British Institute of Persian Studies

AN ALTERNATE VIEW OF COMPLEXITY AT TALL-E BAKUN A
Author(s): James A. Fraser
Reviewed work(s):
Source: *Iran*, Vol. 46 (2008), pp. 1-19
Published by: British Institute of Persian Studies
Stable URL: http://www.jstor.org/stable/25651433
Accessed: 16/02/2013 12:01

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
http://www.jstor.org/page/info/about/policies/terms.jsp

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

British Institute of Persian Studies is collaborating with JSTOR to digitize, preserve and extend access to *Iran.*

http://www.jstor.org

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

AN ALTERNATE VIEW OF COMPLEXITY AT TALL-E BAKUN A

By James A. Fraser
University of Sydney

Abstract
This paper reviews the evidence for complexity at the small mound site of Tall-e Bakun A. Alizadeh has identified the village as a manufacturing centre controlled by an élite group. This argument was based on the sealings, prestige goods, distinctive architecture and segregation of areas found at the site. It is suggested here, however, that these data are also consistent with a largely undifferentiated society. An alternate model is offered, in which the community was structured in a series of extended family households.

Keywords
Bakun; Iran; sealings; complexity; elite.

I. INTRODUCTION

The 2 ha. mound of Tall-e Bakun A is situated at the eastern end of the Kur River Basin, 2.5 km. south of Persepolis, in the highlands of south-western Iran[1] (Fig. 1). The site was first excavated by Herzfeld in 1928 as part of the Oriental Institute Persepolis Project,[2] and it has remained a focus of interest ever since. Langsdorff and McCown conducted the most substantial excavations in 1932 on behalf of the Oriental Institute, and the subsequent OIP volume remains the most comprehensive publication of the site.[3] Several smaller trenches were excavated by McCown and Schmidt in 1937,[4] the results of which have been recently published,[5] and a single trench was opened by a Japanese team in 1956.[6] Finally, Alizadeh excavated three small trenches in 2004 as part of a joint project between the Oriental Institute and the Iranian Cultural Heritage and Tourism Organization.[7]

As a result of these projects, Tall-e Bakun A is the most extensively excavated prehistoric site in Fars. The name Bakun has been used to classify settlements elsewhere in Fars that date to the fifth millennium B.C., and on which distinctive black-on-buff Bakun-ware ceramics have been found. The site has consequently become the primary lens through which we have viewed the development of pre-state societies in the highlands.

We are becoming increasingly aware, however, of the regional context in which Tall-e Bakun A sat. It is significant that three other fifth millennium B.C. sites in the Kur River Basin are each three times larger than Tall-e Bakun A, and it is probable that the site was not the most important settlement of its day.[8] The last five years in particular have seen a dramatic increase in projects investigating other Bakun-period sites, such as Tappeh Rahmatabad,[9] Tol-e Nurabad,[10] Tol-e Pir,[11] and several sites in the Bulaghi Valley.[12] Given this sudden vigour in research, it is timely that we review current theories concerning the development of village-based societies in Fars. This undertaking inevitably leads us back to Tall-e Bakun A.

Langsdorff and McCown described the site as a simple farming village, and it remained so in the literature for the next 50 years.[13] However, after studying the material retained by the Oriental Institute as part of his postgraduate research, Abbas Alizadeh argued that

1 Tall-e Bakun consists of two adjacent prehistoric mounds, A and B. Tall-e Bakun A is the later of the two sites, and the subject of this paper.
2 Herzfeld 1929; 1932.
3 Langsdorff and McCown 1942.
4 Schmidt 1939.
5 Alizadeh 2006: 60–63.
6 Egami and Masuda 1962: 1–6.
7 Alizadeh 2004; 2006: 40–41.
8 Petrie *et al.* 2006: 188; Bernbeck *et al.* 2005: 96; Abdi *et al.* 2003; Sumner 1994: table 2.
9 Bernbeck *et al.* 2005.
10 Potts and Roustaei 2006.
11 Askari Chaverdi *et al.*, this volume.
12 Helwing and Seyedin 2006; 2007.
13 Langsdorff and McCown 1942: 23.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

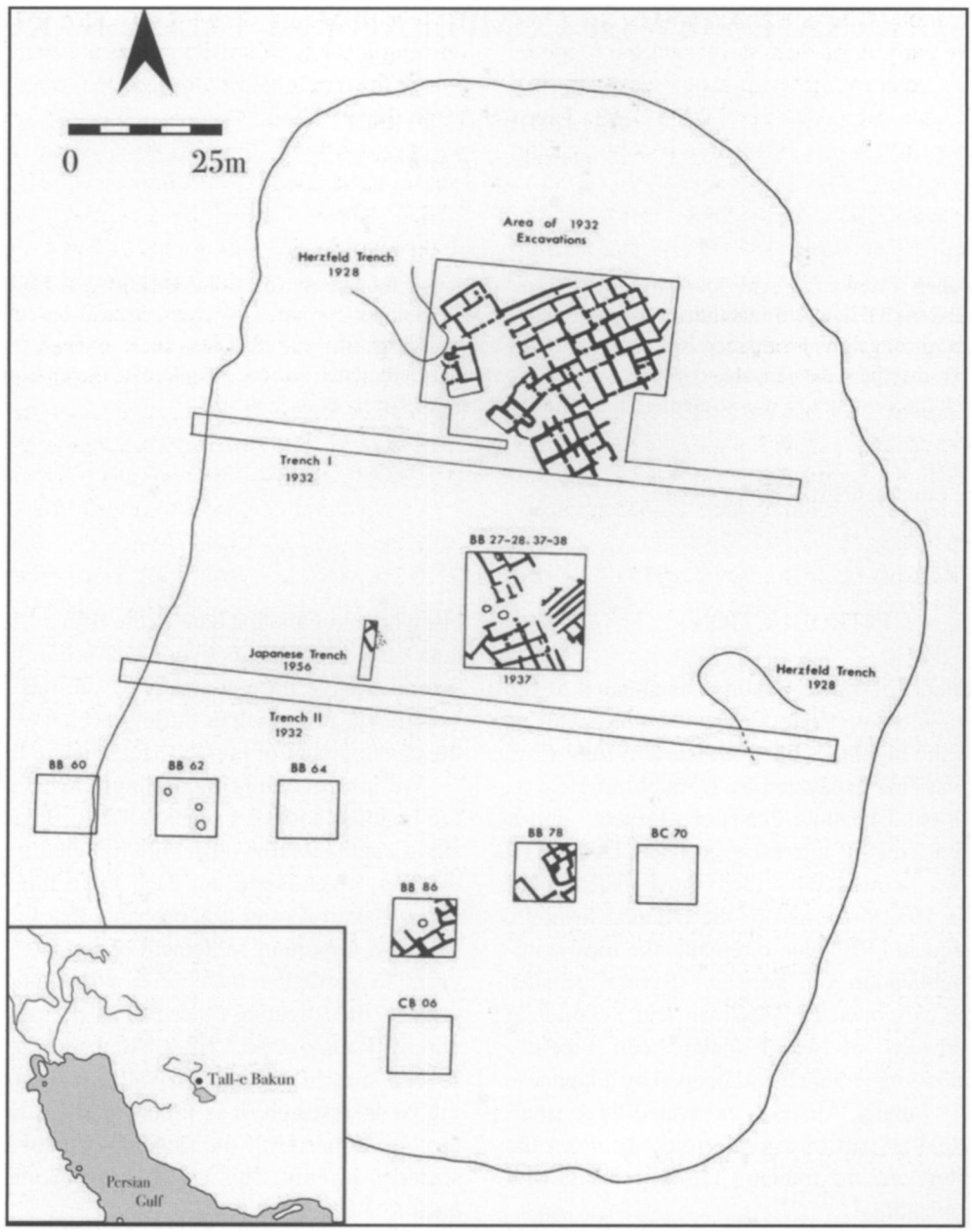

Fig. 1. Excavation trenches at Tall-e Bakun A (after Alizadeh 1988: fig. 2).

the village community had actually developed a level of complexity commensurate with larger, lowland centres such as Eridu and Susa.[14] In a series of subsequent publications[15] culminating in his recent Oriental Institute volume,[16] Alizadeh identified the economic diversification of nomadic élites as the stimulus driving the development of complexity at Tall-e Bakun A. In so doing, Alizadeh ascribed mobile pastoralists a key role in the development of pre-urban societies in Fars, ultimately precipitating state-level organisations.

This theory was partly based upon the correspondence between the distribution of black-on-buff Bakun pottery and the migration routes of modern Bakhtiari and Qashqai nomads, from which Alizadeh inferred a

[14] Alizadeh 1988: 28.
[15] Alizadeh 1988; 1994; 2003.
[16] Alizadeh 2006.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

nomadic population in the fifth millennium B.C.[17] While a discussion of early nomadism is beyond the scope of this paper,[18] an equally important aspect of Alizadeh's argument lay in the interpretation of Tall-e Bakun A as a specialised manufacturing centre controlled by an élite group.

Alizadeh proposed a model in which a small cadre of nomadic élite settled at the site, where they controlled the production of goods such as textiles, metals and ceramics by attached specialists. The élite exchanged these goods for the pastoral surplus produced by their mobile kinsmen, such as wool, meat and dairy products, and for the natural resources that nomads could procure. They then redistributed the pastoral surplus to the other inhabitants, relieving the artisans of the need to generate subsistence staples, and enabling them to concentrate on specialised production.[19]

Alizadeh inferred the centralised control of an élite group from four strands of archaeological evidence:

1. the distribution of administrative artefacts;
2. the distribution of prestige items;
3. the presence of distinctive architecture; and
4. the segregation of areas.[20]

It is argued here that the same evidence can also support the interpretation of a less structured, less centralised and ultimately less complex community than currently thought. The data for each of the four points will be outlined, Alizadeh's interpretation of the data reviewed, and some alternate ideas discussed. A new model will then be offered that explores a society organised in a series of extended family households.

II. THE DISTRIBUTION OF ADMINISTRATIVE ARTEFACTS

In their 1932 season at Tall-e Bakun A, Langsdorff and McCown opened a 1200 sq. m. area in the northern part of the site, exposing a network of interconnected mudbrick buildings in level III that is referred to here as the "Northern Complex".[21] McCown returned to explore the centre and south of the mound five years later, opening a series of smaller, disparate trenches (Fig. 1). One of the most distinctive collections of material culture from the Northern Complex (Fig. 2) was over 140 impressed sealings found in five clusters in the back or next-to-back rooms of Buildings II, III, IV, VII and XIII.[22] These rooms were initially identified as storerooms, as the back rooms of Buildings III, IV and VII also contained caches of goods such as stacked bowls, storage jars and stone tools.[23] Although parts of Buildings IV and VII had been burned,[24] the sealings from all five buildings had been fired, suggesting that they had been removed, baked, then returned to act in an archival capacity,[25] although it remains an assumption they were returned to their original place of use.[26]

The excavators recognised that the "labels" they collected were actually sealings,[27] but it was not until Alizadeh analysed their spatial distribution that the nature of the administrative system was better understood.[28] Alizadeh detected the impressions of five seals on 94 sealings (67% of the total), which he reconstructed as Seals 1–5 in Table 1. Most were found in Buildings III and IV. Alizadeh also classified 46 sealings (33%) as "Miscellaneous", as they were each stamped by a seal whose design occurred only once. These were found in each of the five buildings.[29] The sealings were also divided into four functional categories based on impressions on their obverse: 104 sealings bore stick and cord impressions, which Alizadeh identified as door sealings; 21 sealings bore traces of portable items such as bags, baskets and sacks; two sealings were used as flat tags or receipts; and 13 sealings, including "a few" jar sealings, were too fragmentary to be identified.[30]

17 Alizadeh 2003; 2006: 94–95.
18 See Abdi 2003; Sumner 1988; Zagarell 1982.
19 Alizadeh 2006: 95–96; also 1988: 23–27; 1994: 50–51; 2003: 91–92.
20 Alizadeh 2006: 57–66.
21 Langsdorff and McCown 1942: 7–15.
22 With the exception of Building XIII, this paper follows Langsdorff and McCown's stratigraphic division between levels III and IV (Langsdorff and McCown 1942: 19). Although Langsdorff and McCown assigned Building XIII to level IV, however, Alizadeh notes that it overlay the same ash layer as the other level III building, and it contained sealings stamped with the same impressions as sealings in Buildings II and IV (Alizadeh 2006: 58–59). Accordingly, Building XIII is considered a level III building here.
23 Langsdorff and McCown 1942: 7–15.
24 Langsdorff and McCown 1942: 15.
25 Alizadeh 1994: 39.
26 Amiet 1994: 56.
27 Langsdorff and McCown 1942: 65–67.
28 Alizadeh 1988: 23–27.
29 Alizadeh 1988: 26.
30 Alizadeh 1988: 23–25.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

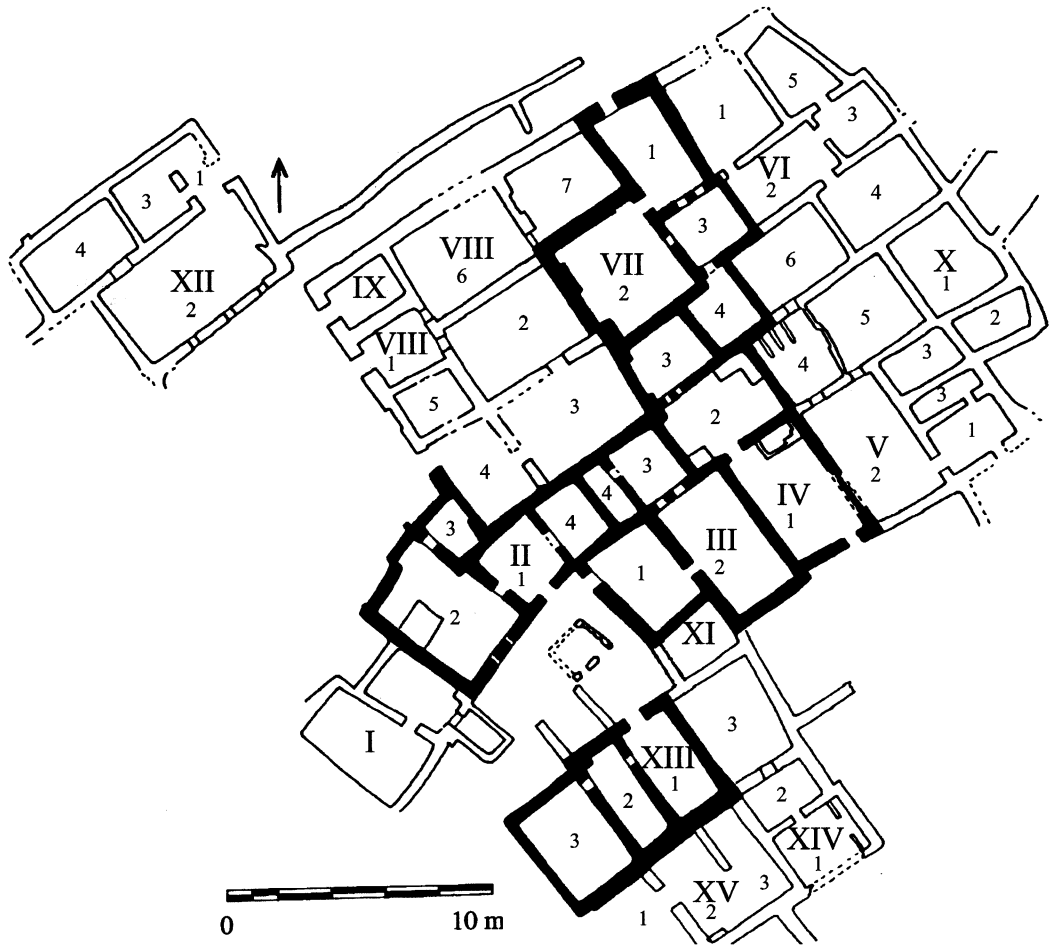

Fig. 2. The Northern Complex at Tall-e Bakun A (after Alizadeh 1988: fig. 3). Buildings in bold contained cashes of sealings.

In Alizadeh's model, the five buildings that contained sealings play a critical role as "warehouses", storing either crafted goods before their exchange with the surrounding nomadic population, or pastoral commodities and raw materials obtained from this exchange and stored before their redistribution to the community.[31] By sealing the containers in which these traded goods were held, as well as the doors to the storerooms in which the goods sat, the élite could safeguard these materials through the system of exchange and distribution.[32]

The key premise of this model is that sealings inherently define social differentiation: they are mechanisms by which seal-holders could exclude non seal-holders from goods, from certain areas, and from the administrative system itself. Hence Alizadeh concludes that "the system of control exercised by some to limit access to certain parts of the community is taken as indicative of the presence of at least two class-endogamous strata".[33] Alizadeh takes this argument a step further, inferring "a hierarchy in the degree of authority of individuals" from the frequency of different seal impressions.[34] The holders of Seals 1–5, for example, had greater control over Buildings III and IV than the holders of the Miscellaneous seals, as Seals 1–5 were used repeatedly in the two buildings.[35] The critical issue underlying these arguments is whether economic and administrative control necessarily attests socio-political differentiation. This issue is explored below using the seals, the sealings and the stored goods themselves.

[31] Alizadeh 1988: 23.
[32] Alizadeh 2006: 87.
[33] Alizadeh 2006: 17.
[34] Alizadeh 1988: 26.
[35] Alizadeh 2006: 88.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

TABLE 1. Alizadeh's analysis of the distribution of seal designs and sealing types (after Alizadeh 1988: fig. 4). DS = door-sealing, BS = bag-sealing.

Provenance	Type of Sealing	 SEAL 1	 SEAL 2	 SEAL 3	 SEAL 4	 SEAL 5	Miscellaneous Seals	Total
Building II	DS						12	15
	BS						2	
	MISC						1	
	TABLET							
Building III	DS	1	9		7			25
	BS		1					
	MISC						7	
	TABLET							
Building IV	DS	36		12		15		80
	BS			8			6	
	MISC	2						
	TABLET						1	
Building VII	DS		3				5	12
	BS						4	
	MISC							
	TABLET							
Building XIII	DS						4	8
	BS							
	MISC						3	
	TABLET						1	
	Total	39	13	20	7	15	46	140

II.1. The seals

The identification of the Northern Complex as an élite enclave primarily rests on the fact that it was the only area in which sealings were found.[36] In contrast, however, the seals themselves were found across the site. Of the 55 stone (and some clay) seals found at Tall-e Bakun A, 30 were recovered from trenches in the central and southern parts of the site (Squares BB27, BB28, BB37, BB38, BB64, BB78, BB86 and the Japanese Trench). The stratigraphic provenance of many of these remains unpublished.[37] While nine seals were definitely found in level III of the Northern Complex, five more can be attributed to equivalent levels in the centre-south (Table 2).[38] Several different scenarios can explain this distribution, which may reflect nothing more than seals being lost or deliberately discarded. Nonetheless, the presence of seals in the central and southern trenches implies that goods were sealed throughout the

[36] Alizadeh 2006: 59.

[37] Langsdorff and McCown 1942: pls 81, 82; Alizadeh 2006: tables 13–16, 18–19, pls 20, 22, fig. 76; Egami and Masuda 1962: fig. 20.2.

[38] Although Alizadeh has briefly published the stratigraphy from the 1937 season (Alizadeh 2006: 60–63), it is not analysed in relation to the 1932 exposure, despite the inferences drawn by comparing the two areas. The 1937 squares that contained architecture are BB 27–28, BB 37–38, BB 62, BB 78 and BB 86. These are the only squares discussed here, as it is possible to make a preliminary attempt to relate their strata to the 1932 exposure. In keeping with the original records, the 1932 levels are in Roman numerals, whereas the 1937 levels are in Arabic numerals. The 1932 exposure comprised three levels. The earliest, Level I/II, consisted of ashy debris and some architectural fragments over virgin soil, although it remains unclear if these were two separate levels. This level was overlain by the Level III Northern Complex, which in turn was overlain by Level IV, although this level was heavily disturbed by Islamic graves (Langsdorff and McCown 1942: 5–21). In squares BB 27–28 and BB 37–38, the graves of levels 1 and 2 correspond with the 1932 Level IV, the ashy basal level 4a relates to Level I/II, and so the two architectural sub-phases of levels 3 and 4 are taken to correlate to Level III. In trench BB 62, level 1 is cut by the graves of Level IV, level 3 overlies virgin soil and correlates with Level I/II, and so level 2 is taken to correspond with Level III. In squares BB 78 and BB 86, levels 1 and 2 contain the same graves and fragmentary architecture as Level IV, level 4 contains the same ash over virgin soil as Level I/II, and so level 3 is taken to correlate with Level III (see Alizadeh 2006: 60–63).

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

TABLE 2. Distribution of seals in level III (north) and equivalent levels (centre-south).

Square	Seal Material	Findspot	Field No.	Reference
BB 37	Light green stone	Level III: sieve	TBA 522	Alizadeh 2006: Plate 22
BB 37	Red stone	Level III(?): sieve	TBA 243	Alizadeh 2006: Plate 20
BB 38	Copper	Level IV: Room 10	TBA 361	Alizadeh 2006: Plate 20
BB 38	Light green stone	Level III: sieve	TBA 539	Alizadeh 2006: Plate 22
BB 62	Brown stone	Level II	TBA 249	Alizadeh 2006: Plate 22
Northern complex	/	Level III, III.2	PPA 41	Langsdorff and McCown 1942: p.17
Northern complex	Black stone	Bldg. III: Rm 1 (sq.AB 88)	TBA 14	Alizadeh 2006: Plate 20
Northern complex	Black stone	Level III, XIII.3, sub-floor	PPA 40	Langsdorff and McCown 1942: Plate 82:9
Northern complex	Chalk	Level III: c-yard fill N' of XIII	PPA 38	Langsdorff and McCown 1942: Plate 82:22
Northern complex	Clay	Level III, XV.1, floor	PPA 36	Langsdorff and McCown 1942: p.20, Plate 8:8
Northern complex	Light green stone	Level III, III.2	PPA 43	Langsdorff and McCown 1942: p.17
Northern complex	Light green stone	Level III, XII.1 (fill)	PPA 560	Langsdorff and McCown 1942: p.18, Plate 8:6
Northern complex	Light green stone	Level III, XVII.2, below floor	PPA 559	Langsdorff and McCown 1942: Plate 8:12
Northern complex	Steatite	Level III: c-yard fill N' of XII	PPA 37	Langsdorff and McCown 1942: Plate 7:11

settlement, and this suggests that people who operated outside the Northern Complex could also engage in the administrative system.

This inference is strongly supported by the large number of seal designs recorded at the site, leading the excavators of the Northern Complex to conclude that a broad base of the community could use seals.[39] At least 60 seals were used in the level III phase at Tall-e Bakun A. These include the five seals recreated from their stamped impressions as Seals 1–5, the 46 seals that had been used to stamp the Miscellaneous sealings (Table 1), and the nine seals that can be provenanced to level III in Table 2. If the population of the two hectare site was about 320–400 people,[40] then the 60 seals may have represented a sizeable proportion of the community, especially if a seal-holder, such as the head of a household, could represent several people.[41]

Such calculations are of course hypothetical, and it is always possible that one individual carried several seals. However, coupled with their site-wide distribution, the number of seals in this small village community testifies that sealings do not axiomatically reflect socio-economic differentiation. While Alizadeh associates seals with "a separation of kinship from economic and political considerations",[42] the number of seals at Tall-e Bakun suggests that kin-groups may actually be the key factor underlying how seals were used. Nissen argues that stamp seals, inscribed with simple geometric patterns, marked personal property where the seal design and therefore the seal owner was known to everyone, and such a "high degree of familiarity is a characteristic of small groups".[43] It is cylinder seals that Nissen associates with the separation of kinship and economic transactions, as cylinder seals could impress a more detailed iconographic design onto the sealing, conveying information about the office of the seal-holder that could be recognised without knowing the seal-holders themselves.[44]

39 Langsdorff and McCown 1942: 23.
40 following Sumner 1994: 61.
41 Sumner 1994: 61.
42 Alizadeh 2006:17.
43 Nissen 2000: 212.
44 Nissen 2000: 211–12.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

The argument that stamp seals were used to mark personal property is a familiar one, as several late prehistoric villages have yielded large numbers of stamp seals and sealings that have been interpreted as property markers. Degirmentepe in Turkey is a good example,[45] and the level XII village at Tepe Gawra is another.[46] But perhaps the best-known instance is the Neolithic "Burnt Village" at Tell Sabi Abyad in Syria, where almost 300 sealings were found in two buildings which stored goods such as miniature vessels, tokens, discs and figurines.[47] At least 67 different seal designs were stamped on these sealings, suggesting that seals were used by a number of people.[48] As there was no further evidence for social differentiation at the site, the excavators concluded that goods were sealed as a low-key, personal exercise for marking private property in communal storehouses.[49] As Matthews neatly states in his overview of the site, "we therefore need to be wary of the assumption that evidence of administrative technology necessarily attests the existence of hierarchical, stratified social entities",[50] and this caution may well be appropriate for Tall-e Bakun.

II.2. The sealings

There are three points concerning the sealings themselves that further the argument against an élite-controlled administrative system. Firstly, the distinction between the 94 sealings impressed by Seals 1–5 and the 46 sealings impressed by the Miscellaneous seals may be less significant than currently thought. The 140 sealings documented in Table 1 represent only those retained by the Oriental Institute and not the actual (unspecified) number of sealings reported by McCown.[51] In addition to the seal impressions Alizadeh reconstructed as Seals 1–5, McCown recorded seven other seal designs that stamped multiple sealings.[52] At least 12 seals were therefore used more than once, which forces a corresponding decrease in the number of seal designs that should be validly defined as being Miscellaneous. This ratio could shift further if the full corpus of sealings were available. The corollary is that the division between the repeatedly used Seals 1–5 and the Miscellaneous seals used only once is falsely exaggerated, and the nucleus of repeatedly used seals was not as tight as Table 1 implies.

Secondly, there is no archaeological evidence that directly substantiates the identification of the 104 sealings with stick and cord impressions as door-sealings. Citing analogies with the level IV Inanna temple at Nippur, Alizadeh argues that "at Bakun the cord was first passed through a hole in the door and then its ends were wound on a stick set in the wall next to the door...a lump of clay was placed over the cord and lower part of the stick and then sealed".[53] Putting aside the 2000 year chronological disparity between the Inanna temple and Tall-e Bakun A, this scenario is weakened by the assumption that a cord could pass through a "hole in the door", as this implies a wooden door, as illustrated in a reconstruction.[54] The doorway to the storeroom in Building III however, was blocked by two stone slabs laid on edge and covered in mud, through which no cord could pass.[55] The excavators also failed to note any *in situ* sealings on these slabs, despite the fact that 25 sealings were found in the storeroom itself, and no mention was made of holes in the walls adjacent to the five storeroom doorways into which sticks may have been set.[56] The obvious question, then, is whether sticks and cords could have been used as mechanisms to fasten portable containers such as boxes, a possibility raised by Rothman for sealings from Tepe Gawra.[57] Indeed, most sealings at Tall-e Bakun A were wrapped around a stick only about 1.5 cm in diameter,[58] which seems too narrow or weak to secure a door.

The final point, but potentially the most significant one, is that one sealing was found in the southernmost trench BB 86.[59] This artefact undermines the argument that sealings were exclusively restricted to the Northern Complex. One sealing is admittedly suggestive at best, and it is neither illustrated nor discussed and its stratigraphic provenance is not provided. However, as all

45 Esin 1994: 63, 79; Rothman 1994: 83.
46 Rothman 2002: 81–83.
47 Akkermans and Duistermaat 1997; 2004.
48 Akkermans and Duistermaat 1997: 26.
49 Akkermans and Duistermaat 1997: 24–27.
50 Matthews 2003: 98.
51 Alizadeh suggests that an unknown number of sealings may have been included in the share of artefacts retained by the Iran Bastan Museum (Alizadeh 2006: 85, fn.161).
52 Langsdorff and McCown 1942: pl. 81.20, 23, 24, 33, pl. 82.2, 8, 13.
53 Alizadeh 2006: 87.
54 Alizadeh 2006: fig. 75 and jacket cover.
55 Langsdorff and McCown 1942: 11, fig. 11.
56 Langsdorff and McCown 1942: 7–12.
57 Rothman 1994: 105.
58 Langsdorff and McCown 1942: 66.
59 Alizadeh 2006: table 19.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

other sealings derive from the same level, it is reasonable to assume that the BB 86 sealing was contemporaneous. The significance of this sealing lies in its suggestion that more sealings await to be found in the centre and south of the village. After all, the 140 known sealings were all found in only five highly localised clusters, and the chance of finding such a cache would be far greater in the extensive northern exposure than in the smaller, disparate central-southern trenches. There is therefore a strong possibility that the concentration of sealings in the Northern Complex may be more a result of the vagaries of trench placement than of élite strategies to restrict administrative practices to one locus.

While only suggestive, this final point tallies with the preceding ones: that the group that held the multiply-used seals was less defined than Table 1 suggests; and that the sealings may not have been used to secure specific doorways at all. These points strengthen the argument that sealings were used to mark stored personal property. This argument is best supported by the stored goods themselves.

II.3. The stored goods

According to Alizadeh's model, the storerooms should have contained either finished crafted goods to be traded with the nomads, or pastoral commodities, and raw materials obtained from the nomads and stored before their redistribution across the site. However, as shown in Table 3, the storerooms contained mostly domestic goods and tools used for manufacture. While organic goods such as baskets and textiles are not preserved,[60] the extant assemblages are strikingly domestic, including artefacts such as blackened cooking pots, mortars, pestles and fire-dogs. The storeroom in Building IV, for example, contained equipment used for food preparation, including three cooking pots, three mortars and a fire-dog, and the storeroom in Building VII stored two cooking pots and two mortars. These domestic artefacts were stored alongside items used for craft production, such as spindle-whorls, clay scrapers, polishers and palettes (Table 3). The storeroom in Building IV is particularly noteworthy, as it also contained 42 spindle-whorls, red colouring material, a polisher, a palette and three stirrup scrapers.

Furthermore, not all stored caches of domestic goods were sealed. As noted above, the five "storerooms" were identified as such because of the sealings they contained.[61] If we base the identification of a storeroom not on the presence of sealings, however, but rather on the caches of stored goods, then there were only four definite storerooms in Buildings III, IV, VII and XI (Tables 3 and 4). Strikingly, Building XI did not contain any sealings at all, and it probably functioned as an open, unsealed storeroom for Building III as their shared wall contained a window opening.[62] In addition, not one storage jar was sealed at the time the site was abandoned,[63] and the doorways to storerooms IV and VII were not even blocked. Evidently, goods could be stored in open storerooms, and, even when the storerooms were closed such as in Building III, neither the door itself nor the goods inside were necessarily sealed. This situation suggests that the relationship between the use of seals and the storage of domestic goods was more fluid than currently proposed. Indeed, the fact that goods could be stored without sealings (such as in Building XI), and that sealings could be cached without stored goods (such as in Buildings II and XIII), undermines the identification of the five buildings in Table 3 as specific "warehouses".

Instead, the domestic nature of the stored goods suggests that these five buildings were domiciles. This interpretation is supported by the presence of artefacts such as cooking pots, mortars and pestles in the remaining rooms of each structure (Table 3), as well as the "ash-filled depressions" in several rooms that were interpreted as cooking holes.[64] These domestic assemblages are similar to those found in the other ten buildings (compare Tables 3 and 4), and the sealings remain the only reason to distinguish Buildings II–IV, VII and XIII from the other buildings in Table 4.

In summary, while the sealings at Tall-e Bakun may reflect a socially differentiated society, the seals, sealings and stored goods are also consistent with a far less structured community, particularly given:

i) the site-wide distribution of seals;
ii) the large number of seal designs;
iii) the domestic nature of the stored goods;
iv) the fluid relationship between sealing and storage; and
v) the similarities in material culture between all 15 buildings.

[60] Alizadeh 1988: 24.

[61] Alizadeh 2006: 56.

[62] Langsdorff and McCown 1942: 10.

[63] Langsdorff and McCown 1942: 23.

[64] Langsdorff and McCown 1942: 13.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

TABLE 3. Artefacts found in the sealed Buildings II–IV, VI and XIII. Highlighted rooms denote storerooms. Compiled from Langsdorff and McCown 1942: 7–21. X: unspecified number of artefacts in Langsdorff and McCown 1942. Stone tools: not further catalogued in Langsdorff and McCown 1942. Tokens: denotes artefacts originally described as "pawns". Polishers: artefacts referred to as "grooved polishers" and "rubbing stones".

Buildings & Rooms		Tokens	Jars	Bowls	Beakers	Cooking pots	Mortars	Pestles	Fire-dogs	Whorls	Clay scrapers	Polishers	Flint knives	Stone tools	Flakes	Shells	Palettes	Figurines	Stone vessel frag.	Miscellaneous
II	1	2					1					1								Colouring material, awl, macehead.
	2			2			1					1						2		Clay heap, mud platform with key-shaped hearth
	3			1								1								
	4																			
III	1			1		1	1					1				2	1			
	2	4			8					1			1				1			
	3										1						1	3		Bone awl
	4		3	3		1				3			3	2			1			Bones in jars; blackened stone
IV	1		1				1			2		1		16				1	1	Ash-filled mud chest
	2	1		2	2		1		1		1	2	1					12		Mud bench & platform; jar-lid
	3	16		4		3	3		1	42	3	1	7	23			1	X	1	Colouring material; 4 clay objects
VII	1	1	1							1				6						
	2			2			1	1		4		2		21		1			1	Clay cone
	3	1												32				2		Clay object
	4	5	2	1		2	2			1				23		1		1	1	Bones in jar; "coarse vessel"
XIII	1			3								1	1							2 jar stoppers
	2		1	2		2							1	X						2 "vessels"
	3	1		2								2								

III. THE DISTRIBUTION OF PRESTIGE ITEMS

In addition to the evidence for administration, Alizadeh proposes that social differentiation is inferred from "the spatial distribution of certain classes of painted pottery, copper objects, and semi-precious stones".[65] The archaeological evidence, however, does not bear this out. Curiously, not a single copper object was found in the northern part of the site. Although a copper needle and pin were found in square AB 88, which was excavated below part of the Northern Complex during the 1937 season, these two items stand against the 23 copper objects found in equivalent levels in the central and southern trenches (Table 5).[66] These include a unique copper seal that, on Alizadeh's argument, should be an élite artefact because of its function as well as its material.[67] Moreover, although 14 artefacts made from semi-precious stones such as lapis lazuli, turquoise and carnelian were found in level III or equivalent levels, Table 6 illustrates that they were evenly distributed across the site.

65 Alizadeh 2006: 15.

66 A 25 cm. copper dagger was uncovered under the floor of a house excavated in level 2 of square BB27 (Alizadeh 2006: pl. 70; Schmidt 1939: 126–27). As this level may post-date the Northern Complex it has not been included in Table 5.

67 Alizadeh 2006: 15, pl. 20.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

TABLE 4. Artefacts found in the unsealed Buildings I, V, VI, VIII–XV. Compiled from Langsdorff and McCown 1942: 7–21.

Buildings & Rooms		Seals	Sealings	Tokens	Jars	Bowls	Beakers	Cooking pots	Mortars	Pestles	Fire-dogs	Whorls	Clay scrapers	Polishers	Flint knives	Stone tools	Flint flakes	Shells	Palettes	Figurines	Stone vessel frag.	Miscellaneous
I	1													3			20					Obsidian flake; unsp. vessel
	2							1						2		11						2 obsidian flakes; macehead
	3																					
V	1			1		1			1			2								1		
	2						3															
	3					1		1	3	2	2			3								Broken vessels
	4								1			2				11						2 vessels; 3 brick projections
	5					1			1							12						
	6				2		1					1				25		2		1		Clay cone
VI	1											3					3					
	2				1				1					2		18			1			
	3																					
	4			2	1	1								4		25		1	1	2	1	
	5									1						12						
VIII	1			2						1				1		15						Unspecified vessel
	2				1				2								4					
	3			1	2	2	4												1			Turquoise bead; pounder
	4																					Pottery tube
	5													3								
	6			2					1			1		1		21				1		
	7			2					1							7				1		
IX				1	1	1			1					2						2		
X	1					1				1				3								
	2			1					1					1		8						
	3													1								Macehead
	4								1	1												
	5																					
	6						1					1										
XI	1				4	10	3	3	1					1		4		7	1		2	Fish bones in bowl; jar-lid
XII	1	1							1													Unspecified vessel
	2									1						17				1		
	3																					
	4			1								2										
XIV	1					1																
	2																					
	3			1																14		
XV	1	1			1	1	3								4						1	2 turquoise beads; calcite cone
	2				1	2																

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

TABLE 5. Distribution of copper objects in level III (north) and equivalent levels (centre-south).

Square	Cu Object	Findspot	Field No.	Reference
Northern complex	Needle	AB 88: Lev. III, Blg. VIII: 4	TBA 35	Alizadeh 2006: Table 21
Northern complex	Pin	AB 88: Lev. III, Blg. II:10	TBA 152	Alizadeh 2006: Table 21, Fig. 69
BB 37	Blade(?)	Level 3, Room 1	TBA 466	Alizadeh 2006: Figure 69
BB 37	Point	Level 3, Room 1	TBA 467a	Alizadeh 2006: Table 21
BB 38	Seal	Level IV, Room 10	TBA 361	Alizadeh 2006: Plate 20
BB 78	Pin	Level 3, Room 11	TBA 420	Alizadeh 2006: Table 21
BB 27	Pin	Level 3, north	TBA 455	Alizadeh 2006: Table 21
BB 28	Needle	Level 3, sieve	TBA 495	Alizadeh 2006: Table 21, Fig. 69
BB 28	Point	Level 3, sieve	TBA 457	Alizadeh 2006: Table 21
BB 28	Toggle pin	Level 4, Room 1	TBA 336	Alizadeh 2006: Table 21, Fig. 69
BB 28	Wire	Level 3, sieve	TBA 463	Alizadeh 2006: Table 21
BB 37	Blade	Level 3, Room 1	TBA 467	Alizadeh 2006: Table 21, Fig. 69
BB 37	Chisel	Room 1	TBA 467b	Alizadeh 2006: Table 21
BB 37	Chisel (?)	Level 3, Room 1	TBA 468	Alizadeh 2006: Table 21, Fig. 69
BB 37	Knife	Level 3, Room 1	TBA 214	Alizadeh 2006: Table 21, Fig. 68
BB 37	Pin	Level 3	TBA 502	Alizadeh 2006: Table 21
BB 37	Pin	Level 3, Room 1	TBA 310	Alizadeh 2006: Table 21, Fig. 68
BB 37	Pin	Level 3, sieve	TBA 446	Alizadeh 2006: Table 21, Fig. 68
BB 37	Pin	Level III, Room 1	TBA 356	Alizadeh 2006: Table 21, Fig. 69
BB 37	Wire	Level 3, Room 8	TBA 177	Alizadeh 2006: Table 21
BB 38	Pin	Level 4, Room 3, sub-floor	TBA 447	Alizadeh 2006: Table 21
BB 38	Pin	Level 3, Hall 1	TBA 398	Alizadeh 2006: Table 21, Fig. 68
BB 38	Pin	Level 3, sieve	TBA 523	Alizadeh 2006: Table 21
BB 38	Point	Level 3	TBA 542	Alizadeh 2006: Table 21, Fig. 69
BB 38	Wire(?)	Level 3, Room 1	TBA 359	Alizadeh 2006: Table 21, Fig. 68
BC 70	Hook(?)	Level 3	TBA 385	Alizadeh 2006: Figure 68
BC 70	Rod	Level 3	TBA 386	Alizadeh 2006: Figure 68

Vessels depicting "certain symbolic painted motifs, such as humans, lizards, and large-horned animals" are also identified as élite artefacts.[68] Drawing on Pollock's study of contemporary Susiana pottery,[69] Alizadeh argues that such motifs were symbolically meaningful, and he associates the restriction of these symbols to the Northern Complex with social segregation. Yet despite the fact that the vast majority of published sherds derive from the northern area, equally distinct motifs decorate pottery found in the centre-south, including humans,[70] horned mouflon,[71] dogs[72] and donkeys.[73] Particularly germane are examples of the stylised lizard motif, found exclusively in the centre-south, and on barrel-shaped jars absent from the north.[74] The distribution of symbolic motifs does not therefore support the argument for social segregation, if indeed the motifs were symbolic at all. On the contrary, the uniform distribution of

68 Alizadeh 2003: 92.
69 Pollock 1983.
70 Alizadeh 2006: fig. 45.A.
71 Alizadeh 2006: figs 25, 26, 33.
72 Alizadeh 2006: figs 39.F, 44.A–B.
73 Alizadeh 2006: fig. 44.C.
74 Alizadeh 2006: fig. 37.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

TABLE 6. Distribution of semi-precious stones in level III (north) and equivalent levels (centre-south).

Square	Material	Object	Findspot	Field No.	Reference
BB 28	Lapis	Bead	Level 3	TBA 494	Alizadeh 2006: Figure 62
BB 28	Turquoise	Disc	Level 3	TBA 411	Alizadeh 2006: Figure 62
BB 37	Carnelian	Bead	Level 3	TBA 517	Alizadeh 2006: Figure 62
BB 38	Jasper	Bead	Level 3	TBA 416	Alizadeh 2006: Figure 62
BB 38	Turquoise	Bead	Level 3	TBA 505	Alizadeh 2006: Figure 62
BB 62	Carnelian	Bead	Level 2	TBA 190	Alizadeh 2006: Figure 62
BB 62	Carnelian	Bead	Level 2	TBA 311	Alizadeh 2006: Figure 62
Northern complex	Carnelian	Bead	Level III, AB 88	TBA 109	Alizadeh 2006: Table 25
Northern complex	Lapis	Bead	Level III, XII:2, fill	PPA 3637	Langsdorff and McCown 1942: Plate 84:17
Northern complex	Serpentine	Bead	Room 8	TBA 90	Alizadeh 2006: Table 25
Northern complex	Turquoise	Bead	Level III	TBA 5	Alizadeh 2006: Table 25, Fig. 62
Northern complex	Turquoise	Bead	Level III, VIII:3	PPA 578	Langsdorff and McCown 1942: p.18, Plate 84:11
Northern complex	Turquoise	Bead	Level III, XV:1	PPA 579	Langsdorff and McCown 1942: p.21
Northern complex	Turquoise	Bead	Level III, XV:1	PPA 580	Langsdorff and McCown 1942: p.21, Plate 84:15

these vessels, as well as artefacts made from copper and semi-precious stones, suggests that the consumption of these goods was not restricted to the Northern Complex.

IV. THE PRESENCE OF DISTINCTIVE ARCHITECTURE

It is also argued that the Northern Complex was distinct because of Building VIII, which was identified as the primary élite residence at the site.[75] Building VIII is the only building with niches in the exterior face of three of its outer walls, against which Buildings II, III, IV and VII were constructed, and it is accessed by two entranceways.[76] Building VIII is also larger than the other buildings, which are similar in size, orientation, construction and room number, and it is located on the highest point of the mound (Fig. 2).

Despite its architectural distinction, Building VIII did not yield a single stamp seal, contrary to its identification as the primary élite residence and, therefore, the centre from which the administrative system was co-ordinated. Indeed, as Table 4 illustrates, the material culture found inside the building does not differentiate it from any other structure at the site: its bowls and beakers, mortars and pestles, stone tools and single turquoise bead could have come from any of the other buildings. We inevitably view the structure in its final stage of occupation; if abandoned peacefully, élite items would have been removed.[77] While an absence of evidence does not necessarily signal the absence of an élite group, it does, however, suggest we must be careful in assuming that such a group was present.

In this respect, Building VIII is ambiguous at best and it may have served a number of different functions. It is, however, immediately striking that this building contains several features listed by Rothman[78] and Jawad[79] as criteria for the identification of temples in prehistoric Mesopotamia, particularly its niched walls, separate entranceways and access through a courtyard or plaza. While its domestic assemblage may appear too pedestrian for a religious structure (Table 4), it is unlikely that temples in this period had exclusively religious functions. While the 'Ubaid temples at Eridu, for example, were differentiated from houses by their architectural elaboration, Pollock has pointed out that their

[75] Alizadeh 2006: 58, 64; also Sumner 1994: 61–63 and Hole 1987: 41.

[76] Alizadeh 2006: 58.

[77] Alizadeh 2006: 81; also Wason 1994: 111.

[78] Rothman 2002: 75.

[79] Jawad 1965: 30–31, 46–48.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

artefacts resembled those in surrounding houses.[80] Rothman observes a similar situation in the contemporary level XII White Room Building at Tepe Gawra. Like Building VIII, it was distinguished for its niches, dual entrances, size and position, yet it too contained a primarily domestic assemblage.[81] Rothman's suggestion that the White Room Building was occupied by an extended family with "remains of domestic life, some craft production and some religious ritual"[82] may therefore be relevant to understanding Building VIII at Tall-e Bakun.

V. THE SPATIAL SEGREGATION OF FUNCTIONALLY DIFFERENT AREAS

Given the sealings, prestige goods and distinctive architecture in the Northern Complex, Alizadeh concludes that the settlement was spatially segregated into residential, administrative and industrial areas: the "central and southern quarters were designed for craftsmen, whereas the northern section seems to have been used for storage of various products, reception of goods and overseeing the distribution of material goods".[83] Accordingly, spatial segregation implies some form of centralised control, and an élite group to exercise this authority.[84]

Unlike the industrial buildings in the centre-south, Alizadeh argues that the élite residential and administrative buildings in the north were built to a planned architectural layout, with buildings orientated "northeast-southwest with nicely aligned and carefully abutted common walls".[85] Significantly, Alizadeh identifies only one open space in the complex, between Buildings VIII, XII and XIII, which was accessed through an alleyway in the far north of the site and so served as the locus for the delivery and dispatch of goods.[86] Buildings I and II were built inside this space only in the final stages of the level III occupation.[87]

In contrast the building in the centre and south were not as well built as those in the north, and they did not follow any planned layout.[88] Instead, the southern buildings were spread around several open areas containing ashy deposits, kilns and industrial artefacts such as wasters, slag, and unworked and unfinished goods.[89] On closer analysis, however, the differences between the two areas are less marked than currently thought. Although its buildings shared common walls, the Northern Complex was organised around at least four separate open areas. As shown in Figure 3, the single courtyard identified by Alizadeh was split into two smaller courtyards by Buildings I and II, at least in its final phase of use, which is the phase under discussion here. The complex also contained open spaces in the east (next to Buildings IV and V) and in the north (next to by Buildings VI and VII).

These separate open areas suggest a complex divided into a network of smaller units rather than a single architectural entity. Indeed, if the buildings accessed through the same courtyard or open space are grouped together, then it is possible that the complex comprised at least four distinct parts. These sub-units are illustrated as Compounds 1–4 in Figure 3.[90] Architecturally, these compounds appear to have developed organically rather than according to a preconceived plan. For example, Room 7 is a late addition to Building VIII, yet this room itself appears to predate the construction of Building VII, which incorporates it into its architectural layout. Similarly, Buildings II, III and IV abut the external niches of Building VIII, suggesting that they too were later constructions. Buildings I and II appear to have been built later than most level III structures: not only do they divide one large open space, but they do not align with the adjacent buildings. These various additions suggest that the Northern Complex developed over time, like the buildings in the central and southern areas.

In addition to the architectural divisions, most buildings in the Northern Complex contained goods such as stone flakes, spindle-whorls, polishers and clay scrapers, which suggest that goods were not manufactured exclusively in the centre and south of the site (Tables 3 and 4). A key-shaped hearth in Building II was particularly striking,

80 Pollock 1999: 88.
81 Rothman 2002: 75, 77.
82 Rothman 2002: 80.
83 Alizadeh 1988: 23.
84 Alizadeh 2006: 64–65.
85 Alizadeh 2006: 58.
86 Alizadeh 2006: 65.
87 Alizadeh 1988: 21, 26.
88 Alizadeh 2006: 65.
89 Alizadeh 2006: 65–66.
90 Buildings I, X, XII, XIV and XV denote that more compounds exist, but as these run into the edges of the excavated area it is unclear to which courtyard each building belonged or whether they opened onto courtyards as yet unexcavated. Consequently, they have not been included as compounds in Fig. 3.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

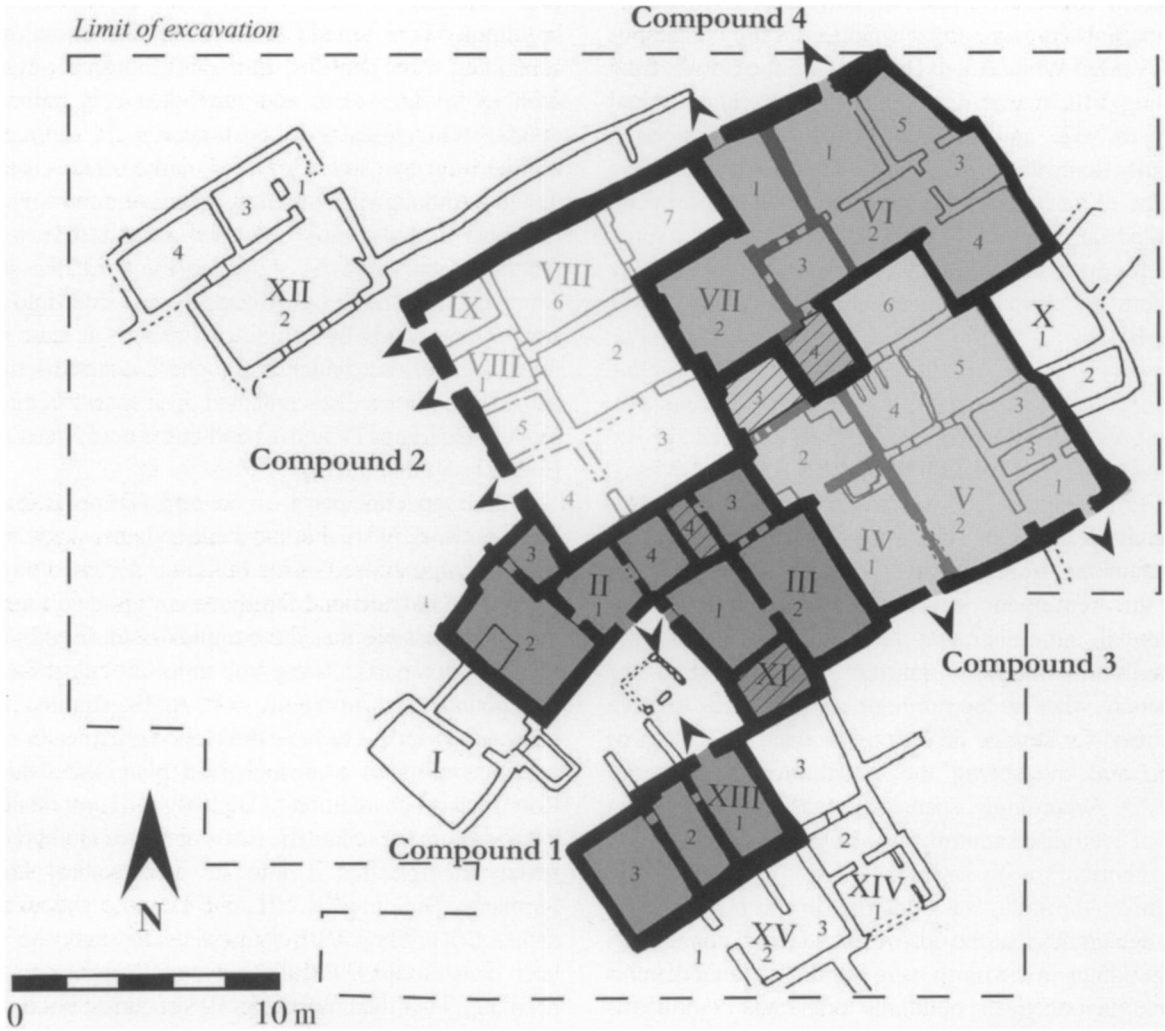

Fig. 3. Compounds 1–4 in the Northern Complex. Hatching denotes the rooms that contained the stored caches of goods.

found on a mud platform with a heap of unworked clay, and the adjacent wall contained a series of airholes suggesting industrial activity.[91] Consequently, to differentiate a northern administrative area from a southern artisans' quarter is to perhaps overstate the case. While the centre-south yielded more evidence for production than the north, this may reflect no more than a functional desire to distance housing from the by-products of manufacture, such as the smoke and heat produced by kilns, or the smell and tailings created by tanning leather or dying fabrics.

The evidence for site-wide production does not challenge the identification of craft specialists at the site,[92] but it does suggest they were not attached to an élite group. Élite patronage is only one of several ways specialists can procure staples; others include kin ties or through exchange.[93] In an overview of kilns and manufacturing in 'Ubaid Mesopotamia, for example, Stein concluded that numerous independent ceramic workshops functioned without élite control, despite, in that case, clear evidence for socio-economic differentiation.[94] Similarly, at Tell Abada there was "unequivocal evidence for craft specialisation" but the kilns were scattered and not controlled by a central authority.[95]

91 Langsdorff and McCown 1942: 12–13, fig. 13.

92 Alizadeh 2006: 95–96.

93 See the papers in Costin and Wright 1998.

94 Stein 1996: 27–29.

95 Jasim 1985: 54. See Sinopoli 1988 for an ethnographic study of decentralised ceramic production in India. See also Berman (1989; 1994), who has used Neutron Activation Analysis to analyse black-on-buff finewares and redwares

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

However, of particular interest are a number of recently excavated Bakun sites in the Bulaghi valley.[96] Despite their small size, each site contained several kilns, suggesting that the production of the ornately decorated black-on-buff Bakun pottery may not have been restricted to specific production centres such as Tall-e Bakun A, and, by extension, potting was not necessarily an élite-controlled activity.

On the contrary, given that industrial materials were found alongside domestic artefacts in almost every structure throughout Tall-e Bakun A, it is likely that goods were produced at a household level. Both Flannery and Pollock argue that household production was a critical factor underlying the development of late prehistoric village societies in Mesopotamia, and Pollock notes little evidence for direct administrative control.[97] Similarly, households were probably the prime groups manufacturing goods at Tall-e Bakun A; some may have even specialised in certain products such as textiles, evidenced by the 42 spindle-whorls found in the storeroom of Building IV, and stone-tools, indicated by a concentration of flakes in Building I (Tables 3 and 4).[98] However, the lack of centralisation suggests that these households were not under élite supervision.

VI. DISCUSSION

Households form the crux of an interpretative model offered below, which explores the society at Tall-e Bakun A as a heterarchy of extended family households rather than a hierarchy controlled by a dominant élite. This hypothesis is reminiscent of Flannery's argument that links the development of the prehistoric village to the economic diversification of extended households.[99] Accordingly, extended households were able to engage in a range of economic pursuits that required a division of labour beyond the capacity of a nuclear family, as they could draw on enough people to simultaneously farm, hunt, herd and produce crafted goods.[100] Flannery proposes that the development of extended family households is reflected in changes in domestic architecture over time, and he uses Hassuna levels I–V (*c.* 5500–5000 B.C.) as an example.[101] Flannery argues that in level Ib, nuclear families occupied the discrete, three to five roomed houses with individual storerooms and exterior spaces. By level III, houses had developed into irregular 15–20 room compounds around a central courtyard, thereby housing extended families; rooms were gradually added to an architectural nucleus as the family expanded, yet the multiple hearths, kitchens and storerooms within each compound indicate that domestic sub-groups retained some degree of autonomy. In levels IV–V, trimodal houses with distinct suites of rooms were planned around a courtyard from the outset.[102]

Although Hassuna I–V predates Tall-e Bakun A, Rothman concludes that the large tripartite buildings at the contemporary settlement of Gawra XII are also "best interpreted as extended family dwellings".[103] Given the heterogeneous nature of the assemblages found within these buildings, extended households engaged in craft production, ritual activity, and day-to-day domestic tasks. As Flannery argues for Hassuna III, rooms were added as families grew, and the large number of sub-floor burials, especially of infants and children, associates large families with these buildings over time.[104] Intriguingly, Gawra XII shares several striking parallels with Tall-e Bakun A: there was no pattern in the distribution of its seals, metals and prestige goods,[105] and the White Room Building shares several features with Building VIII, as discussed above. In addition, the numerous graves at Gawra XII contained few distinctive goods indicative of social differentiation.[106] Rothman therefore concludes that the society was not structured by a marked social hierarchy, but was rather organised into a series of extended families that each lived in a tripartite building.[107]

It is possible that Tall-e Bakun A was similarly organised into a series of extended family households. Although its structures are not direct architectural parallels of the extensive tripartite buildings of Gawra XII or the multi-roomed compounds of Hassuna III, the

from the Susa necropole and surrounding plain. This analysis demonstrated the operation of multiple workshops and, in the case of redwares especially, the probable manufacture of pottery at household or small village level.

96 Helwing and Seyedin 2006; 2007.

97 Flannery 2002; Pollock 1999: 101–16.

98 Sumner 1994: 59.

99 Flannery 2002.

100 Flannery 2002: 424.

101 Flannery 2002: 423–29.

102 Flannery 2002: 423–27.

103 Rothman 2002: 80.

104 Rothman 2002: 75–83.

105 Rothman 2002: 82.

106 Rothman 2002: 80–81.

107 Rothman 2002: 80.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

four compounds in the Northern Complex are nonetheless conceptually analogous. Taken in their entirety, each compound consists of a suite of multiple rooms that were divided into two or three discrete units that opened onto a shared courtyard or open space. Compound 1, for example, is composed of 12 rooms divided into three units (Buildings II, III/XI and XIII) that each opened onto the same courtyard containing a communal bread oven (Fig. 3).

Given the parallels with Gawra XII and Hassuna III, it is reasonable to hypothesise that an extended household occupied each compound, and presumably a sub-group such as a nuclear family lived in each division. The agglomerative nature of the Northern Complex, reminiscent of the irregular multi-roomed compounds of Hassuna III,[108] implies that rooms were added as families grew. Furthermore, the equipment used for food production and consumption found in each building, such as mortars, pestles, cooking pots, bowls and beakers, suggests that each sub-group prepared and consumed their own meals (Tables 3 and 4), even if some features were shared, such as the bread oven in the courtyard of Compound 1.

Significantly, there appears to be a relationship between each compound and the storage of goods, as only one building in each compound (except Compound 2) contained a cache of stored goods: rooms III.4 and XI in Compound I, room IV.3 in Compound 3, and room VII.4 in Compound 4 (Fig. 3). This relationship suggests that the storerooms were used communally by each extended household. In this scenario, the families in Buildings III, IV and VII acted as overseers of the stored goods that belonged to members of their extended kin-group. If we accept for the sake of argument that the 94 sealings with stick and cord impressions represent door-sealings, then the difference between these sealings and those associated with portable items is important: the portable goods may have belonged to anyone in the extended family, but only the senior members of the building that housed the communal storeroom stamped the door-sealings. Accordingly, the portable goods were placed in the storeroom, which was then sealed by the senior member of the household. When the room was later opened, the sealed goods were easily identified, minimising the potential for conflict.[109] Alternately, the 104 door-sealings were actually used to seal movable items such as boxes, in which case certain seal-holders may have stored more goods, or stored them more often, than other members of their extended family.

Furthermore, as Buildings III and IV are located in separate compounds, their storerooms would have contained goods stored by different seal-holders. As shown in Table 1, Seals 2 and 4 impressed the door-sealings in Compound 1, whereas Seals 1, 3 and 5 impressed the door-sealings in Compound 3. The Miscellaneous sealings found in both compounds were restricted to the portable goods, presumably stored by other members of the extended families. That the seals in Buildings III and IV were repeatedly used implies that the same seal-holders frequently secured the storeroom door, perhaps accessing items stored in the short term such as perishable goods. The sealings found in Buildings II and XIII may suggest that each family could also store goods in their own storerooms, but, given the absence of stored materials in these buildings, these sealings may have been discards from items once removed from the shared storeroom in Building III.

The relationship between storage and extended households was probably fluid in this small community. Although Seal 1 was attested 38 times in Building IV, it was found once in Building III; and while Seal 2 had impressed 10 sealings in Building III, it was also found on three sealings in Building VII. Nevertheless, the patterns are unambiguous and clearly identify Building III in Compound 1 and Building IV in Compound 3 as the prime *loci* for storage. Compound 2 is exceptional, as it did not contain any seals, sealings or stored goods. It may not have been occupied by a distinct kin-group at all, serving a possible cultic function, or perhaps an additional building with evidence for storage and administration lies on the unexcavated western side of the courtyard.

If this scenario has merit, then, as Flannery argues, these extended households could have mobilised a large labour force, enabling them to engage in a multifaceted economy.[110] Such diversification may have led to the increasing specialisation of individuals or groups, supported by their extended family. As previously discussed, the distribution of industrial goods suggests that households may have specialised in craft manufacture: the cache of spindle-whorls in Building IV, for example, implies its occupants produced textiles, and similar individuals or families may have produced the copper, ceramics and seals manufactured elsewhere at the site.

[108] Flannery 2002: 423–27.

[109] For Tepe Gawra see Rothman 2002: 82; also Akkermans and Duistermaat 1997: 24–26.

[110] Flannery 2002: 424.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

However, other members of the extended family households would have engaged in other activities such as farming, herding and hunting. The evidence for these activities is difficult to assess, as the limited botanical and faunal samples collected by Alizadeh in 2004 remain the only well-analysed samples from the site.[111] On current data we cannot even establish whether the site was permanently occupied. Nevertheless, the remains of barley, emmer and einkorn,[112] the silica sheen on the sickle blades,[113] and the numerous mortars and pestles (Tables 3 and 4) testify that farming was an important subsistence strategy, despite claims that the community could not produce a surplus large enough to support the production of goods.[114] The large proportion of caprid remains suggests that herding was also important,[115] and when compared with the samples taken from the earlier sites of Tall-e Mushki, Tall-e Jari A and Tall-e Jari B, Mashkour notes a clear trend from hunting to herding.[116] Certain individuals or families within each household may have managed these herds, while other members cultivated the fields, although the division between each group may have been blurred.

VII. CONCLUSION

Alizadeh's model and the model proposed here are similar in that they both view Tall-e Bakun A as an example of an increasingly complex village society. Its sealings denote that for the first time complex mechanisms were needed to control property, and the manufacture of metals, ceramics and textiles reflect increasing technological capabilities. However, the models fundamentally differ in their preference for either external or internal stimuli driving these developments. According to Alizadeh, the economic diversification of a pre-existing nomadic élite was the stimulus behind the development of complexity at the site. In contrast, the model offered here identifies the stimulus as the economic diversification of extended households within the community itself. Alizadeh accounts for the use of administrative technology as a means to protect goods that were crafted for trade with an external population, whereas the model presented here views sealings as a means to mark stored property for internal, domestic use. Alizadeh argues that specialists were supported by a pastoral surplus generated externally, whereas the model here proposes that specialists lived on the staples produced by their own kinsmen.

It is hoped that this discussion has demonstrated that different interpretations are viable, and that we must treat the data with care. Given that this small village remains our primary lens into pre-state complex societies in Fars, this alternate interpretation has significant implications. For example, the model offered here suggests that mobile pastoralists need not have played a key role in the ultimate development of state-level organisations. Indeed, although the evidence from Tall-e Bakun A has been used to infer the existence of fully nomadic pastoralists,[117] this alternate interpretation implies that pastoralists may not have been nomadic at all, at least in the fifth millennium B.C. If Tall-e Bakun A was structured as a series of economically diversifying households, then its occupants may have been nothing more than village-based herders engaging in short-range transhumance. This possibility neatly dovetails with Sumner's theory that pastoralists in Fars did not become nomadic until the Lapui period.[118]

These issues serve to illustrate the influence one site can have over our understanding of the late prehistory of the region. Fortunately, several new excavations of other Bakun-period sites promise to help place Tall-e Bakun A in its regional context, and their botanical and faunal data in particular will contribute to our understanding of subsistence strategies in this period.[119] Excavations of the Bakun levels of one of the three 6–8 ha. Bakun-period sites[120] should also be a priority, as these settlements will provide new insights into the regional organisation of Bakun settlements and society in the fifth millennium B.C. A better understanding of the regional context in which the small village of Tall-e Bakun A sat is critical for determining which of the two models discussed here is more appropriate, or whether a new interpretation is needed.

111 Miller and Kimiaie 2006; Mashkour *et al.* 2006.
112 Miller and Kimiaie 2006: 107.
113 Crowfoot 1942: 78.
114 Alizadeh 2006: 93.
115 Mashkour *et al.* 2006: Table 2.
116 Mashkour *et al.* 2006: 105.
117 Alizadeh 2006: 1–4.
118 Sumner 1988: 59; also Petrie *et al.* 2006: 186–89.
119 Helwing and Seyedin 2006; 2007; Potts and Roustaei 2006; Bernbeck *et al.* 2005.
120 Sumner 1988: table 2.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

Acknowledgements

This paper is a significant revision of part of the author's undergraduate honours thesis, supervised by Professor Dan Potts and Associate Professor Alison Betts, and completed while a Foundation Scholar at St Paul's College at the University of Sydney. The thesis was submitted to the Department of Near Eastern Archaeology at the University of Sydney in November 2003. I am grateful to both my supervisors and to Dr Stephen Bourke, Dr Jaimie Lovell, Abbas Moghaddam, Dr Cameron Petrie and two reviewers for their comments on drafts of this paper. I would also like to thank Dr Abbas Alizadeh for permission to reproduce some of the images from his 1988 paper published in this journal. All errors are my own.

Bibliography

Abdi, K. 2003. "The Early Development of Pastoralism in the Central Zagros Mountains", *Journal of World Prehistory* 17(4): 395–448.

— Pollock, S. and Bernbeck, R. 2003. "Fars Archaeology Project 2003: Excavations at Toll-e Bashi", *Iran* 41: 339–44.

Akkermans, P.M.M.G. and Duistermaat, K. 1997. "Of Storage and Nomads: the Sealings from Late Neolithic Sabi Abyad, Syria", *Paléorient* 22(2): 17–44.

— 2004. "More Seals and Sealings from Neolithic Tell Sabi Abyad, Syria", *Levant* 36: 1–12.

Alizadeh, A. 1988. "Socio-Economic Complexity in Southwestern Iran During the Fifth and Fourth Millennia B.C.: the Evidence from Tall-i Bakun A", *Iran* 26: 17–34.

— 1994. "Administrative Technology and Socio-Economic Complexity at the Prehistoric Site of Tall-i Bakun, Iran", in E.F.P. Ferioli, G.G. Fissore and M. Frangipane (eds.), *Archives Before Writing: Proceedings of the International Colloquium, Oriolo Romano, October 23–25, 1991*, Scriptorium, Torino: 35–54.

— 2003. "Some Observations Based on the Nomadic Character of Fars Pehistoric Cultural Development", in N.F. Miller and K. Abdi (eds.), *Yeki Bud, Yeki Nabud: Essays on the Archaeology of Iran in Honor of William M. Sumner*, Cotsen Institute of Archaeology at UCLA, Los Angeles: 83–97.

— 2004. "Recent Archaeological Investigations on the Persepolis Plain", *The Oriental Institute Notes & News* (Fall 2004): 1–7.

— 2006. *The Origins of State Organizations in Prehistoric Highland Fars, Southern Iran: Excavations at Tall-e Bakun*, Oriental Institute Publications, Volume 128, Chicago.

Amiet, P. 1994. "Response", in E.F.P. Ferioli, G.G. Fissore and M. Frangipane (eds.), *Archives Before Writing: Proceedings of the International Colloquium, Oriolo Romano, October 23–25, 1991*, Scriptorium, Torino: 55–57.

Askari Chaverdi, A., Petrie, C.A. and Taylor, H. *this volume*. "Early Villages on the Persian Gulf Littoral: Revisiting Tol-e Pir and the Galehdār Valley".

Berman, J.C. 1989. "Ceramic Production and its Implications for the Sociopolitical Organization of the Susiana Plain During the Late 'Ubaid", in E.F. Henrickson and I. Thuesen (eds.), *Upon This Foundation: The 'Ubaid Reconsidered*, University of Copenhagen, Museum Tusculanum Press, Copenhagen.

— 1994. "The Ceramic Evidence for Sociopolitical Organization in 'Ubaid Southwestern Iran", in G. Stein and M.S. Rothman (eds.), *Chiefdoms and Early States in the Near East: The Organizational Dynamics of Complexity*, Prehistory Press, Madison.

Bernbeck, R., Fazeli, H. and Pollock, S. 2005. "Life in a Fifth-Millennium B.C.E. Village: Excavations at Rahmatabad, Iran", *Near Eastern Archaeology* 68(3): 94–105.

Costin, C.L. and Wright, R.P. (eds.) 1998. *Craft and Social Identity*, American Anthropological Association, Sante Fe.

Crowfoot, J. 1942. "The Flint Industry", in Langsdorff and McCown 1942: 76–80.

Egami, N. and Masuda, S. 1962. *Marv Dasht 1: The Excavations at Tall-i Bakun, 1956*, The Tokyo University Iraq-Iran Archaeological Expedition, Report 2, University of Tokyo, Tokyo.

Esin, U. 1994. "The Functional Evidence of Seals and Sealings of Degirmentepe", in E.F.P. Ferioli, G.G. Fissore and M. Frangipane (eds.), *Archives Before Writing: Proceedings of the International Colloquium, Oriolo Romano, October 23–25, 1991*, Scriptorium, Torino: 59–81.

Flannery, K.V. 2002. "The Origins of the Village Revisited: From Nuclear to Extended Households", *American Antiquity* 67(3): 417–33.

Helwing, B. and Seyedin, M. 2006. "Prehistoric Settlements in Bulaghi Valley: Iranian/German Rescue Excavations at Sites DB91 and DB119", *Abstracts: Symposium on the Archaeological Rescue Excavations in the Bolaghi Valley*, Iranian Center for Archaeological Research, Tehran: 13–17.

— 2007. "Prehistoric Settlements in Bulaghi Valley: Iranian/German Rescue Excavations at Sites DB91, DB119, DB73 and DB131", *Abstracts: Symposium on the Archaeological Rescue Excavations in the Bolaghi Valley*, Iranian Center for Archaeological Research, Tehran: 12–13.

Herzfeld, E. 1929. "Prehistoric Persia I, a Neolithic Settlement at Perspolis", *Illustrated London News 25*: 892–93.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions

— 1932. *Iranische Denkmaler I A*, Dietrich Reimer Verlag, Berlin.

Hole, F. 1987. *The Archaeology of Western Iran: Settlement and Society from Prehistory to the Islamic Conquest*, Smithsonian Institute Press, Washington and London.

Jasim, S.A. 1985. *The Ubaid Period in Iraq. Recent Excavations in the Hamrin Region*, BAR International Series 267, Oxford.

Jawad, A.J. 1965. *The Advent of the Era of Townships in Northern Mesopotamia*, Brill, Leiden.

Langsdorff, A. and McCown, D.E. 1942. *Tall-i-Bakun A: Season of 1932*, Oriental Institute Press, Volume 59, Chicago.

Mashkour, M., Mohaseb, A. and Debue, K. 2006. "Towards a Specialized Subsistence Economy in the Marv Dasht Plain: Preliminary Zooarchaeological Analysis of the Faunal Assemblages From Tall-e Mushki, Tall-e Jari A and B, and Tall-e Bakun A and B", in Alizadeh 2006: 101–6.

Matthews, R. 2003. *The Archaeology of Mesopotamia: Theories and Approaches*, Cambridge University Press. Cambridge.

Miller, N.F. and Kimiaie, M. 2006. "Some Plant Remains from the 2004 Excavations at Tall-e Mushki, Tall-e Jari A and B, and Tall-e Bakun A and B", in Alizadeh 2006: 107–18.

Nissen, H. 2000. "A Mesopotamian Hierarchy in Action in Ancient Uruk", in M.W. Diehl, *Hierarchies in Action: Cui Bono?*, Centre for Archeological Investigations, Southern Illinois University, Illinois: 210–17.

Petrie, C.A., Weeks, L.R., Potts, D.T. and Roustaei, K. 2006. "Perspectives on the Cultural Sequence of Mamasani", in Potts and Roustaei 2006: 169–96.

Pollock, S. 1983. "Style and Information: An Analysis of Susiana Ceramics", *Journal of Anthropological Archaeology* 2(4): 354–90.

— 1999. *Ancient Mesopotamia: The Eden That Never Was*, Cambridge University Press, Cambridge.

Potts, D.T. and Roustaei, K. (eds.) 2006. *The Mamasani Archaeological Project Stage One: A Report on the First Two Seasons of the ICAR-University of Sydney Expedition to the Mamasani District, Fars Province, Iran*, Iranian Center for Archaeological Research, Tehran.

Rothman, M.S. 1994. "Seal and Seal Findspots, Design, Audience and Function", in E.F.P. Ferioli, G.G. Fissore and M. Frangipane (eds.), *Archives Before Writing: Proceedings of the International Colloquium, Oriolo Romano, October 23–25, 1991*, Scriptorium, Torino: 97–121.

— 2002. *Tepe Gawra: The Evolution of a Small, Prehistoric Centre in Northern Iraq*, University of Pennsylvania, Philadelphia.

Schmidt, E.F. 1939. "Tol-e Bakun: Prehistoric Mound Near Persepolis", *University Museum Bulletin (Philadelphia)* 7(1): 27–29.

Sinopoli, C.M. 1988. "The Organization of Craft Production at Vijayanagara, South India", *American Anthropologist* 90(3): 580–97.

Stein, G.J. 1996. "Producers, Patrons and Prestige: Craft Specialists and Emergent Elites in Mesopotamia from 5500–3100 B.C.", in B. Wailes (ed.), *Craft Specialization and Social Evolution: In Memory of V. Gordon Childe*, The University Museum of Archaeology and Anthropology, Philadelphia: 25–38.

Sumner, W.M. 1988. "Prelude to Proto-Elamite Anshan: The Lapui Phase", *Iranica Antiqua* 23: 23–43.

— 1994. "The Evolution of Tribal Society in the Southern Zagros Mountains, Iran", in G. Stein and M.S. Rothman (eds.), *Chiefdoms and Early States in the Near East: The Organizational Dynamics of Complexity*, Prehistory Press, Madison: 47–65.

Wason, P.K. 1994. *The Archaeology of Rank*, Cambridge University Press, Cambridge.

Zagarell, A. 1982. *The Prehistory of the Northeast Bahtiyari Mountains, Iran: The Rise of a Highland Way of Life*, Dr. Ludwig Reichert Verlag, Wiesbaden.

This content downloaded on Sat, 16 Feb 2013 12:01:50 PM
All use subject to JSTOR Terms and Conditions