixth and the middle of the fifth millennium BCE. This fieldwork also made it clear that this site is aceramic, a configuration that stands in contrast to the typical sixth and fifth millennium BCE archaeological sites in Iran. The aggregate of this fieldwork produced new data which have confirmed the unique nature of Tell-e Atashi and the Bam-Narmashir Region as well as their significance for the understanding of the Neolithic and Chalcolithic periods in the Indo-Iranian Borderlands.

Keywords: Neolithic, South-eastern Iran, Bam, Tell-e Atashi, Archaeological survey, Excavation

Introduction

The Bam-Narmashir Region is located in the southern margins of the Lut Desert, Kerman (Figs. 1-2). In 2016 and 2017, we conducted in this region the first two field-seasons of a new Iranian-French archaeological mission, the Bam Archaeological Mission (BAM). This mission seeks to reconstruct the ancient settlement in this area with an emphasis on its oldest occupation periods between the Palaeolithic period and the Iron Age. It aims to understand how this settlement evolved, to evaluate the influence of climate and environmental changes on this evolution, and to determine its relationship to...
the archaeological cultures defined in Iran and Pakistan and more generally in the rest of the Middle East, Central Asia, and South Asia. As such, this research project also more broadly seeks to contribute to the general study of ancient south-eastern Iran and to the reconstruction of the major demic and cultural dynamics—the dispersal of peoples, cultures, and technologies—that occurred in this area and across Middle- and South Asia during pre- and proto-history.

The creation of this mission was encouraged by the late Dr. C. Adle who tirelessly made considerable effort to record and protect the cultural heritage of the Bam-Narmashir Region in the aftermath of the deadly earthquake that struck this region in December 2003. Prior to our first field-season in 2016, Adle and other colleagues, including one of the authors (O.G.) as well as M. Atayi, L. Fazel, M. Judaki, N.A. Soleimani, and Sh. Zare, had conducted archaeological surveys and excavations in the Bam-Narmashir Region (Adle, 2006). This fieldwork currently continues, with a focus on the early historical and Islamic periods as part of a protection and conservation program of the UNESCO World Heritage property “Bam and its Cultural Landscape”, nominated to the World Heritage List soon after the December 2003 earthquake (https://whc.unesco.org/en/list/1208). The city of Bam is famous for its Islamic citadel and fortified town, the Arg-e Bam, which was a major hub along the trade routes of the so-called Silk Roads between the 7th and 11th centuries AD. Vestiges of the Islamic period are not limited to the Arg-e Bam, but also include many additional monuments and expanses of archaeological materials outside of the city. The Bam-Narmashir Region is also rich of archaeological remains dating to older periods. Among them are the archaeological remains from the Chalcolithic period (and possibly from the Neolithic period) reported by Adle from the Arg-e Bam area and west of Bam city (Adle, 2006: 39-41), the fourth millennium BCE graveyard of Khaje Askar rescued by N.A. Soleimani and his colleagues in the western periphery of Bam city (Soleimani et al. 2016), and Tell-e Atashi, a large Neolithic site excavated by one of the authors (O.G.), situated ca. 30 km as the crow flies east of the Arg-e Bam in an area called Darestan (Adle, 2006: 38-39; Garazhian, 2009; Garazhian and Shakooie, 2013).

Our first two field-seasons had two main objectives, different in scope: 1) To survey the Bam-Narmashir Region in order to evaluate and get an initial reconstruction of its ancient settlement; 2) To renew fieldwork at Tell-e Atashi. Our survey was mostly conducted during the first field-season in 2016 while additional sectors were explored in 2017. Fieldwork at Tell-e Atashi began in 2017.

Geographic settings

The city of Bam and the Bam-Narmashir Region are located in the eastern part of the Kerman Province, close to the Sistan-Baluchestan Province, in the south-western periphery of the Southern Lut Desert (Dasht-e Lut). Bam is located between two mountain ranges, both north-west—south-east oriented: the Kapudi Mounts in the north, with hilltops higher than 2400 m, and the Jebal Barez in the south, which almost reaches 4000 m in altitude (Fig. 2). The average altitude of the plain between these mountain ranges decreases from west to east. It is ca. 1250 m at Darzin and ca. 750 m in Darestan. The city of Bam is located at the confluence of two rivers: the Posht-e Rud coming from the north-west and the Chelekhoneh from the south-west. These rivers then continue further east and north-east through Darestan down to the Southern Lut Desert. As noted above, this region...
is located in an active seismic zone. Bam city lies directly above the active seismic Bam fault. A well-known geological feature related to this fault is a north-south ca. 15-20 m high scarp located in the eastern and south-eastern periphery of the city and west of the town of Baravat. The Bam-Narmashir Region is characterized by a desert climate with rainfalls averaging 72 mm/year and an annual average temperature of 21.7°C. The amount of rainfalls annually is ca. 300 mm along the south-eastern slope of the Jebal Barez. They provide the plain with water and make it possible, with irrigation systems, for palm trees to grow (Fouache et al. 2013: 563-564).

Archaeological Survey of the Bam-Narmashir Region: Field-Seasons 2016-2017

In 2016, our survey focused on two areas located west and east of Bam city, along the Posht-e Rud: 1) Area 1, located west of the city between Bam and Darzin, an area C. Adle called “Bidârzin”, where he reported sites dating to the Neolithic and Chalcolithic periods (Adle, 2006: 39-40); 2) Area 2, in Darestan, east of Bam, an area where the Neolithic site of Tell-e Atashi is located (Figs. 3-4). We systematically surveyed these two areas by foot, aided with the prior study of satellite imagery. We recorded and documented the archaeological sites we identified and collected a selection of diagnostic artefacts (mostly stone artefacts and ceramic fragments) from their surfaces. We also explored additional sectors inside and in the immediate periphery of the city of Bam, although we had little hope to find any substantial remains in these sectors, since any ancient occupations that may have existed there are today covered and most probably completely disappeared through the cumulative effects of urban expansion and palm tree plantation.

In 2017, we briefly visited and recorded a few sites along the Posht-e Rud between the towns of Darzin and Abaregh, sites on the fault scarp located west of Baravat, and sites along the western piedmont of the Jebal Barez, ca. 30-35 km south-west of the Arg-e Bam (Fig. 3). In total, we recorded about 250 sites with remains mostly dating to between the Palaeolithic and Iron Age periods with the majority of the sites belonging to the Neolithic and Chalcolithic periods (around 80 sites in each period). These Neolithic and Chalcolithic sites are the focus of the present, brief presentation of our results. We provide here preliminary estimates of site
Numbers; exact figures will be presented when the study of the totality of the surface material we collected is completed. As explained below, the lithic assemblage from this survey is the topic of an ongoing Ph.D dissertation, while issues remain as to the characterization of certain ceramic styles.

The Neolithic sites are all located in Darestan (Area 2), east of Bam city. Adle reported one lithic flake from inside the Arg-e Bam and additional lithics from Area 1 west of Bam city, which he assigned to the Neolithic period. However, although it is possible that the Neolithic settlement in the Bam-Narmashir Region extended as far...
west as the Arg-e Bam and Area 1, our systematic survey in this area recorded no cultural materials relating to this period. The lithics Adle reported may date to the Chalcolithic period or even to a more recent period. In any case, there are, in this area, no Neolithic remains as clear and abundant as those we observed in Darestan. There, the Neolithic settlement is represented by numerous and various types of sites including flat expanses of archaeological material (Fig. 5) and mounded sites with Tell-e Atashi being the largest of them. As far as surface material is concerned, we have recorded Neolithic sites with a distinctive type of vegetal-tempered pottery (Fig. 6) as well as sites with no pottery. The latter sites represent slightly less than half of the total number of sites. Despite this difference, we have observed similar categories of lithics including blades at both types of sites, although this observation, made in the field, should be considered preliminary and await confirmation, since the lithic assemblage from our survey is currently being thoroughly analysed by M. Shakooie as part of her doctoral research (University of Mazandaran). It is also important to recall that vegetal-tempered pottery, a primary criterion for identifying pottery Neolithic sites, is not a ceramic product found only during the Neolithic period. Excavation at Tepe Yahya, ca. 170 km south-west of the Arg-e Bam, has shown that vegetal-tempered vessels, which appear in the Neolithic period at this site, continued to be produced during the following Chalcolithic period (Beale and Lamberg-Karlovsky, 1986: 39-47, fig. 4.1). The sites we have defined as pottery Neolithic sites in the Bam-Narmashir Region are sites where we recorded only vegetal-tempered material and did not identify a single mineral-tempered, painted or plain ceramic fragment of the styles typical of the Chalcolithic or later periods. However, it remains possible that we mistakenly assigned to the Neolithic period Chalcolithic sites where all mineral-tempered had disappeared from their surfaces. Reciprocally, the sites we defined as Chalcolithic may also include sites with Neolithic deposits that we could not identify from just their surfaces. The chronology of this Neolithic settlement in the Bam-Narmashir Region remains elusive, although we should note that we have observed a relative consistency in the material remains collected at these sites. The series of radiocarbon dates currently available from the aceramic site of Tell-e Atashi points to a dating of between the late sixth and mid-fifth millennia BCE (ca. 5300-4600 cal. BCE). At Tepe Yahya, the Neolithic period (Period VII), which yielded pottery, is dated to ca. 5600-4600 cal. BCE (Prickett, 1986a: 413 Tab. 3.2; see also Beale and Lamberg-Karlovsky, 1986: 11),
but considerably older dates are reported from the pottery Neolithic site of Tepe Gav Koshi, excavated by N.A. Soleimani near Jiroft (pers. comm.).

We recorded Chalcolithic sites in both Areas 1 and 2 as well as west of Area 1 near Abaregh. They divide into: 1) Sites with diagnostic ceramic material relating to Tepe Yahya Periods VB-VA and Tal-i Iblis Periods I-II, namely Black-on-Buff ware and Black-on-Red ware; 2) Sites with Aliabad ware-related ceramics connected to Tal-i Iblis Period IV, or more broadly to Iblis Periods III to V. As such, the Chalcolithic sites in the Bam-Narmashir Region are culturally linked to the typical archaeological cultures of Kerman during the Chalcolithic period. Both types of assemblages are abundantly recorded in this province such as at Tepe Yahya (Beale and Lamberg-Karlovsky, 1986), Tal-i Iblis (Caldwell, 1967; 1968), in the Daulatabad Plain (Prickett, 1986a; 1986b), and in the western periphery of the Lut Desert (Eskandari, 2017), as well as in the Bampur Valley in Sistan-Baluchestan province, and as far as Kech-Makran in southwestern Pakistan as far as Aliabad-related material is concerned (Mutin, 2013; Mutin et al. 2017; Sarhaddi-Dadian et al. 2019). Yahya VB-VA and Iblis I-II periods are generally dated to between the mid-fifth and the early fourth millennia BCE, while Iblis IV, or III to V, periods follow them in the general chronological sequence of south-eastern Iran with a *terminus ante quem* in the second half or at the end of the fourth millennium BCE (Caldwell, 1967; 1968; Beale and Lamberg-Karlovsky, 1986: 11; Prickett, 1986a: 413 Tab. 3.2; Mutin, 2012: 161 Tab. 1; Mutin, 2013: 255 Tab. 14.1; Vidale and Desset, 2013; Pfälzner and Soleimani, 2017: 118, fig. 13). Three radiocarbon dates available from sites we surveyed in the Bam-Narmashir Region are consistent with the later part of this chronological range. All three dates are between ca. 3650-3350 cal. BCE and from sites with Aliabad-related material. One is from a sample collected by Adle from the surface of a site in Area 1, and the two others are from samples collected from a test-trench at a site in Area 2. Nonetheless, it remains difficult to specify the date of all the Chalcolithic sites we recorded in the Bam-Narmashir Region on the basis of surface collection, since stylistic continuity is observed between the assemblages of Periods VB-VA at Tepe Yahya (Beale and Lamberg-Karlovsky, 1986: 40, fig. 4.1) and between those of Periods I-II and Periods III-IV-V at Tal-i Iblis (Caldwell, 1967: 36, 154-158, 188; Caldwell, 1968: 179). A major issue that prevents us from providing a more precise dating of these sites is also, most importantly, that the chronology of these periods, of ancient south-eastern Iran in general, is not well established. Few sites have been excavated and few radiocarbon dates are currently available. Additionally, the cultural assemblage of the critical transitional phase between the end of the Aliabad period and the early Bronze Age, around the late fourth and early third millennia BCE, is not well-known. It is important to recall this issue, since it remains possible that among the sites we define as

![Fig. 7. Yahya V-related site near Abaregh, Bam Region (© BAM).](image)
Aliabad-related are sites that in reality date to this transitional phase. Hopefully, current fieldwork conducted by N. Eskandari at Varamin, which precisely focuses on this aspect, will help solve this issue. Thus, the quantity of Aliabad-related sites we recorded might be slightly overestimated, because it is simply not always possible, based on surface material, to distinguish between sites relating to Iblis III, IV, or V, especially when this material is limited and fragmentary. However, we collected enough clear diagnostics to argue that the Aliabad-related settlement in the Bam-Narmashir Region was considerable. Lastly, we should admit that the archaeological deposits and materials recorded at Tepe Yahya, Tal-i Iblis, Tepe Dehno, Mahoutabad, and in the Bam-Narmashir Region, as well as at sites in the Bampur Valley and in Kech-Makran, were not necessarily all strictly contemporaneous. The geographic distribution of the Chalcolithic ceramics on the south-eastern Iranian Plateau may indeed partly reflect gradual dispersals of peoples with their traditional savoir-faire and objects. It may also reflect connections that occurred between some of these sites and regions at some points in time and not necessarily continuously throughout the time these ceramic styles were produced (Mutin et al. 2017; Sarhaddi-Dadian et al. 2019).

Sites relating to Tepe Yahya Period V in the Bam-Narmashir Region are considerably less numerous than the above-mentioned Neolithic sites as well as the Aliabad-related sites. Less than ten Yahya V-related sites are indeed recorded in total (Fig. 7). Among the most evident diagnostics of this period are buff and red ceramics bearing typical chevron motifs (Beale and Lamberg-Karlovsky, 1986: 74-75, figs. 4.33-4.34). Additional sites may have been occupied during this period, but their surface material is not diagnostic enough to confirm this hypothesis. In any case, even if we included these sites in the Yahya V-related settlement of the Bam-Narmashir Region, our first impression would remain that, compared to the Neolithic period, this region (at a minimum the sectors we surveyed) became depopulated sometime after the middle of the fifth millennium BCE. Certainly, however, this observation should be supported by a better control of the chronology and duration of the Neolithic settlement, and we cannot exclude the possibility that we have not identified major clusters of Yahya V-related sites that may be located outside of the areas we surveyed. Lastly, in contrast to the Neolithic period, which is unambiguously identified only in Area 2, there is clear evidence that Areas 1 and 2 were occupied during the Yahya V-related period.

In contrast to the Yahya V-related settlement, sites relating to the fourth millennium BCE Aliabad period are much more numerous; they consist of more than 70 sites recorded in total in Areas 1 and 2. Despite the reservations mentioned above regarding the reality of this number, the quantity of sites in the Bam-Narmashir Region with clear Aliabad-related diagnostics, including typical bichrome and conical ceramics (Fig. 8), is high, suggesting an increased occupation compared to the Yahya V-related period. Furthermore, this settlement includes clusters of sites extending over hundreds of meters³, imposing mounded sites, and sites with remains of pottery kilns (Fig. 9). One should also mention the graves relating to the same period rescued at Khaje Askar (Soleimani et al. 2016). Taken as a whole, this evidence seems to contrast with the

3. The Aliabad-related settlement in Area 1 extends over more than 5 km.
following observations made on the Iblis IV/V period in the Daulatabad Plain further west (Beale and Lamberg-Karlovsky, 1986: 267): “Settlements continue in the Daulatabad basin immediately after [Yahya] VA, but there is a substantial decline in numbers of sites and total area occupied” and “It would appear clear... that following this break there is some social fragmentation, as communities live in smaller aggregates on sites that are more ephemeral. It is possible that Iblis IV/V represents a period of development of, or reversion to, a more nomadic lifestyle...”

Following this period, the number of third millennium BCE Bronze Age sites we recorded is more in the range of that of the Yahya V-related settlement. It is possible that the Bam-Narmashir Region once again became depopulated.

However, before seeking explanations for this decline, one should consider the possibility that the Bronze Age settlement is mostly not located in the areas we surveyed. It is indeed important to remember that we have observed a shift in sites location between the Neolithic and Chalcolithic periods; we noted above that there is no Neolithic settlement west of Bam city, in Area 1, while settlement in this area seems to begin during the Yahya V-related period and then considerably increases during the Aliabad-related period. It is reasonable to believe that an additional shift may have occurred during the Bronze Age, particularly considering the fact that most of the Bronze Age sites we recorded in Area 2 are located within the western limit of this area and that we have not thoroughly explored the lands situated just west of it. Furthermore, additional sectors of the Bam-Narmashir Region remain to be surveyed. The question of whether a settlement crisis happened in this region at the same time as the Halil Rud Civilization developed in the Halil Rud Basin (Madjidzadeh, 2008), just west of the Jebal Barez, is certainly worthy of further investigation.

Two last observations on the results from our survey deserve mention. First, one should emphasize that the Neolithic and Aliabad-related settlements documented in this survey are probably among the highest concentrations of sites dating to these periods reported so far on the south-eastern Iranian Plateau. We mentioned above the observations made on the Iblis IV/V period in the Daulatabad Plain and we should also note here that M.E. Prickett recorded 24 Neolithic sites in that area (Prickett, 1986a: 544-579), which is more than three times less than in Darestan. Second, as a general rule, sites with more than one occupation period are rare and we have not identified a site like Tepe Yahya where settlements accumulated at the same location for a long period of time.

**Renewed Fieldwork at Tell-e Atashi: Field-Season 2017**

In 2017, we resumed fieldwork at Tell-e Atashi. The substantial, unique Neolithic settlement observed in Darestan during the previous
field-season, in 2016, encouraged us to focus our research on this period, as did the fact that little is known at present as to the development of farming life in south-eastern Iran and that virtually no Neolithic site is recorded in the areas between Tell-e Atashi and the Neolithic site of Mehrgarh in Pakistan, ca. 870 km to the east (C. Jarrige et al. 1995; Jarrige et al. 2013).

Tell-e Atashi is the largest Neolithic site recorded in Darestan, and its shape, which consists of a mounded ring encircling a lower, flat area in its center, also has no parallel in this region (Figs. 4, 10-11). In 2008, one of the authors (O.G.) conducted a systematic surface survey at this site and opened a test-trench in its south-western part, where its uppermost archaeological deposits appeared to be located (Fig. 10). This trench yielded successive mudbrick architectural levels radiocarbon dated to between the late sixth and the mid-fifth millennia BCE. Surprisingly, no pottery was found in this trench as well as on the surface of the site (Garazhian, 2009; Garazhian and Shakooie, 2013), a result that contrasts to what is usually observed at sixth and fifth millennia BCE sites in Iran (e.g. Tepe Yahya: Beale and Lamberg-Karlovsky, 1986; see Matthews and Fazeli Nashli, 2013). Certainly, whether and to what extent Tell-e Atashi connects to the other Neolithic sites known in south-eastern Iran and Fars further west, as well as to Mehrgarh in Pakistan, was one of our primary questions. More broadly, by investigating this site again, we hoped to gain new information on the processes involved in the development of farming, this major food production “revolution” (Bellwood, 2005), on the south-eastern Iranian Plateau. More, set as it is between the Fertile Crescent and India, our fieldwork is ideally located not only to investigate the emergence of the earliest farming communities in eastern Iran, but also to comprehend how and when this critical development took form across Middle Asia into South Asia.

Tell-e Atashi appears to be the largest Neolithic site in Darestan and the only one that, before we resumed excavation at this site, we had pieces of information about the chronology, type of occupation, and material culture. In 2017, we decided to resume fieldwork at this site with four main objectives: 1) To get a comprehensive view of its stratigraphy; 2) To determine the nature of the deposits in the flat area located in the centre of the site; 3) To determine whether the Neolithic occupation extends outside of the mounded peripheral archaeological deposits; 4) To locate areas for future, extensive excavation. To achieve these goals we opened: 1) A new stratigraphic trench aligned with the 2008 trench several meters south of it, where we thought we would have more chance to reach the oldest levels of the site; 2) Three test-trenches in and near the centre of the site (TT1, TT2, and TT7); 3) Three additional trenches in the eastern periphery of the site, outside of its mounded deposits (TT3, TT4,
and TT5); 4) A slightly larger test-trench in the north-western part of the site (TT6), where we had identified from the surface vestiges of well-preserved architecture. The placement of these test-trenches was also determined based on the results from a previous geomagnetic survey of the site that was conducted by K. Mohammadhkani in 2011.

The stratigraphic trench is 8×2 m. In its upper part, close to the surface, we exposed quadrangular mudbrick structures similar to those found in 2008 (Fig. 12C). In its lower part, at its southern end, we reached the virgin soil at about nine meters relative to the surface at the top of the site, and, on top of this soil, the earliest archaeological deposits in this area (Fig. 12A-B). Two charcoal samples from this trench are radiocarbon dated to the late sixth millennium BCE, which is consistent with the dates from the 2008 test-trenches. TT1 and TT2 in the centre of the site have shown that this area was mostly filled with natural deposits. Both test-trenches indeed exposed a thick layer of white, compact clayey deposit that probably resulted from slow water deposition. We excavated this layer for over more than one meter and observed no change. Certainly, however, this result should be confirmed through deeper excavation, which
would help us understand if, or as it appears, why the successive communities at this site organized their habitat around this circular central space. TT3 and TT4, outside of the mounded part of the site in its north-eastern periphery, revealed no archaeological deposits comparable to those found in the stratigraphic trench or in TT6 (see below). The stratigraphy in these trenches includes a series of natural deposits alternating between layers of compact, clayey soil and loose, sandy soil. We excavated these deposits for over more than one meter until we reached a ca. 20-30 cm thick archaeological layer. This layer contains ashes, charcoals, and archaeological artefacts, but no architecture. Below it, the deposits we found are a natural compact, clayey deposit on top of a pure layer of sand. In TT4, we found the imprints of (a) hoofed animal(s) inside one of the clayey layers. Approximately 75 m north of the stratigraphic trench, in TT6, we excavated the portion of a very well-preserved mudbrick building complex (Fig. 13), in which a child burial was placed after the area was abandoned (Fig. 14). This child was three to six months old at the time of their death and was wearing two bracelets made of bone beads, one at each of their wrists, as well as an additional one attached to their left leg. Two stone beads were also recorded in this burial as well as traces of ochre.

The material culture from the trenches we opened in 2017 includes lithics, stone vessels, beads and perforated discs, as well as clay objects including balls, cones, and figurines (Fig. 15). Some of these objects have parallels at Tepe Yahya and Tall-i Iblis, and the mudbricks used in the architecture at Tell-e Atashi, typically with “thumb impressions”, also compare to those excavated at these sites (see Beale and Lamberg-Karlovsky, 1986: 119 fig. 6.10; 136 fig. 6.19; Caldwell, 1967: 219, 222, 304 Pl. 7 lower photograph). At Tepe Yahya, this type of brick continues into Period V but is no longer observed in Yahya VA (Beale and Lamberg-Karlovsky, 1986: 248-249 Tab. 10.1). These mudbricks as well as additional objects from Tell-e Atashi show that the Neolithic settlement in Darestan was somehow connected to the pottery Neolithic communities located west of the Jebel Barez. Yet, it is interesting to note that, in contrast to these sites, the community settled at Tell-e Atashi and, apparently, at other sites in Darestan, did not produce any ceramics.

Conclusion
Our survey has revealed that, in addition to a rich history during the Islamic period, the Bam-Narmashir Region has an enormous cultural heritage that dates back to the Palaeolithic period and includes, in particular, substantial settlements during the Neolithic period and the fourth millennium BCE late Chalcolithic period. One of our objectives of the next field-seasons is to continue our survey program in this region. It also will be important to compare the settlement dynamics we have begun to understand in this area, such as those noted above concerning the
Neolithic and Chalcolithic periods, with those observed in other regions of the south-eastern Iranian Plateau. By looking at how they resemble, how they differ, we will be able to get a better comprehension of the broader interregional dynamics that occurred in this area and of the extent these were determined or influenced by climate and environmental changes, or by social and political factors. Why, for instance, does the Bam-Narmashir Region seem to see an increasing number of sites during the fourth millennium BCE, while, at the same time, the Daulatabad Plain becomes depopulated? Did massive migrations occur? If so, why?

The test-trenches we opened in 2017 at Tell-e Atashi proved to be extremely productive, as they have helped us understand its stratigraphy and organization, as well as the nature of deposits present in various locations at this site. Our new radiocarbon dates have confirmed that at least a large part of its occupation levels date to between the second half of the sixth and the middle of the fifth millennia BCE. The 2017 test-trenches were also instrumental in the preparation of 2018 fieldwork. For instance, the fact that we identified in 2017 a portion of a well-preserved building complex in TT6 led us to open in 2018 an extensive excavation in this area. In this excavation, which we labelled Excavation 2 in 2018 (Fig. 10), we studied many rooms with well-preserved walls, floors, doorways, and fireplaces connected to chimneys, and we collected large amounts of objects including many unbaked clay items. We were also able to collect many zooarchaeological and botanical samples as well as samples for radiocarbon dating. The aggregate of this work in addition to the results from the stratigraphic trench, which was also extended in 2018 (Excavation 1), have provided substantial new information about Tell-e Atashi. This site now emerges as an atypical late aceramic Neolithic settlement with an original material culture with no pottery and yet connections to pottery Neolithic sites located further west in south-eastern Iran. These results are very promising, and it is now evident that not only the study of this site will help us understand the Neolithic settlement in the Bam-Narmashir Region, but also, will more broadly provide us with new insights onto the various configurations at play during the food production “revolution” in the Indo-Iranian Borderlands.

Acknowledgments

We are infinitely grateful to C. Adle for his constant support while we were setting this field research project between 2014 and 2015. His sudden passing in 2015, just one year before our first field-season began, unfortunately did not let him see the outcomes of these efforts. We are grateful to the Iranian Centre for Archaeological Research and its former and current directors H. Choubak and R. Shirazi, as well as the Research Institute of Cultural Heritage and Tourism and its former and current directors M. Beheshhti and B. Omrani, respectively. In Bam, our research has been facilitated by the Arg-e Bam World Heritage Base Camp and its former and current directors A. Ebrahimi and M. Movahedi, Bam county former and current governors R. Ashk and M. Shahriyarpur, Bam city mayor M. Poshtiban, and Narmashir county governor M. Moshki, as well as the Bam Cultural Heritage NGO and its deputy M. Tohidi. We also would like to thank M. Salehi and S. Naseri, representatives of the Kerman Cultural Heritage, Handicrafts and Tourism Organization (KCHHTO). In France, the Bam Archaeological Mission is part of the research program of the CNRS team Archaeology of Central Asia (UMR 7041 ArScAn – Archéologies et Sciences de l’Antiquité), directed by C. Debaine-Francfort. The mission is funded by the French Ministry of Foreign Affairs (Ministère des Affaires Étrangères et du Développement International and now Ministère de l’Europe et des Affaires Étrangères).

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