

THE 1985 SEASON AT 'AIN GHAZAL: PRELIMINARY REPORT

by

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Introduction

In the final days of the 1984 season of excavation at 'Ain Ghazal,¹ two pits were discovered in the Central Field that contained molded fragments of plaster similar in many ways to the cache of human statuary recovered from the site in 1983². Due to the lateness in the season of these discoveries, it was not possible to remove the contents of the pits in 1984; both pits were protected securely and arrangements were made to conduct an emergency rescue excavation in June and July of 1985³.

The excavations in 1985 focused on two trenches of quite different sizes. The first in Sq 3081 was quite small and entailed principally the removal of sterile fill in and around a pit containing the molded plaster fragments exposed in 1984. As a consequence, no cultural information other than the plaster material itself was recovered.

The second trench was more formidable in its dimensions and the variety of its cultural contents. While work was under way by the conservator on the small pit in Sq 3081, a trench measuring approximately 3.0 × 1.5 m was opened in Sq 3282 just to the northwest (Fig. 1) in order to expose the larger statuary cache. Eventually this trench sampled more than 3.2 m of deposits down to sterile basal clay, exposing approximately 1.2-1.4 m of Yarmoukian occupations in the upper part of the sequence and nearly 2.0 m of PPN habitational

episodes in the lower part (Fig. 2). As work progressed on the statuary cache in Sq 3282, the trench was expanded another 2.0 m towards the west to increase the exposure of the Yarmoukian levels. Altogether, the Yarmoukian material recovered in 1985 derived from a maximum area of about 3.5 × 3 m to an average depth of approximately 1.3 m. The PPN excavations sampled a maximum of about 3.0 × 2.0 m (at the bottom of the bulldozer section) with an average thickness of about 2.0 m. The volume of sediments is thus nearly 13.7 m³ for the Yarmoukian period and 12m³ for the PPN layers.

The Statuary Remains

As had been strongly suspected when the pits were discovered in 1984, the fieldwork in 1985 confirmed that both features contained important new evidence of PPNB plaster human statuary. Each collection is described below, although the recovery methods used to remove the statuary in both cases allowed for little detailed examination in the field.

The Statue Head (Sq 3081)

A small depression with dimensions of ca. 40 × 30 × 20 cm had been excavated into sterile basal clay, and in the center of this pit a single plaster human statue head had been placed face-down and covered with a fill of fine clay with inclusions of small fragments of chalk and yellowish

1. Rollefson and Simmons 1985a.

2. Rollefson 1983.

3. The 'Ain Ghazal Archaeological Project, co-sponsored by the Institute of Archaeology and Anthropology of Yarmouk University, received funding from the National Geographic Society (USA); the Department of Antiquities of Jordan; Alia, the Royal Jordanian Airlines; and the Cobb Institute of Archaeo-

logy at Mississippi State University (USA). The staff consisted of the two co-directors; St. John Simpson and Marcia Donaldson (Senior Field Staff); Emsaytif Suleiman (Department of Antiquities Inspector); Ilse Köhler-Rollefson and Ellen McAdam (Senior Laboratory Staff); Lynn Grant (conservator); and Curt Blair (photographer and archaeological assistant).

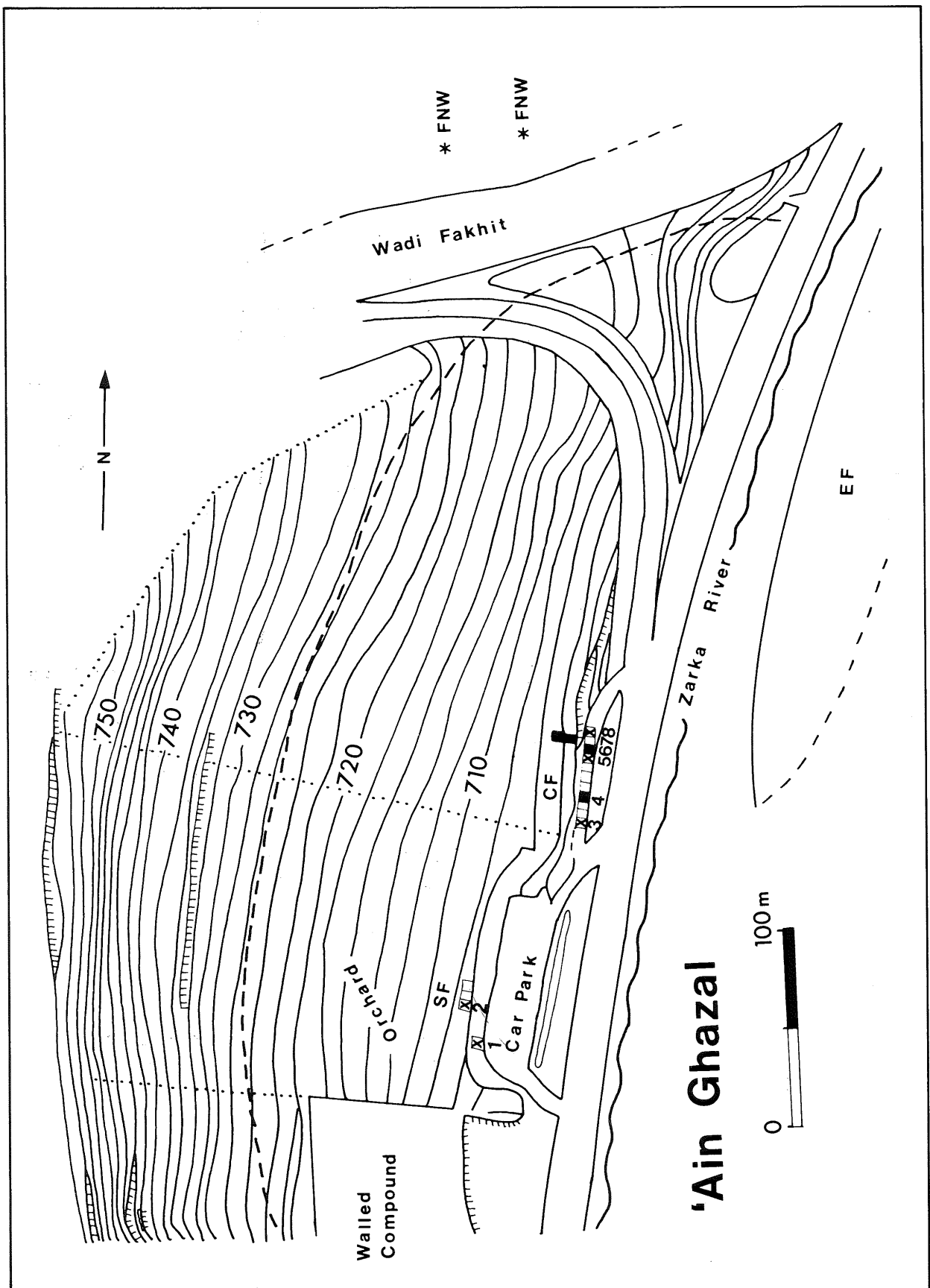


Fig. 1. 'Ain Ghazal site map showing the location of the South Field (SF), Central Field (CF), East Field (EF), and Far Northwest (FNW) sections of the site. Numbered excavation squares show the location of radiocarbon samples referred to in Table 6: 1-Sq 4048; 2-Sq 4452; 3-Sq 3273; 4-Sq 3076; 5-Sq 3080; 6-Sq 3081; 7-Sq 3282; 8-Sq 3083. (Drawing: Deborah Fridell).

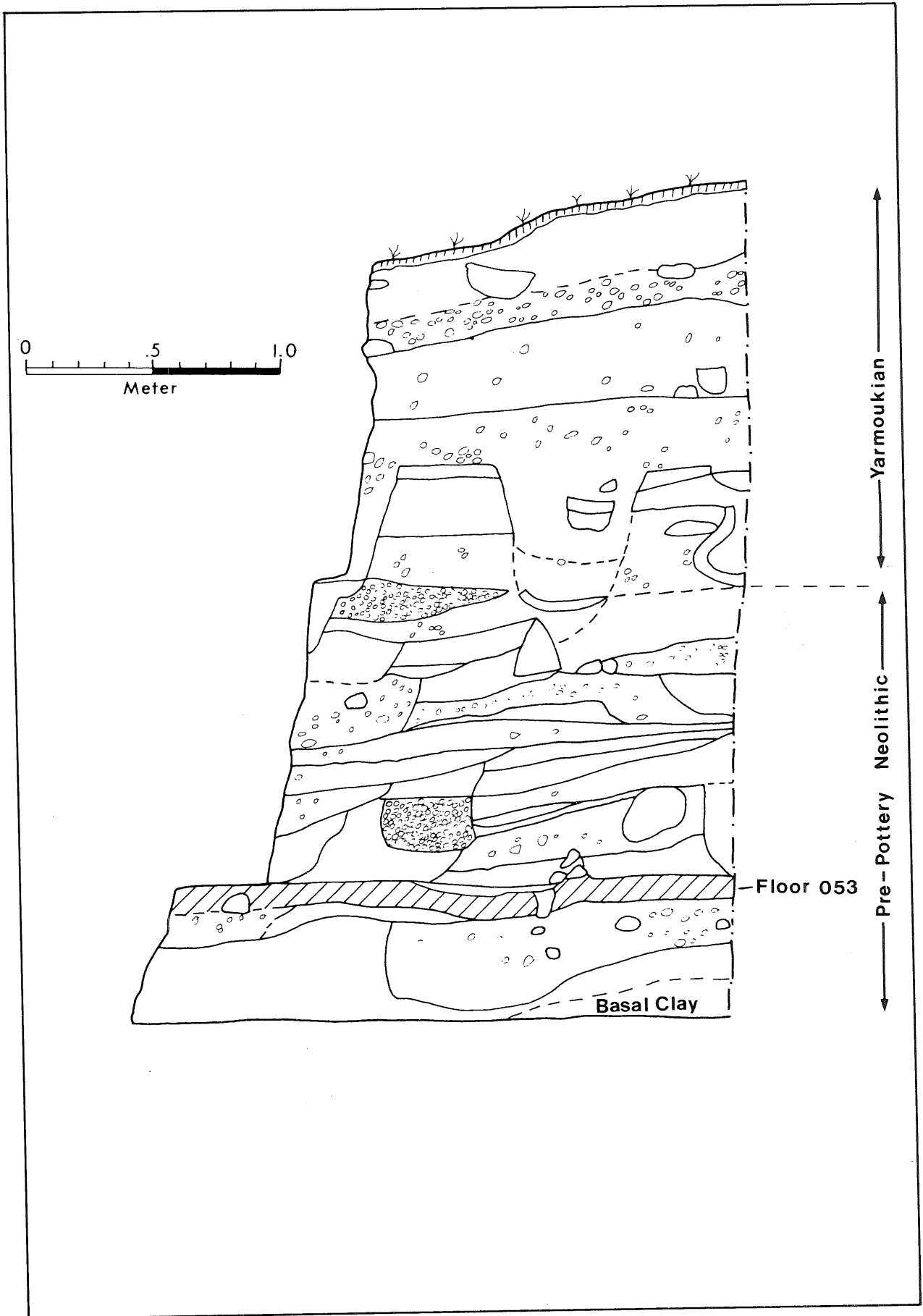


Fig. 2. Stratigraphic sequence in south baulk of Sq. 3282. The statuary pit cut through Floor 053 near the bottom of the section. (D. Fridell).

floor plaster. This interment was later covered by redeposited clay that eventually became compacted, characterized as a stable surface for an unknown period of time. Several stages of domestic building construction occurred subsequently. From the contents of a stone-lined pit stratigraphically later than the statuary deposit, an abundant charcoal sample yielded a date of 7100 +/- 80 b.c. (see below), indicating that the statue head was of an even older age. To our knowledge, this makes the 'Ain Ghazal specimen the oldest known statuary in the Near East, almost 1,000 years earlier than the date suggested for the material from Jericho⁴.

Due to the weight of successive deposits above the pit, the hollow statue head collapsed into itself. Several *in situ* fragments suggest that the original ear-to-ear diameter measured approximately 20-25 cm, which would be within the range of the dimensions for heads in the statuary cache from 1983. Other similarities with the 1983 material are revealed by corded impressions on the interior surface, indicating a similar method of construction⁵, and the molded ear fragment (left side?) is also similar in treatment⁶. Bitumen eyeliner surrounded one eye that still retained a thin circular disc of bitumen representing the iris, features also noted among the 1983 statuary cache. But there were also some distinctive features: the nose of the head from Sq 3081 appears to be less stylized and more detailed in its modelling, and the entire exterior surface of the head appears to have been "washed" with a dilute suspension of a red pigment, giving the whole sculpture a characteristic pinkish hue not seen in the 1983 objects.

The Large Cache of Statuary

The second statuary cache was located

beneath approximately 2.5 m of cultural deposits in Sq 3282 (Figs. 1 and 2). While its position deep in the section required extensive time to expose and prepare the objects for removal, it also afforded the opportunity to obtain a complete stratigraphic sequence of occupations for this part of 'Ain Ghazal.

Like its counterpart in 1983, this collection of plaster statues and busts was placed carefully in two tiers in a large pit (*ca.* 1.5 x 1.0 m) that had cut through the floor of an abandoned house. The upper layer had evidently been exposed some time later in view of the relatively poor condition of preservation: the statuary was badly cracked, and the surfaces had developed a deep gray colour as the result of the presence of an overlying and even intermingling ashy deposit. The southeastern corner of the cache was badly damaged in antiquity due to an intrusive pit, and the disturbance to this part of the statuary group was further aggravated by bulldozers that cut through the outer edge of the pit.

In-field conservation efforts concentrated on the recovery of loose statuary fragments; the removal of unstable rubbly components in the pit that may have caused additional damage during the transportation of the cache to the laboratory; and on the consolidation of exposed but relatively intact figures. Less of the pit contents was exposed compared to the 1983 cache, and thus less information is available at this time. Nevertheless, several points can be made that show both shared and distinctive features between the two major statuary collections.

The 1985 group was rigidly aligned along a NE-SW axis, with heads oriented to the SW end of the pit⁷. Busts and statues were mingled together in the cache from Sq 3282, not in separate groups as was the

4. Kenyon gave a date of 6250 B.C. for the end of the PPNB sequence at Jericho (Kenyon 1957: 74), and her notes suggest that Garstang's statuary must have dated to this part of the sequence (Kenyon 1981: 268; Garstang 1935:1936). However, subsequent radiocarbon dates for Jericho have tended to confuse the absolute chronology to

some degree (Kenyon 1971: 332; 1981: 502-504), although it still appears that the Jericho statuary probably dates to the second half of the 7th millennium.

5. Rollefson 1983: 30.

6. See K. Tubb in Rollefson *et al.* n.d.

7. Compare Rollefson 1983: 30 and Fig. 1.

case in 1983. Because of the damage incurred to the upper layer, it was not always possible to distinguish busts and statues, but a minimum of seven figures could be detected; how many more may have occupied the SE part of the pit could not be estimated in the field (Pl. I, 1). The lower layer of statuary, which was in an excellent state of preservation, required less preparatory work, so little is known of the composition of this tier beyond the unmistakable outlines of at least four more busts or statues (Pl. I, 2).

The method of statue and bust manufacture appears to be congruent with the figures of the 1983 group⁸, but details concerning cosmetic treatment of the faces and other areas of the bodies are very scanty. The presence of bitumen eyeliner was noticed on several faces in the upper tier, but the presence of green diopside powder on the lower eyeliner segment did not appear to be characteristic of the 1985 statuary⁹. One iris was visible, and initial impressions suggest it may be more angular in shape than the circular irises of the 1983 cache; on the other hand, this may simply represent a post-depositional distortion of this plastic feature. A small bust face from near the NE end of the cache appears to share the distinctive "pink wash" visible on the single head from Sq 3081.

Although it is clear that the large cache from 1985 is from a later stratigraphic context than the single head from Sq 3081, the temporal relationship of both to the 1983 group of statues and busts is difficult to determine at the present time. Charcoal samples from Sqs 3282 and 3076 should provide absolute dates in the near future, but for now it appears probable that both large groups come from the early to middle part of the 7th millennium. In any event, it is evident now that a highly sophisticated system of ritual and religion was developed at a very early part of 'Ain Ghazal's history, and that this tradition continued to

play a major role in the daily and seasonal lives of the community for a considerable amount of time.

Other Artifact Samples

The fieldwork in 1985 produced another formidable collection of artifacts and other archaeological information despite the small scale of labor invested during the season. At the present time preliminary analysis of the data is still under way, so only a small amount of interpretation can be relayed.

Chipped Stone Artifacts

We have estimated that as many as 25,000-30,000 chipped stone artifacts were collected in 1985, and of this amount just more than 10,000 have been sorted into major artifact classes (Table 1) and classified according to major tool types (Table 2). For the PPN layers, the analyzed material represents samples from 33 of the 81 excavation loci (40.7% of the PPN samples). (It should be noted here that a particularly dense "chipping floor", noticeably rich in debitage but poor in tools, was found near the bottom of the PPN sequence, this locus has not yet been examined). For the Yarmoukian artifacts, 14 of the 39 early ceramic loci (35.9%) have been sampled so far.

The figures for the PPN loci in Table 1 compare favorably with the results of the analysis of the 1984 artifacts from the Central Field¹⁰, especially in terms of the blade:flake ratio. Cores were more numerous in the 1985 season, and tools were nearly twice as frequent as in the 1984 collections. Among the Yarmoukian artifacts, blades are substantially underrepresented in the 1985 sample compared to the Yarmoukian layers in the South Field¹¹, although this may reflect sample bias in what has been examined so far and/or in the small area investigated in 1985.

Among the tools that have been classi-

8. Rollefson 1983: 30-32.

9. See Note 6.

10. Rollefson and Simmons 1985b: Tables 1

and 2.

11. Phases S-1 and S-II in Tables 1 and 2, Rollefson and Simmons 1985b.

Table 1. Absolute and relative frequencies of chipped stone artifact classes from the 1985 excavations at 'Ain Ghazal (analyzed samples only).

Class	PPN			Yarmoukian			Ex Situ
	<i>n</i>	%	%'	<i>n</i>	%	%'	<i>n</i>
Blades	1290	45.9	52.0	425	27.8	31.7	823
Bladelets	133	4.7		77	5.0		135
Flakes	1189	42.3	48.0	915	59.9	68.3	1386
C. T. E. *	89	3.2		23	1.5		58
Burin Spalls	63	2.2		15	1.0		18
Other Flakes	9	0.3		6	0.4		12
Cores	38	1.4		66	4.3		89
(Tools)	(397)	(14.1)		(154)	(10.1)		(424)
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Subtotals	2811	100.0		1527	99.9		2521
Microflakes	303	(8.3)		317	(12.0)		611
Debris	528	(14.5)		793	(30.0)		1251
Paleolithic	4	(0.1)		7	(0.3)		8
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Totals	3646			2644			4391

* C. T. E. refers to core trimming elements.

fied (Figs. 3-5), the 1985 PPN samples agree well with the Central Field tools from 1984¹², although burins and notches are somewhat less frequent at the expense of projectile points and knives. Among the burins, simple types (especially transverse burins) continue to dominate this tool class significantly (Table 3). For the Yarmoukian period, burins and truncations are less frequent than among the S-I and S-II phases in the South Field, although large projectile points, scrapers, and bifacial tools are relatively more numerous. Yarmoukian burins continue to be characterized by complex and truncation types in distinct contrast to PPN burin configurations.

It will be recalled that in the South Field excavations in 1984, Phase S-III represented an aceramic Neolithic series of occupations that differed sharply in a variety of important ways with PPNB cultural material, including chipped stone artifi-

cats. In the analysis of the 1985 samples such distinctions have not emerged, even though the uppermost PPN strata have been reasonably well sampled. It is suspected that the absolutely small area of the late PPN sequence investigated in 1985 (less than 6 m²) may have contributed to this lack of resolution.

Groundstone Artifacts

The distribution of groundstone artifacts is presented in Table 4 and little additional comment is required here other than to note the absolute rarity of such artifacts in either the PPN or Yarmoukian layers.

Small Finds

Table 5 lists small finds and other artifacts recovered during the 1985 season. A variety of bone tools was present in the

12. Cf. Rollefson and Simmons 1985b: Table 4.

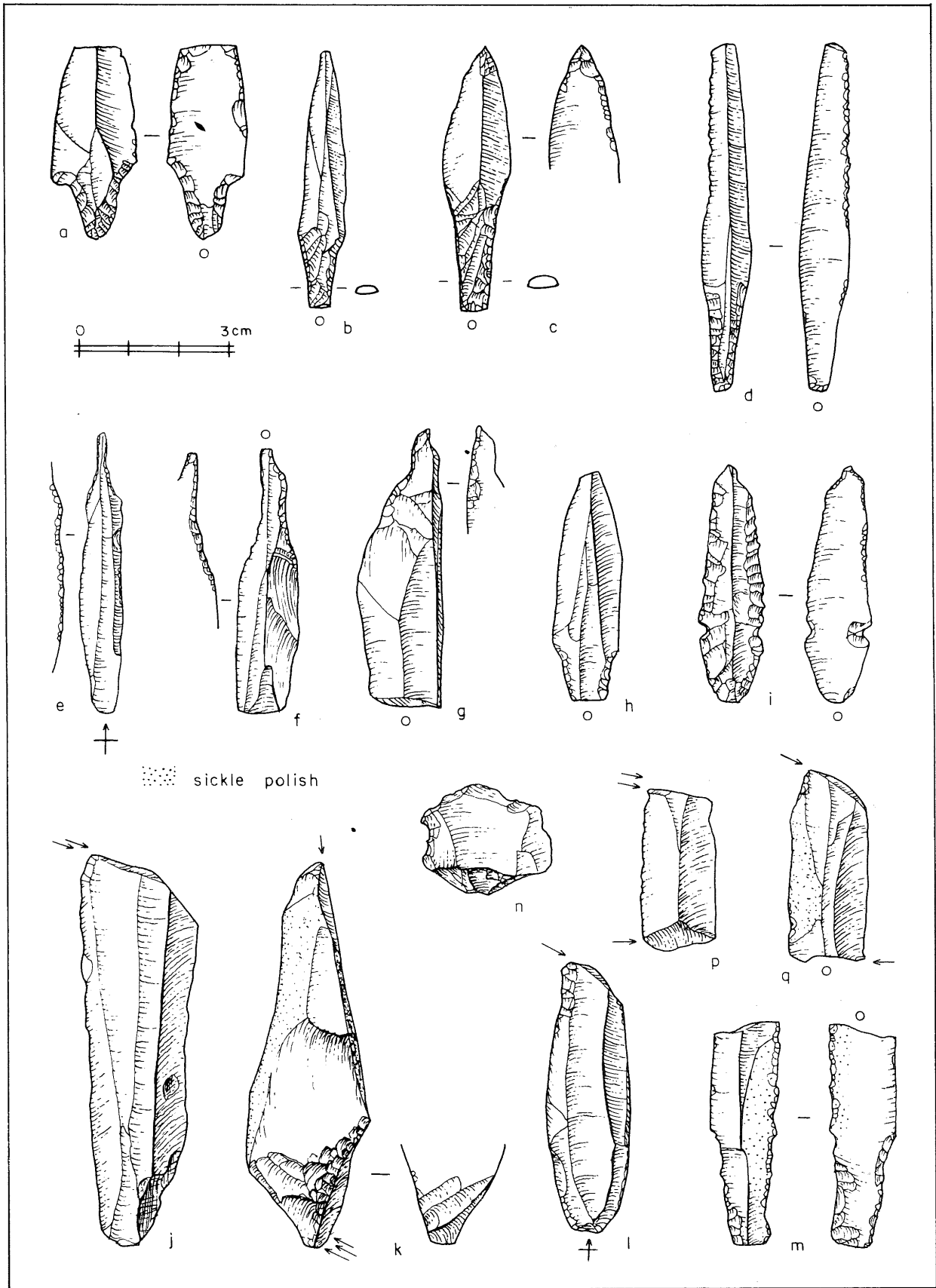


Fig. 3. PPN artifacts from 'Ain Ghazal, 1985. a-c, h-i) projectile points; d) tanged microdenticulate "saw"; e-f) drills; g) borer; j, l, p-q) transverse burins; k) opposed burin; m) tanged sickle blade; n) wedge. (Drawing: Brian Byrd).

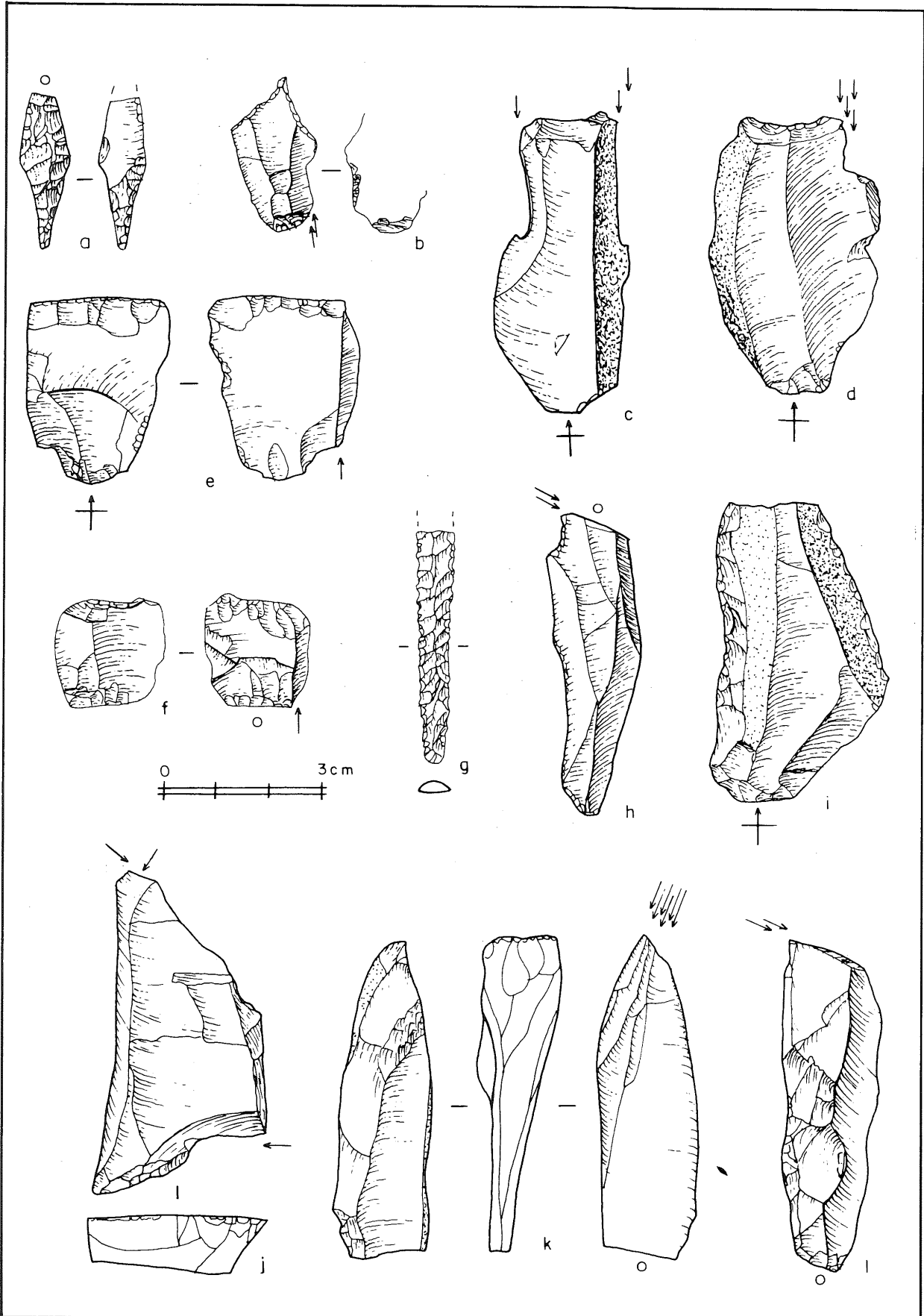


Fig. 4. Flint artifacts from 'Ain Ghazal 1985. a) arrowhead; b) borer; c-d) burins on truncations; e-f) wedges; g) microdenticulated "saw" with slight sheen; h, l) transverse burins; i) sidescraper; j) opposed burin; k) "other" burin. PPN: g-1; Yarmoukian: a-f. (B. Byrd).

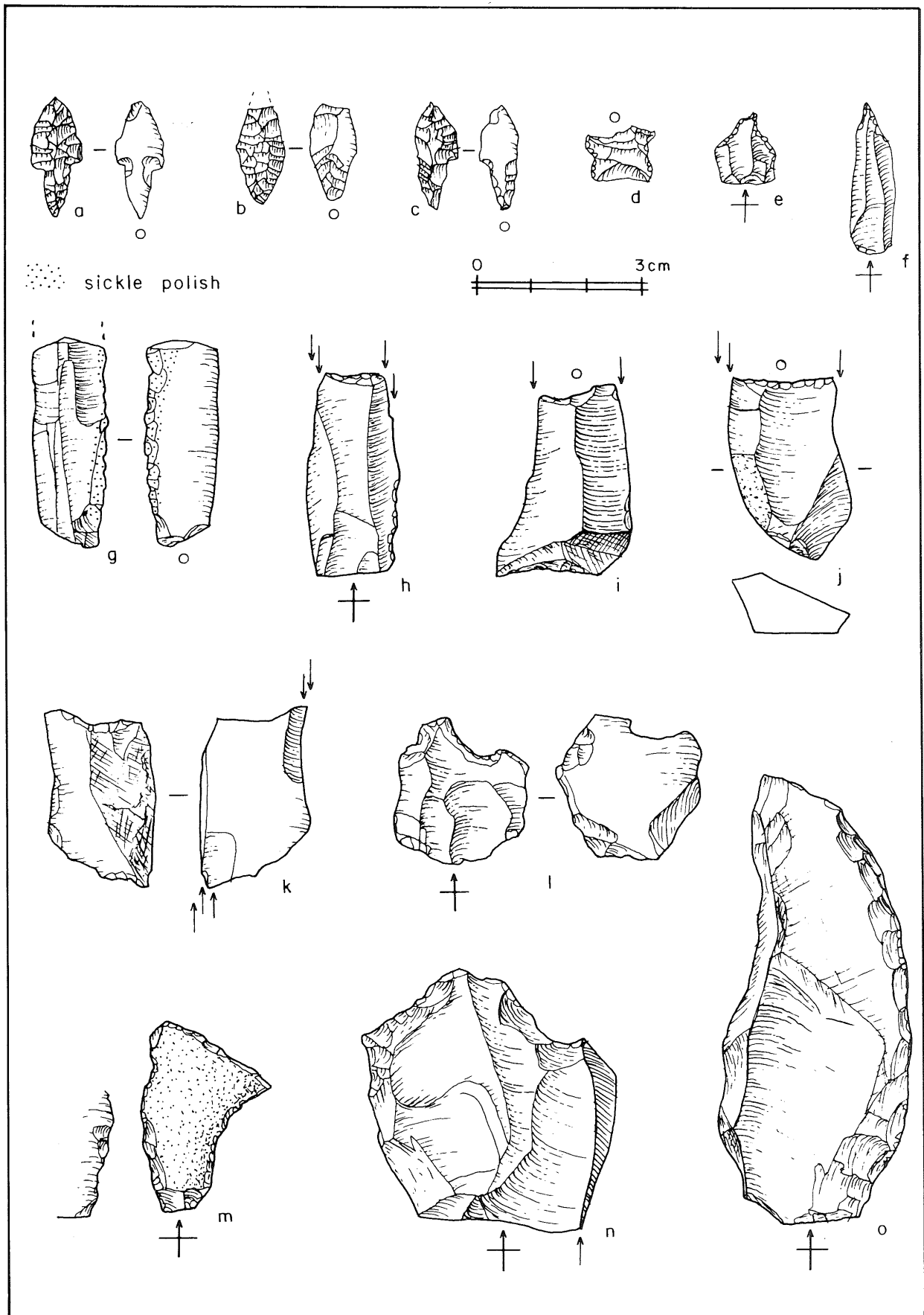


Fig. 5. Yarmoukian artifacts from 'Ain Ghazal 1985. a-c) arrowheads; d-f) borers; g) truncated sickle blade; h-k) truncation burins; l) wedge; m) cortical scraper; n) "other" (sidescraper + notch + burins); o) sidescraper. (B. Byrd).

Table 2. Absolute and relative frequencies of tool types from the analyzed samples of the 1985 excavations at 'Ain Ghazal

<i>Tool Type</i>	<i>PPN</i>		<i>Yarmoukian</i>		<i>Ex Situ</i>
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>
Spear Points	20	6.2	5	4.0	12
Arrowheads	-	0.0	4	3.2	3
Sickles	29	9.1	3	2.4	10
Burins (all types)	122	38.1	31	25.0	111
Truncations	12	3.8	3	2.4	22
Scrapers (all types)	18	5.6	14	11.3	61
Denticulates	21	6.6	9	7.3	22
Notches	21	6.6	13	10.5	25
Perforators/Awls/Drills	22	6.9	16	12.9	31
Bifacial tools	22	6.9	15	12.1	24
Knives	14	4.4	4	3.2	8
Backed Blades	6	1.9	5	4.0	7
Tanged Blades	4	1.2	-	0.0	2
Other	9	2.8	2	1.6	4
Subtotals	320	100.1	124	99.9	342
Retouched Blades	12	(3.6)	2	(1.6)	11
Retouched Flakes	-	(0.0)	-	(0.0)	4
Subtotals	332		126		357
Utilized Blades	38	(9.6)	4	(2.6)	18
Utilized Flakes	8	(2.0)	7	(4.5)	21
Indeterminate	19	(4.8)	17	(11.0)	28
Totals	397		154		424

PPN layers although such implements were decidedly rare in Yarmoukian contexts, similar to the situation in the Central and South Field samples in 1984.

Although small clay animal figurines were few in the sediments excavated in 1985, human figurines were well represented in the PPN deposits. One of these is a small standing figure from the fill surrounding the statuary cache in Sq 3283 (Pl. II,1). The face has been badly damaged, as has the chest and abdomen, but it appears to be a person of indeterminate sex in a slightly stooped posture with both arms placed behind the back either in a relaxed attitude or to support some ill-

defined load. Another figurine, broken across the chest, appears to be a robust male (Pl. II,2) with well-developed shoulder and pectoral muscles. The delicately modelled head shows details of the brow, nose, and jawline, and the eyes at one time may have been inset with some other material.

Finally, another figurine is pervaded with pathos (Pl. II,3): lying on its back with the right arm and hand placed over the abdomen, this individual appears to reflect a moment of extreme grief in the attitude of its raised head comforted by the left hand wrapped across the face. Whatever may have been the painful inspiration cap-

Table 3. Absolute and relative frequencies of burin types (above) and burin classes (below) among the analyzed samples from the 1985 excavations at 'Ain Ghazal.

<i>Type</i>	<i>PPN</i>		<i>Yarmoukian</i>		
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	
Simple	3	2.5	1	3.2	
Angle	2	1.6	1	3.2	
Transverse	64	52.5	4	12.9	
On Break	7	5.7	-	0.0	
Straight Dihedral	3	2.5	-	0.0	
Canted Dihedral	8	6.6	7	22.6	
Core	1	0.8	-	0.0	
Double	5	4.1	4	12.9	
Opposed	14	11.5	4	12.9	
Concave Truncation	2	1.6	4	12.9	
Convex Truncation	3	2.5	2	6.5	
Oblique Truncation	2	1.6	-	0.0	
Combination	3	2.5	1	3.2	
Indeterminate	5	4.1	3	9.7	
Totals	122	100.1	31	100.0	
					<i>X</i> ²
Simple Burins	77	65.8	6	21.4	.001
Complex Burins	33	28.2	16	57.1	.01
Truncation Burins	7	6.0	6	21.4	.02
Totals	117	100.0	28	99.9	

tured in this remarkable object will never be known, but it is powerful testimony to the emotional range of early Neolithic artists.

For the other small finds listed in Table 5, little is noteworthy in comparison to earlier seasons at 'Ain Ghazal except to mention that small geometric objects of clay were rare as were jewelry pieces and shell.

Architecture

Except for occasional fragments of plaster flooring in the upper parts of the PPN sequence, the only substantial architecture in Sq 3282 was the house through which the statuary pit had been dug. The excava-

tion trench located the north, west, and south walls of the western portion of the structure, but how much had been destroyed to the east by bulldozers is not determinable. The area preserved within the remaining section was approximately 5 m (NS) by 1.9 m (EW) in extent. The construction techniques appeared to be standard PPNB in character, with walls of stone and a floor of lime plaster polished and bearing sketchy evidence of red ochre paint. Two and possibly three large post-holes (each larger than 40 cm in diameter) evidently supported roof beams, while at least five smaller postholes may have contained secondary structural members. No evidence of an interior hearth was found in this room, but if one had existed, it was

Table 4. Groundstone artifacts from the 1985 excavations at 'Ain Ghazal

<i>Artifact Class</i>	<i>PPN</i>	<i>Yarmoukian</i>	<i>Ex Situ</i>
	<i>n</i>	<i>n</i>	<i>n</i>
Muller, basalt	2	-	6
Muller, other stone	-	2	2
Quern	2	-	-
"Stone Bowl" mortar	-	2	-
Pestle, basalt	-	-	1
Pestle, miniature	-	1	-
Burnishing stone	1	1	1
Spindle whorl	-	-	1
Stone weight	1	1	-
Perforated stone	1	1 ^a	1
Grooved stone	1 ^b	-	1 ^b
Incised stone	-	1	-
"Worked stone"	-	1	-
Basalt fragments	-	-	2

a: basalt

b: "shaft straightener"

probably destroyed by the statuary pit. The poor condition of the plaster floor reflects a relatively long period of exposure to weathering, indicating that the building had been abandoned long before the statuary was placed beneath the floor.

In nearby Sq 3285 (10 m to the north of Sq 3282), remnants of a house severely damaged by bulldozers were exposed in the section, and the fill in this structure was cleared down to the floor. Constructed immediately on top of sterile basal clay (and thus somewhat earlier in date than the house in Sq 3282), the north, west, and south walls enclosed a space 3.5 m (NS) by 1.5 (maximum EW) in which a replastered floor remained. In the NW corner of the room a small Late Acheulian biface leaned against the wall. Typical of PPNB architecture, the floor surface reflected a singular style of decoration. The central stretch of the floor was covered with repeated red "commas" applied using a finger-painting method; the northernmost reaches of the floor were too badly eroded to detect any designs, but near the SW corner of the

room was a small red ellipse (ca. 60 × 30 cm) of solid red color surrounded by an area of smudges and irregular patches of red paint.

The Yarmoukian layers in Sq 3282 contained abundant evidence of architecture, and it all indicates that these later inhabitants stayed at 'Ain Ghazal in relatively flimsy, temporary structures. Several examples of semi-subterranean pit dwellings were uncovered, some with interior storage features (one of which had "beehive" contours) and possible interior partitions associated with puddled mud floors. One structure included a poorly preserved plaster-lined pit that may have been an interior hearth. No structure was completely exposed, so it is not possible to estimate the size of these shelters with any accuracy, but one appeared to extend at least 3 m in maximum dimension. Although more detailed analysis is necessary to understand the Yarmoukian situation more clearly, the general picture appears to be consistent with periodic, perhaps seasonal visits to 'Ain Ghazal, perhaps in con-

Table 5. List of small finds from the 1985 excavations at 'Ain Ghazal.

	PPN	Yarmoukian	Ex Situ
	<i>n</i>	<i>n</i>	<i>n</i>
<i>Bone Tools</i>			
Spatulas	3	1	5
Awls	8	1	3
Needle/Pin	1	-	-
Incised bone fragment	-	-	1
Worked fragment	3	1	-
<i>Clay Objects</i>			
Human figurine	5	-	-
Equid (?) figurine	-	1	-
Unidentified animal	1	-	1
Sphere	3	1	1
Spindle whorl	-	1	-
Potsherd (sun dried)	1	-	-
Molded fragment	3	1	1
Reed-impressed fragment	1	-	-
<i>Jewelry</i>			
"Bracelet"/Circular pendant	1	2	8
Greenstone bead	1	-	-
"Blackstone" bead	1 ^a	-	-
Fossil bead	1 ^b	-	-
Greenstone fragment (worked)	-	-	1 ^c
Carnelian fragment	-	1 ^d	-
<i>Other</i>			
White ware fragment	-	1	-
Sweetclam shell	1	-	-
Cockle shell	-	1	-
Unidentified shell	1	-	1
Fine-grained greenstone	-	-	1

a: Burned, identification difficult

b: Blastoid-like

c: Malachite?

d: Unworked chunk

junction with the annual rounds associated with nomadic pastoralism¹³.

Radiocarbon Dates

We have recently received a series of 14 radiocarbon dates for samples from the Central and South Field excavations in

1984 that provide a firm basis for interpreting the earlier history of the occupation of 'Ain Ghazal (Table 6).

The dates from the Central Field (Sqs 3273 through 3083) reveal that the village was established about 7250 b.c. and maintained a long period of subsequent development. By about 6500 b.c. the village sud-

13. Cf. Köhler-Rollefson *et al.* n.d.

Table 6. Radiocarbon dates from samples excavated in 1984 at 'Ain Ghazal (cf. Fig. 1)

<i>Sample</i>	<i>Square</i>	<i>Local Phase*</i>	<i>Years b. c.</i>	<i>Comments</i>
GrN-12959	3076	I/II	7050 \pm 90	Older than the 1983 statuary cache
GrN-12960	3080	III	7080 \pm 80	
GrN-12961	3080	II	6980 \pm 60	
GrN-12962	3080	I	6730 \pm 190	Inverted, too young, note \pm range
GrN-12963	3081	IV	7020 \pm 80	
GrN-12964	3081	IV	7020 \pm 80	
GrN-12965	3081	III	7100 \pm 80	Inverted, but \pm overlaps other samples.
GrN-12966	3083	VI	7250 \pm 110	Large \pm overlaps earlier samples in this square
GrN-12967	3083	IV	6980 \pm 80	Later than the skull cache
GrN-12968	3083	III	7020 \pm 110	Overlaps with \pm of other samples in this square
GrN-12969	3273	VII	6860 \pm 80	
GrN-12970	3273	V	6700 \pm 200	Inverted, but \pm overlaps with other samples in this square
GrN-12971	4048	-	6510 \pm 90	Earliest evidence of occupation in South Field
GrN-12972	4452	-	6215 \pm 50	Base of 15-m building

* N. B.: "Local Phase" refers to the phase within each of the excavation squares and is not necessarily equivalent to the phases seen in other excavation units.

denly increased in size, based on the sample from just above sterile basal clay in Sq 4048 in the SW corner of the car park (Fig. 1). Population continued to increase during the later part of the 7th millennium, and by 6200 b.c. the construction of the 15-m building had begun in the South Field as shown by the date from a log at the base of the structure (Sq 4452). This date also provides a *terminus post quem* for the emergence of the final PPN development (the "PPNC") at 'Ain Ghazal contained in the occupational series above the floor of the 15-m complex¹⁴.

Several other radiocarbon samples are still being processed at the University of Arizona NSF Linear Accelerator Facility,

including two samples from PPNC contexts and one sample from the East Field test trenches. When the results are finally made available, the chronological framework for this important cultural development at 'Ain Ghazal will be established. In addition, bone samples from Yarmoukian contexts have been submitted for radiometric dating which should fix the events of these developments on a more secure temporal foundation.

Concluding Remarks

Four excavation seasons at 'Ain Ghazal (1982-1985) have produced a staggering wealth of archaeological information.

14. Rollefson and Simmons 1985a.

The impact of all this material on the interpretation of crucial Neolithic socioeconomic and sociocultural developments has already been shown to be dramatic, but so far only a minute amount of the information has been analyzed in depth. In order to understand the critical evolution in more detail and to make more meaningful comparisons with contemporary trends in the region, it is time to call a temporary halt to the acquisition of additional raw data and to begin the intensive analysis of what has already been painstakingly accumulated. It is the intention of the 'Ain Ghazal Archaeological Project to devote the

next two years or more to laboratory research of the archaeological samples in preparation for the first volume of the 'Ain Ghazal site report. We intend to resume full scale field operations as early as 1988.

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