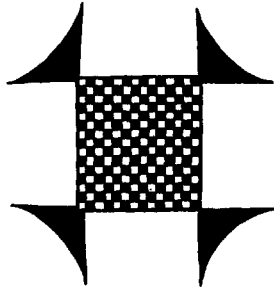


THE ORIENTAL INSTITUTE OF THE UNIVERSITY OF CHICAGO  
*STUDIES IN ANCIENT ORIENTAL CIVILIZATION · NO. 25*



THE  
COMPARATIVE  
ARCHEOLOGY OF  
EARLY MESOPOTAMIA



*BY ANN LOUISE PERKINS*

THE ORIENTAL INSTITUTE OF THE UNIVERSITY OF CHICAGO  
*STUDIES IN ANCIENT ORIENTAL CIVILIZATION · NO. 25*  
THE UNIVERSITY OF CHICAGO PRESS · CHICAGO · ILLINOIS

*International Standard Book Number: 0-226-62396-3*

*Library of Congress Catalog Card Number: 49-10748*

THE UNIVERSITY OF CHICAGO PRESS, CHICAGO 60637  
THE UNIVERSITY OF CHICAGO PRESS, LTD., LONDON

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*Published 1949. Printed in the United States of America*

SECOND PRINTING 1957

THIRD PRINTING 1959

FOURTH PRINTING 1963

FIFTH PRINTING 1968

SIXTH PRINTING 1972

SEVENTH PRINTING 1977



*To the Memory of*  
**ALBERT TEN EYCK OLMSTEAD**



## PREFACE

**B**ELIEVING that the war years, in which little excavation was being conducted in the Near East, offered the logical opportunity to synthesize the discoveries of the interwar period, Professor Frankfort initiated in 1939 a seminar in comparative stratigraphy for advanced students in archeology at the University of Chicago. Each country of the Near East was studied systematically and in detail by one person, and the results were presented to the seminar at large, with full discussions of all the problems involved and all the conclusions which might be drawn from the facts presented. The writer studied Mesopotamia for this seminar and used the material for her doctoral dissertation, *The Comparative Stratigraphy of Prehistoric Mesopotamia*, in 1940.

Of all the lands of the Near East, Mesopotamia presents one of the most provocative challenges to the archeologist. Its remains go back to a very remote past; a large amount of excavation has provided us with a considerable body of material; the cultures revealed by this material are very significant, both for their own sakes, as revealing the beginnings of one of the great civilizations of antiquity, and for their influences on other lands. Of recent years very few attempts have been made to bring together all the available material and evaluate it so that a coherent picture is obtained. Professor Frankfort's *Archeology and the Sumerian Problem* provided such a summation of evidence; but so much material has been gathered since its publication in 1932 that the picture has changed greatly. Viktor Christian's *Altertumskunde des Zweistromlandes I* (Leipzig, 1940) is the most recent attempt at a synthesis and provides a very useful collection of material; that we believe Dr. Christian's comparative stratigraphy to be erroneous in some respects will be made clear in the body of this study. We believe that this is due in part to his improper evaluation of the source material, in part to his lack of access to certain unpublished material available to the writer.

In the belief that the student of archeology needs descriptions of the actual material remains of the various periods, as well as the comparative stratigraphy of the sites, we are including both of those features. This study synthesizes all the relevant published data bearing on Mesopotamian archeology from earliest times to the onset of the Early Dynastic period, plus all the unpublished data available. It attempts to describe, analyze, and correlate these data, using the stratified sites as a framework into which may be fitted the considerable quantity of unstratified finds. Specific references have been made to original publications, but the intention is to provide in one work all necessary information on significant culture elements.

We have followed the excavators in employing such terms as "slip," "burnish," "tournette," and "fast wheel." The answers to the technical questions involved in deciding what a slip is, whether a given piece has such a coating, what constitutes proof of the use of a tournette or a foot-turned wheel, etc. are in the province of the ceramic engineer, not of the archeologist. Therefore throughout this study such terms may be considered as quotations from the individual excavators, not as expressions of the writer's personal conviction.

The drawings of pottery forms and painted motifs reproduce characteristic or otherwise significant pieces and are to be considered as type specimens rather than individuals. All examples of motif 10 in Figure 2 cited in the text are not identical with the one drawn; but all are (in the writer's opinion) sufficiently alike to be considered variants of the same motif, of which the specimen depicted in our figure is an especially good example.

The area covered by this study, for which we use the ancient term Mesopotamia, includes

not only the greater part of modern Iraq but also most of the Jazirah, which in antiquity was culturally more closely related to Mesopotamia than to Syria. In differentiating the parts of this main area, the author has deliberately avoided the use of terms which have either implications of political hegemony (e.g. Assyria) or uncertainties as to location and extent (e.g. Sumer, Babylonia). The northern and southern parts of the area are fairly distinct cultural units, which meet at the narrow gap between the Tigris and the Euphrates near Baghdad. The Diyala sites excavated by the Oriental Institute are included in the South, to which they belong culturally. The South (or southern Mesopotamia) thus extends from the head of the Persian Gulf to the dividing line just north of Baghdad and from the Zagros Mountains to the desert edge west of the Euphrates (as far west as excavated sites occur). The North (or northern Mesopotamia) extends from the line above Baghdad to the northern political boundary of Iraq in the mountains of Kurdistan and from the eastern Kurdish foothills to the headwaters of the Khabor River. Sites outside this area, such as Carchemish and Şamramaltı, are mentioned when they exhibit material comparable with that of Mesopotamia, but no attempt has been made to deal systematically with such sites or with their history.

In the pursuit of our task the aid of numerous people has been sought. The writer is aware of the dangers of pontificating on archeological technicalities without herself having had field experience; she has therefore constantly availed herself of the advice and counsel of the experienced excavators who are her colleagues in the Oriental Institute. The full and detailed discussions of problems with the archeological seminar have been a most salutary preventive against too hasty speculation without proper evaluation of facts, and subsequent conversations on specific points with Professor Frankfort and members of the seminar have been equally helpful. Acceptance of this study for publication by the Oriental Institute was kindly made by Professor John A. Wilson. The careful editing of the manuscript has been the work of Mrs. Albert R. Hauser, whose patience and sympathetic help in a long and tedious task have been invaluable and are most deeply appreciated. The majority of the illustrations are the work of Mr. Alfred Harris; Miss Sue Richert and Mr. Carl Dinella made some of the drawings. Access to museum collections and to unpublished information has been most generously granted by the authorities of the University Museum, Philadelphia (to whom a special debt of gratitude is owed for permission to use the manuscript of *Excavations at Tepe Gawra II*), by Professor Frankfort for the Iraq Expedition of the Oriental Institute, by Mr. Lauristan Ward and Mr. Derwood W. Lockard for the material from Harvard University's survey of northern Iraq, and by Professor W. F. Albright for material from various parts of Iraq. The gratitude which the author feels for the unfailing assistance and encouragement freely given her through ten years of study and work in the Oriental Institute by the late Professor Albert T. Olmstead is only inadequately expressed by the dedication of this book.

ANN LOUISE PERKINS

CHICAGO, ILLINOIS  
October 1948

# TABLE OF CONTENTS

LIST OF ILLUSTRATIONS . . . . .	xv
LIST OF ABBREVIATIONS . . . . .	xvii
I. THE HASSUNAH PERIOD . . . . .	1
Tell Hassunah . . . . .	2
Samarra <sup>o</sup> . . . . .	5
Nineveh . . . . .	8
Tell Arpachiyyah . . . . .	10
Tell Shaghir Bazar . . . . .	11
Tell al-Halaf . . . . .	12
Other Sites . . . . .	13
Comparative Stratigraphy . . . . .	14
Extent and Origin of the Hassunah Culture . . . . .	15
II. THE HALAF PERIOD . . . . .	16
Pottery . . . . .	16
Tell Arpachiyyah . . . . .	16
Tepe Gaura . . . . .	21
Samarra <sup>o</sup> . . . . .	25
Tell Hassunah . . . . .	25
Nineveh . . . . .	26
Tell Brak . . . . .	27
Tell Shaghir Bazar . . . . .	27
Tell al-Halaf . . . . .	29
Tell Aswad . . . . .	31
Carchemish . . . . .	31
Other Sites . . . . .	31
Figurines . . . . .	32
Glyptic . . . . .	33
Stone Vessels . . . . .	34
Tools and Weapons of Stone, Bone, and Clay . . . . .	35
Ornaments . . . . .	36
Miscellaneous . . . . .	36
Architecture . . . . .	37
Tell Arpachiyyah . . . . .	37
Tepe Gaura . . . . .	40
Tell Shaghir Bazar . . . . .	41
Tell al-Halaf . . . . .	41
Tell Aswad . . . . .	41
Carchemish . . . . .	41
Burials . . . . .	41
Tell Arpachiyyah . . . . .	41
Tepe Gaura . . . . .	42
Tell Shaghir Bazar . . . . .	42
Comparative Stratigraphy . . . . .	42
Source and Extent of the Halaf Culture . . . . .	43

## TABLE OF CONTENTS

III. THE UBAID PERIOD . . . . .	46
The North . . . . .	46
Pottery . . . . .	46
Tepe Gaura . . . . .	46
Levels XIX-XVII . . . . .	46
Levels XVI-XV . . . . .	48
Level XIII . . . . .	49
Levels XIIIa-XII . . . . .	50
Tell Arpachiyah . . . . .	52
Nuzi . . . . .	55
Tell Hassunah . . . . .	56
Nineveh . . . . .	56
Grai Resh . . . . .	57
Tell Brak . . . . .	58
Tell Shaghir Bazar . . . . .	58
Tell al-Halaf . . . . .	58
Tell Mefesh . . . . .	59
Other Sites . . . . .	60
Objects . . . . .	60
Architecture . . . . .	65
Tepe Gaura . . . . .	65
Tell Arpachiyah . . . . .	70
Tell Mefesh . . . . .	70
Burials . . . . .	71
Tepe Gaura . . . . .	71
Tell Arpachiyah . . . . .	72
Nuzi . . . . .	72
Nineveh . . . . .	72
Twofold Division of the Ubaid Period in the North . . . . .	72
The South . . . . .	73
Pottery . . . . .	74
Tell Abu Shahrain . . . . .	74
Al-Ubaid . . . . .	76
Ur . . . . .	77
Warka . . . . .	78
Raidau Sharqi . . . . .	80
Hajji Muhammad . . . . .	80
Telloh . . . . .	81
Tell Uqair . . . . .	81
Summary . . . . .	82
Figurines . . . . .	83
Tools and Weapons . . . . .	85
Ornaments . . . . .	86
Stone Vessels . . . . .	86
Other Objects . . . . .	86
Architecture . . . . .	87
Burials . . . . .	89
Comparative Stratigraphy . . . . .	90
Correlation of the North and the South . . . . .	90
Extent of the Ubaid Culture . . . . .	96

## TABLE OF CONTENTS

xi

IV. THE WARKA AND PROTOLITERATE PERIODS	97
Pottery	98
Warka	98
Tell Abu Shahrain	102
Al-‘Ubaid	104
Ur	104
Raidau Sharqi	105
Telloh	105
Farah	106
Jamdat Nasr	106
Tell ‘Uqair	108
Khafajah and Tell Asmar	108
Architecture	110
Warka	110
Anu Ziggurat	110
Level <i>B</i>	110
Level <i>C</i>	113
Intermediate Layers	114
Levels <i>D–E</i>	115
Level <i>F</i>	116
Level <i>G</i>	117
Level <i>X</i>	117
Level <i>A</i>	117
Mosaic Temple	118
Eanna Precinct	119
Level VII	120
Level VI	120
Level V	120
Level IV	121
Level III	125
Dating	128
Tell Abu Shahrain	129
Ur	130
Jamdat Nasr	130
Tell ‘Uqair	131
Khafajah	132
Tell Asmar	133
Burials	133
Stone Vessels	134
Warka	134
Ur	136
Telloh	136
Farah	137
Jamdat Nasr	137
Khafajah	137
Glyptic	138
Warka	138
Ur	142
Telloh	142
Farah	143
Jamdat Nasr	143
Khafajah and Tell Asmar	143

## TABLE OF CONTENTS

Animal Amulets . . . . .	143
Warka . . . . .	143
Ur . . . . .	144
Telloh . . . . .	144
Farah . . . . .	144
Jamdat Nasr . . . . .	145
Khafajah . . . . .	145
Personal Ornaments . . . . .	145
Warka . . . . .	145
Ur . . . . .	146
Telloh . . . . .	146
Farah . . . . .	146
Jamdat Nasr . . . . .	146
Khafajah . . . . .	147
Tools and Weapons . . . . .	147
Warka . . . . .	148
Ur . . . . .	148
Telloh . . . . .	148
Farah . . . . .	148
Jamdat Nasr . . . . .	149
Khafajah . . . . .	149
Metal Vessels . . . . .	149
Warka . . . . .	149
Ur . . . . .	149
Telloh . . . . .	149
Farah . . . . .	150
Jamdat Nasr . . . . .	150
Khafajah . . . . .	150
Sculpture . . . . .	150
Warka . . . . .	150
Ur . . . . .	152
Telloh . . . . .	152
Khafajah . . . . .	152
Miscellaneous Objects . . . . .	153
Comparative Stratigraphy . . . . .	155
Warka . . . . .	155
Southern Mesopotamia . . . . .	159
V. THE GAURA AND NINEVITE PERIODS . . . . .	162
Pottery . . . . .	162
Nineveh . . . . .	162
Nuzi . . . . .	165
Tell Billa . . . . .	165
Tepe Gaura . . . . .	166
Grai Resh . . . . .	170
Tell Brak . . . . .	171
Tell Shaghir Bazar . . . . .	171
Architecture . . . . .	172
Nineveh . . . . .	172
Tepe Gaura . . . . .	172
Grai Resh . . . . .	177
Tell Brak . . . . .	177
Tell Shaghir Bazar . . . . .	179



## TABLE OF CONTENTS

xiii

Burials . . . . .	179
Nineveh . . . . .	179
Tell Billa . . . . .	179
Tepe Gaura . . . . .	180
Tell Shaghir Bazar . . . . .	181
Stone Vessels . . . . .	182
Nineveh . . . . .	182
Tepe Gaura . . . . .	182
Tell Brak . . . . .	182
Tell Shaghir Bazar . . . . .	182
Glyptic . . . . .	183
Nineveh . . . . .	183
Nuzi . . . . .	183
Tell Billa . . . . .	183
Tepe Gaura . . . . .	183
Grai Resh . . . . .	185
Tell Brak . . . . .	185
Tell Shaghir Bazar . . . . .	186
Personal Ornaments . . . . .	186
Nineveh . . . . .	186
Nuzi . . . . .	186
Tell Billa . . . . .	186
Tepe Gaura . . . . .	186
Tell Brak . . . . .	188
Tell Shaghir Bazar . . . . .	188
Tools and Weapons . . . . .	188
Nineveh . . . . .	188
Nuzi . . . . .	188
Tell Billa . . . . .	189
Tepe Gaura . . . . .	189
Grai Resh . . . . .	190
Tell Brak . . . . .	190
Tell Shaghir Bazar . . . . .	190
Sculpture . . . . .	190
Nuzi . . . . .	190
Tepe Gaura . . . . .	190
Tell Brak . . . . .	191
Miscellaneous Objects . . . . .	191
Comparative Stratigraphy . . . . .	193
Correlation with the South . . . . .	194
VI. EPILOGUE . . . . .	198
EXPLANATION OF TABLES 1-3 . . . . .	<i>following 200</i>



## LIST OF ILLUSTRATIONS

### TEXT FIGURES

1. HALAF POTTERY FORMS . . . . .	<i>facing</i> 30
2. HALAF POTTERY MOTIFS . . . . .	<i>facing</i> 30
3. THOLOI OF TELL ARPACHIYYAH 10-7. PLAN OF FOUNDATIONS . . . . .	38
4. ABNORMAL THOLOS OF TELL ARPACHIYYAH . . . . .	39
5. UBAID POTTERY MOTIFS FOUND IN THE NORTH . . . . .	<i>facing</i> 60
6. UBAID POTTERY FORMS FOUND IN THE NORTH . . . . .	<i>facing</i> 60
7. TEMPLE OF LEVEL XVIII AT TEPE GAURA . . . . .	66
8. PLAN OF TEMPLES OF LEVEL XIII AT TEPE GAURA . . . . .	68
9. UBAID POTTERY FORMS FOUND IN THE SOUTH . . . . .	<i>facing</i> 82
10. UBAID POTTERY MOTIFS FOUND IN THE SOUTH . . . . .	<i>facing</i> 82
11. UR-UBAID I POTTERY MOTIFS . . . . .	<i>preceding</i> 83
12. LATE PREHISTORIC POTTERY FORMS . . . . .	<i>facing</i> 108
13. JAMDAT NASR STYLE POTTERY MOTIFS . . . . .	<i>preceding</i> 109
14. PLAN OF ANU ZIGGURAT AT WARKA, LEVELS <i>P-C</i> . . . . .	112
15. PLAN OF ANU ZIGGURAT AT WARKA, LEVELS <i>D-E</i> . . . . .	115
16. PLAN OF EANNA PRECINCT AT WARKA, LEVEL IV . . . . .	<i>facing</i> 122
17. PLAN OF EANNA PRECINCT AT WARKA, LEVEL III . . . . .	<i>facing</i> 126
18. PROTOLITERATE STONE VESSEL FORMS . . . . .	134
19. NINEVITE 5 POTTERY MOTIFS . . . . .	<i>facing</i> 164
20. PLAN OF TEMPLES OF LEVEL VIIC AT TEPE GAURA . . . . .	176

### TABLES

1. NORTHERN MESOPOTAMIA . . . . .	} <i>at end</i>
2. SOUTHERN MESOPOTAMIA . . . . .	
3. TENTATIVE CORRELATION OF NORTH AND SOUTH . . . . .	

### MAP

MAP SHOWING LOCATIONS OF MESOPOTAMIAN SITES WITH PREHISTORIC REMAINS . . . . .	} <i>at end</i>
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## LIST OF ABBREVIATIONS

<i>AAA</i>	Annals of archaeology and anthropology (Liverpool, 1908—).
<i>AASOR</i>	American Schools of Oriental Research. The annual (New Haven, Conn., 1920—).
<i>AJ</i>	The antiquaries journal (London, 1921—).
<i>AOF</i>	Archiv für Orientforschung (Berlin, 1923—).
<i>Arp.</i>	MALLOWAN, M. E. L., and ROSE, J. CRUIKSHANK. Excavations at Tall <i>Arpachiyah</i> , 1933. ( <i>Iraq II</i> [1935] i–xv and 1–178 and Pls. I–XXII).
<i>BASOR</i>	American Schools of Oriental Research. Bulletin (South Hadley, Mass., 1919—).
<i>Cyl. Seals</i>	FRANKFORT, H. Cylinder seals. A documentary essay on the art and religion of the ancient Near East (London, 1939).
<i>DSA</i>	WOOLLEY, C. LEONARD. The development of Sumerian art (New York, 1935).
<i>Fara</i>	HEINRICH, ERNST. <i>Fara</i> . Ergebnisse der Ausgrabungen der Deutschen Orient-Gesellschaft in Fara und Abu Hatab 1902/03, hrsg. von WALTER ANDRAE (Berlin, 1931).
<i>Hissar</i>	SCHMIDT, ERICH F. Excavations at Tepe Hissar, Damghan (Philadelphia, 1937).
<i>ILN</i>	The illustrated London news (London, 1842—; New York ed.).
<i>Iraq I</i>	WOOLLEY, C. LEONARD. The prehistoric pottery of Carchemish ( <i>Iraq I</i> [1934] 146–62 and Pls. XVIII–XXI).
<i>Iraq III</i>	MALLOWAN, M. E. L. The excavations at Tall Chagar Bazar, and an archaeological survey of the <i>Ḥabur</i> region, 1934–5 ( <i>Iraq III</i> [1936] 1–86 and Pls. I–III).
<i>Iraq IV</i>	MALLOWAN, M. E. L. The excavations at Tall Chagar Bazar and an archaeological survey of the <i>Ḥabur</i> region. Second campaign, 1936 ( <i>Iraq IV</i> [1937] 91–177 and Pls. XII–XIX).
<i>Iraq VII</i>	LLOYD, SETON. Iraq Government soundings at Sinjar ( <i>Iraq VII</i> [1940] 13–21 and Pls. II–IV).
<i>Iraq VIII</i>	MALLOWAN, M. E. L. Excavations in the Balih Valley, 1938 ( <i>Iraq VIII</i> [1947] 111–59 and Pls. XXIV–XXVIII).
<i>Iraq IX</i>	MALLOWAN, M. E. L. Excavations at Brak and Chagar Bazar ( <i>Iraq IX</i> [1947]).
<i>Jemdet Nasr</i>	MACKAY, ERNEST. Report on excavations at Jemdet Nasr, Iraq (Field Museum of Natural History. Anthropology, Memoirs I 3 [Chicago, 1931]).
<i>JNES</i>	Journal of Near Eastern studies (Chicago, 1942—).
<i>JNES II</i>	LLOYD, SETON, and SAFAR, FUAD. Tell Uqair. Excavations by the Iraq Government Directorate of Antiquities in 1940 and 1941 ( <i>JNES II</i> [1943] 131–58 and Pls. III–XXXI).
<i>JNES III</i>	BRAIDWOOD, ROBERT J., BRAIDWOOD, LINDA S., TULANE, EDNA, and PERKINS, ANN L. New Chalcolithic material of Samarran type and its implications ( <i>JNES III</i> [1944] 47–72, 23 unnumbered pages of motifs, and Pls. I–IX).

- JNES IV* LLOYD, SETON, and SAFAR, FUAD. Tell Hassuna. Excavations by the Iraq Government Directorate of Antiquities in 1943 and 1944 (*JNES IV* [1945] 255-89, 19 unnumbered pages of text figures, and Pls. I-XXI).
- Kleinfunde* HEINRICH, ERNST. Kleinfunde aus den archaischen Tempelschichten in Uruk (Deutsche Forschungsgemeinschaft, *Berlin*. Ausgrabungen . . . in Uruk-Warka I [Berlin and Leipzig, 1936]).
- Lenzen, Zikurra* LENZEN, HEINRICH J. Die Entwicklung der Zikurra von ihren Anfängen bis zur Zeit der III. Dynastie von Ur (Deutsche Forschungsgemeinschaft, *Berlin*. Ausgrabungen . . . in Uruk-Warka IV [Leipzig, 1941]).
- MJ* Pennsylvania. University. University Museum. The museum journal (Philadelphia, 1910—).
- MJ XXII* SCHMIDT, ERICH F. Excavations at Fara, 1931 (*MJ XXII* [1931] 192-245).
- MJ XXIII* SPEISER, E. A. The pottery of Tell Billa (*MJ XXIII* [1932-33] 249-308).
- Nuzi* STARR, RICHARD F. S. Nuzi; report on the excavations at Yorgan Tapa near Kirkuk, Iraq, conducted by Harvard University in conjunction with the American Schools of Oriental Research and the University Museum of Philadelphia. I. Text. II. Plates and plans (Cambridge, Mass., 1939 and 1937).
- OIC* Chicago. University. The Oriental Institute. Oriental Institute communications (Chicago, 1922—).
- OIC No. 19* FRANKFORT, H., and JACOBSEN, THORKILD. Oriental Institute discoveries in Iraq, 1933/34. Fourth preliminary report of the Iraq Expedition (1935).
- OIC No. 20* FRANKFORT, H. Progress of the work of the Oriental Institute in Iraq, 1934/35. Fifth preliminary report of the Iraq Expedition (1936).
- OIP* Chicago. University. The Oriental Institute. Oriental Institute publications (Chicago, 1924—).
- OIP XLIV* FRANKFORT, H. Sculpture of the third millennium B.C. from Tell Asmar and Khafajah (1939).
- OIP LIII* DELOUGAZ, PINHAS. The Temple Oval at Khafajah (1940).
- OIP LVIII* DELOUGAZ, PINHAS, LLOYD, SETON, FRANKFORT, H., and JACOBSEN, THORKILD. Pre-Sargonic temples in the Diyala region (1942).
- OIP LIX* LANGSDORFF, ALEXANDER, and McCOWN, DONALD E. Tall-i-Bakun A, season of 1932 (1942).
- OIP LX* FRANKFORT, H. More sculpture from the Diyala region (1943).
- OIP LXI* BRAIDWOOD, ROBERT J., and BRAIDWOOD, LINDA S. Excavations in the Plain of Antioch. I. The earlier assemblages (in preparation).
- OIP LXIII* DELOUGAZ, PINHAS. Pottery from the Diyala region (in press).
- Samarra V* HERZFELD, ERNST E. Die Ausgrabungen von Samarra. V. Die vorgeschichtlichen Töpfereien von Samarra (Berlin, 1930).
- SAOC* Chicago. University. The Oriental Institute. Studies in ancient oriental civilization (Chicago, 1931—).
- SAOC No. 23* McCOWN, DONALD E. The comparative stratigraphy of early Iran (1942).
- Schilf und Lehm* HEINRICH, ERNST. Schilf und Lehm. Ein Beitrag zur Baugeschichte der Sumerer (Berlin, 1934).

## LIST OF ABBREVIATIONS

xix

<i>Shahrain</i>	THOMPSON, R. CAMPBELL. The British Museum excavations at Abu Shahrain in Mesopotamia in 1918 ( <i>Archaeologia</i> LXX [1920] 101-44).
<i>Sialk</i>	GHIRSHMAN, ROMAN. Fouilles de Sialk, près de Kashan, 1933, 1934, 1937 I (Paris. Musée du Louvre. Département des antiquités orientales. Série archéologique IV [Paris, 1938]).
<i>Sumer III</i>	LLOYD, SETON, and SAFAR, FUAD. Eridu ( <i>Sumer III</i> [1947] 84-111, Figs. 1-7, and Pls. I-IX).
<i>Tell Halaf</i>	OPPENHEIM, MAX, FREIHERR VON. Tell Halaf, a new culture in oldest Mesopotamia (tr. by GERALD WHEELER; London and New York, 1933).
<i>Tell Halaf I</i>	OPPENHEIM, MAX, FREIHERR VON. Tell Halaf. I. Die prähistorische Funde. Bearbeitet von HUBERT SCHMIDT (Berlin, 1943).
<i>Telloh</i>	GENOUILLAC, HENRI DE. Fouilles de Telloh. I. Époques présargoniques (Paris, 1934).
<i>Tepe Gawra I</i>	SPEISER, E. A. Excavations at Tepe Gawra. I. Levels I-VIII (Philadelphia, 1935).
<i>Tepe Gawra II</i>	TOBLER, ARTHUR J. Excavations at Tepe Gawra II (in press).
<i>UE</i>	Joint Expedition of the British Museum and of the Museum of the University of Pennsylvania to Mesopotamia. Ur excavations (London, 1927—).
<i>UE I</i>	HALL, H. R., and WOOLLEY, C. LEONARD. Al-Ubaid (1927).
<i>UE III</i>	LEGRAIN, LÉON. Archaic seal-impressions (1936).
<i>Univ. Museum Bull.</i>	Pennsylvania. University. University Museum. Bulletin (Philadelphia, 1930—).
<i>UVB</i>	Deutsche Forschungsgemeinschaft, <i>Berlin</i> . . . . vorläufiger Bericht über die von der Notgemeinschaft der deutschen Wissenschaft in Uruk-Warka unternommenen Ausgrabungen (Preussische Akademie der Wissenschaften, philos.-hist. Klasse. Abhandlungen [Berlin, 1930—]).
<i>WVDOG</i>	Deutsche Orient-Gesellschaft, <i>Berlin</i> . Wissenschaftliche Veröffentlichungen (Leipzig, 1900—).
<i>WVDOG LI</i>	JORDAN, JULIUS. Uruk-Warka nach den Ausgrabungen durch die deutsche Orient-Gesellschaft (1928).





## I

## THE HASSUNAH PERIOD

THE recent excavations of the Iraq Department of Antiquities at Tell Hassunah, a site not far from Mosul, have provided material which for the first time allows us to speak of a definite culture preceding that of the Halaf period. Hassunah is a stratified site with a fair volume of material, including some of the famous Samarran painted pottery, which may now finally be placed chronologically. The pottery sequence at Hassunah corresponds with that long known from Nineveh, and these two sites provide a framework into which almost all the pre-Halaf materials from other sites in our area can be fitted. We cannot say that all the non-Halaf fabrics found in the lowest levels of the sites in the region stretching from the Mosul area to the Khabur drainage are actually earlier in date than Halaf; on the contrary, we know that at least some of them were made and used contemporaneously with the Halaf painted pottery. However, there is some evidence, mostly of a negative character, which indicates that many of them appeared prior to the establishment of the Halaf culture. In this chapter we therefore include with those from Hassunah, Nineveh, and Samarra<sup>2</sup> the other non-Halaf fabrics which seem to have preceded, or partially coexisted with, the early phases of the Halaf period.<sup>1</sup>

Our material comes for the most part from the following sites:

Tell Hassunah: strata I–V. Stratum VI probably marks the beginning of the Halaf period.

All except the lowest phase of level I are building levels.

Samarra<sup>2</sup>: grave material only.

Nineveh: strata 1, 2a, and 2b, approximately 3 meters in depth. There are no building levels here, the stratification of this lower part of the prehistoric pit being purely typological.

Tell Arpachiyah: a little pottery mixed with the earliest Halaf material in the levels earlier than TT 10.

Tell Shaghir Bazar: a "cache" of incised and burnished wares in level 15 and supposed Samarran painted pottery scattered through levels 15–13.

Tell al-Halaf: coarse unpainted pottery said to begin below the "Buntkeramik" (Halaf painted pottery) and to coexist with it, plus a small amount of Samarran pottery.

A short campaign of work was conducted by Robert J. Braidwood of the Oriental Institute in 1948. At the site of Matarrah near Kirkuk the expedition found stratified deposits of the Hassunah period of which we have at present no further details. A test by the same expedition at Qal'at Jarmo, near the Kurdish foothills to the east of Kirkuk, revealed especially interesting things—remains from a period before the making of pottery vessels was known (therefore pre-Hassunah), comparable with the "Early Neolithic" layers of Jericho<sup>2</sup> and otherwise unparalleled anywhere in the Near East.

1. Since the various sites have yielded such different materials, we have felt it advisable to discuss all the remains from each site as a unit rather than to describe pottery from all sites in one section, architecture in another, etc. Because of the variety of pre-Halaf pottery, we have not used type forms or type motifs in this chapter.

2. See AAA XXIII (1936) 69.

## TELL HASSUNAH

Level Ia, the lowest stratum, produced mostly coarse straw-tempered pottery in the form of large storage jars, some of which were used secondarily for infant burials. These jars usually are carinate or have an ogee-like curve of the lower part; bases are narrow and flat, necks very short or altogether absent, rims flat or gently tapered.<sup>3</sup> The fabric is buff with a black core and much straw temper; the outside is wet-smoothed, occasionally showing traces of a very slight burnish. The taller specimens often have little groups of unpierced lugs near the rim and occasionally raised ridges; in one instance a lip is dented for pouring.<sup>4</sup> There are also fragments, chiefly from carinate bowls, with slightly burnished light slip.<sup>5</sup>

In level Ib the straw-tempered ware is quite rare but shows a new form, a pear-shaped jar with outturned rim, which is found once with a lid.<sup>6</sup> Plain burnished pottery continues, and two new wares appear. The first is "archaic painted" ware,<sup>7</sup> whose fabric is pink, buff, or brown with a cream or pinkish slip and an almost uniform red color for the paint. Its characteristic feature, which distinguishes it from the "standard painted" ware, is a glossy surface, produced by lustrous paint, burnish, or a combination of the two. The second new ware is "standard incised" ware, in which the fabric is also buff or pinkish, tempered apparently with fine sand but sometimes showing large white grits. The vessels have a thin cream slip, which sometimes turns pink with firing, covering the outside and extending just inside the mouth. The design, drawn with a fine point, is rather carelessly executed and almost invariably linear in style. Sherds show bowl rims and outturned rims of jars, perhaps of the same shape as the coarse-ware jars.<sup>8</sup>

Level Ic has a little coarse ware, including one sherd perforated just below the rim, perhaps for pouring.<sup>9</sup> Beginning here the slip of the burnished ware may be almost white; the sherds show jar rims and bowl profiles of varying types. The excavator states that rims are now flatter, but of those illustrated<sup>10</sup> the majority are tapered. Bowl rims also occur in "archaic painted" ware; here the majority shown are flattened, a feature which is rare in the "standard painted" ware. Designs are commonly zones of truncated chevrons, but crosshatching is used and also some solid bands and figures.<sup>11</sup> "Standard incised" ware is much the most common of the level; there are bowls and almost globular jars with short, nearly straight or slightly outturned necks. The designs show herringbone patterns, "sprigs," and many instances of little scratches, sometimes apparently used as fill for some motif drawn in outline.<sup>12</sup> "Standard painted" ware begins at this time; the fabric seems to be the same as that of the "archaic painted" ware, the slip being usually cream but sometimes varying toward pink or green. The paint is rarely red but ranges from reddish brown through deep brown to almost black.<sup>13</sup> This level also sees the beginning of "standard painted-and-incised" ware,<sup>14</sup> which combines the techniques of the "standard painted" and the "standard incised" wares. From what little can be seen<sup>15</sup> the patterns seem to be similar to those of the simpler wares.

In level II a new type of coarse-ware vessel comes into use, the so-called "husking tray," a large flat oval dish whose whole inner surface is corrugated or pitted with a stick. In both "archaic painted" and "standard incised" wares there are examples of the globular jars with

3. See *JNES* IV, Fig. 6 and Pl. XIII 1.

4. *Ibid.* p. 277.

5. *Ibid.* pp. 276-78 and Fig. 7:1-8; one sherd (Fig. 7:1) has a red-painted band below the rim.

6. *Ibid.* Fig. 6:13.

7. According to tabulation of sherd count *ibid.* Fig. 5; no pieces are illustrated from this level.

8. *Ibid.* Fig. 10:1-2, 8-12.

11. *Ibid.* Figs. 8:1-12 and 9:1-9.

9. *Ibid.* Fig. 6:22.

12. *Ibid.* Figs. 4:2, 4-6 and 10:3-7, 13-18.

10. *Ibid.* Fig. 7:9-28, 32-33.

13. *Ibid.* Fig. 11:1-2.

14. The text (*ibid.* p. 280) states that it begins in Ib, but Fig. 5 shows Ic.

15. *Ibid.* Fig. 9:18-25.

short, almost straight necks<sup>16</sup> which begin in the preceding level. A striking painted design on the inside of a bowl consists of wide crosshatched zones in cruciform arrangement.<sup>17</sup> A jar of "standard painted" ware<sup>18</sup> has a shorter neck than the incised jars, a distinction which holds for the two wares throughout. Bowls with incised decoration outside and a painted band just inside the rim represent the "standard painted-and-incised" ware.<sup>19</sup>

In level III "husking trays" continue, and one small burnished bowl appears.<sup>20</sup> There is a fair amount of "archaic painted" ware, mainly sherds from bowls, whose rims may be tapered or flat; multilinear designs, mostly zones of truncated chevrons, continue an older practice.<sup>21</sup> Two very squat jars occur in "standard painted" ware, each with a zone of crosshatched triangles around the shoulder.<sup>22</sup> Although little is illustrated, "standard incised" ware according to the sherd count is the most common ware of the level.<sup>23</sup> In "standard painted-and-incised" ware there is a squat, short-necked jar with painted decoration on neck and upper shoulder and incised design at the point of greatest diameter.<sup>24</sup> Twelve sherds of Samarran pottery (perhaps intrusive) occur in this level.<sup>25</sup>

Level IV has a good deal of pottery. "Husking trays" continue.<sup>26</sup> The "standard incised" ware shows bowls and jars of the same shapes as before and a prevailing tendency to herring-bone decoration.<sup>27</sup> In "standard painted" ware there are numerous outturned-rim sherds from short-necked jars, probably of the squat shape seen in the preceding level; a piece of a long straight neck and many bowl sherds<sup>28</sup> also occur. Most bowls now have unformed or slightly tapered rims, which may have simple painting inside.<sup>29</sup> On the exteriors of both bowls and jars zones of chevrons like those of the "archaic painted" ware are common; crosshatching and other multilinear designs continue, and there is an increase in solidly painted design.<sup>30</sup> Especially notable is the neck sherd mentioned above, which has a zone of connected hourglasses. In the "standard painted-and-incised" ware a new form, a deep bowl, appears, but the older bowl and jar forms seem to continue.<sup>31</sup> Both painted and incised designs may occur on the exterior (frequently painted design on the neck and incision on the shoulder) or there may be only incision outside, with painting confined to rim bands on the interior. An unusual feature is a gray burnished bowl whose fabric is said to match that of sherds from Sakçagözü.<sup>32</sup> The most important single element in level IV is the appearance in fair quantity of Samarran pottery.<sup>33</sup> The fabric varies usually from buff to pinkish but is occasionally bright pink or red; firing is generally of medium intensity, rarely strong enough to turn the clay greenish. There is a rather thick cream slip with a mat finish. Painted decoration is always monochrome; chocolate brown is the most favored color, but the paint ranges from red through brown to black. The forms found here correspond quite well to those from the site of Samarra<sup>3</sup>, and the design motifs do likewise.<sup>34</sup>

Level V at Hassunah still has "husking trays"<sup>35</sup> and burnished ware, the latter represented by a carinate bowl of a finely burnished black fabric such as occurs at Sakçagözü.<sup>36</sup> The "stand-

16. *Ibid.* Figs. 3:6, 4:1, and 7:30-31.

17. *Ibid.* Fig. 2:9.

18. *Ibid.* Fig. 2:4.

19. *Ibid.* Fig. 9:27-28.

20. *Ibid.* Fig. 3:8 and Pl. XIV 1:12 respectively.

21. *Ibid.* Figs. 8:13-32 and 9:10-17.

22. *Ibid.* Fig. 2:5-6.

23. See *ibid.* Fig. 5 and Fig. 3:5.

24. *Ibid.* Fig. 3:1.

25. See *ibid.* Fig. 5.

26. *Ibid.* Fig. 3:10.

27. *Ibid.* Fig. 15:1-6, 11-12.

28. See *ibid.* Figs. 12:1-16 and 11:4-19.

29. *Ibid.* Fig. 11:3-4, 6, 9, 12.

30. See e.g. *ibid.* Figs. 11:4, 6, 15, 18 and 12:12.

31. See *ibid.* Figs. 13:1-8 and 14:1-8 and Pl. XVI 2:4.

32. *Ibid.* Pl. XIV 1:11 and p. 278.

33. See *ibid.* Fig. 5.

34. See *ibid.* Figs. 1:1, 4-6, 8, 16 and 18:1-6 and cf. *JNES* III 73-95. Design motifs from Hassunah which do not fit precisely into the repertoire given in *JNES* III seem perfectly acceptable within the decorative scheme which the repertoire illustrates.

35. *JNES* IV, Fig. 3:9.

36. *Ibid.* Pl. XIV 1:9 and p. 278; cf. *AAA* XXIV (1937) 132.

ard" wares of level V do not differ in shapes or decoration from those of the preceding levels. Both the newer solid painting and the older multilinear designs occur. Among the painted-and-incised vessels we may mention two good examples of the type of deep carinate bowl which first appeared in level IV and also a very nice jar.<sup>37</sup> There is a good deal more Samarran pottery here than in level IV.<sup>38</sup>

Level VI seems to mark the beginning of the Halaf period. Unfortunately it is the top level in Sounding 1, therefore subject to considerable contamination, and the bottom level in the other sounding (2), with a very sparse deposit. We know that "standard" wares and Samarran pottery continue and that in Sounding 2 forty-four Halaf sherds were found.<sup>39</sup> In the succeeding level (VII) the proportion of Halaf sherds is greatly increased,<sup>40</sup> and it is possible that those found in VI are intrusive; but forty-four is a fair number, and it is safest to say that VI probably marks the beginning of the Halaf period, without showing any marked break from the Hassunah period.

Hassunah is the only site which has yielded architectural remains of pre-Halaf date. Level I *a* has no true buildings, only three superimposed camp sites<sup>41</sup> with hearths on foundations of sherds set in a kind of cement and fragments of mat which suggest some sort of wind screen. Above level I *a* pisé is used as building material. In I *b* we find a single room; I *c* shows more complicated units with several rooms, furnished with bread ovens and storage jars.<sup>42</sup> The uneven floors are of tamped earth and ashes; the walls are of various sized lumps of mud with vegetable temper, laid while so wet that individual pieces tended to run together. Large lumps were used for the main part of the construction, the gaps being filled with smaller pieces, and the walls were then smoothed.

In level II the same type of construction continues, but the clay of the walls is finer in quality here than in level I. Although the planning of the units is not completely clear,<sup>43</sup> it is obvious that this is a domestic area, for an assemblage of pottery, tools, etc. was found.

Level III exhibits larger rooms and an intelligible plan;<sup>44</sup> projections from the side walls of one room indicate that it may have been spanned by a beam.

Level IV shows the best preserved buildings, consisting of parts of at least two houses having open courts.<sup>45</sup> Some rooms are paved with a mixture of clay and chopped straw about 3 cm. thick. Ovens, hearths, and grain bins were found.

In level V there is a complete rebuilding, a long wall down the center of the excavated area dividing it into two distinct groups of buildings.<sup>46</sup> Again some rooms are paved with a mixture of clay and straw.

It will be noted that in no case is a level a mere duplication of the one below it; each time the walls are shifted, and new units emerge. This may indicate that the five levels here described cover a fairly long span of time.

One interesting feature of the levels beginning with I *b* is the grain bins,<sup>47</sup> more than thirty having been found in Sounding 1. They are built as large pots, those of levels I *b*–III having the same shape as the large coarse-ware storage jars of level I *a*: a carinate vessel with peculiar ogee-like curve of the lower part and a flat base. In the later levels the carination disappears and the bottom is rounded. Except for the earliest example, the walls of these bins, approximately 6 cm. thick, are of fine unbaked straw-tempered clay; the outside is heavily coated with bitumen, and in some cases the inside is lined with gypsum plaster. The diameter ranges from 60 cm. to 1.50 m., averaging around one meter. These vessels were lowered into underground

37. *JNES* IV, Pl. XVI 2:2–3, 1.

38. *Ibid.* Figs. 1:2–3, 17 and 18:7–13, 15–21.

39. See *ibid.* Fig. 5.

40. See *ibid.*

41. *Ibid.* Fig. 27.

42. *Ibid.* Fig. 28.

43. *Ibid.* Fig. 29.

44. *Ibid.* Fig. 30.

45. *Ibid.* Fig. 31.

46. *Ibid.* Fig. 32.

47. E.g. *ibid.* Pl. IV.

pits, and the spaces around them were filled in with loose debris. Many bins still held decayed chaff and carbonized grain when excavated.

Several burials were found within the excavated area. In the first camp site of I a a skeleton was found between two hearths in a litter of domestic objects;<sup>48</sup> the body, although more or less contracted, may not have been deliberately buried. From I b on there are infant burials in pots,<sup>49</sup> various kinds of pottery being used for this purpose; apparently there were never any special types of burial urns. Beneath a floor of level I c there was an undisturbed burial, apparently made while the house was still occupied; the foundations of the room were used for three sides of the grave, and the fourth side consisted of a row of stones. The body was fully contracted,<sup>50</sup> the head toward the north. No traces of burial gifts were seen. Two adult skeletons had been flung into a grain bin of level III. In level IV a skull was found in a rubbish pit, and two groups of disordered bones were found in corners of a single room. There seems to have been no standard burial practice in this period.

The objects found in the levels representing the Hassunah period are all such as would be expected in an ordinary domestic assemblage. Biconical spindle whorls (usually of baked clay, sometimes ornamented with paint, and less often of stone), polished stone celts, and clay sling-pellets occur all through these levels. Bone awls begin in I a<sup>51</sup> and flat bone spatulas in I c. Flint and obsidian blades and points are common, and some show a good deal of retouching; the chipped flint "hoes" are notable for their marked resemblance to those characteristic of the Ubaid culture in southern Mesopotamia (see p. 85).<sup>52</sup> Sickle blades begin to appear in large numbers in I b; many show signs of use, and some are still set in bitumen with traces of wooden backing.<sup>53</sup> Simple beads and pendants<sup>54</sup> are almost the only ornaments. Turquoise occurs in levels I b, II, and III; level III offers two flat, finely polished beads, one biconical and one oval in outline, as contrast to the ubiquitous ring beads. The only stone vessel is a little spherical alabaster bowl found in level II.<sup>55</sup> Level IV yielded a few crude female figurines of clay, and level V has a clay figurine of a seated female.<sup>56</sup>

Animal bones include those of ox, ass, sheep and/or goat, gazelle(?), pig, and hare.

That the material found at Hassunah has revolutionized our concept of the pre-Halaf period will be obvious to anyone familiar with the extremely limited material available up to the time of the excavation of Hassunah. The significance of this site will be considered after we have discussed the pre-Halaf material from other Mesopotamian sites.

### SAMARRA<sup>3</sup>

Beneath the pavements of Islamic houses at this site, which is located on the Tigris not far north of Baghdad, a debris layer about 1.5 meters thick rests on virgin soil. This layer, consisting almost wholly of badly preserved graves, shows no stratification. The graves are usually simple shallow inhumations, in special cases surrounded by a row of mud bricks or a pisé layer; whether they were in any way covered is not to be ascertained. There is no consistent orientation of the bodies, which lie on the right side in a contracted position;<sup>57</sup> because of age and inundation the skeletons are so destroyed that they could not be taken up except for one newly born infant or embryo which was inside a pot. The graves are so close together and so disturbed that separation of the objects into grave groups was only rarely possible.

The distinctive painted pottery first found and best exemplified at Samarra<sup>3</sup> is described in

48. *Ibid.* Fig. 27:17 and Pl. III 1.

49. E.g. *ibid.* Pl. III 3.

50. *Ibid.* Pl. III 2.

51. *Ibid.* p. 272 and Fig. 27.

52. *Ibid.* Pls. X 1:14, XI 1:5-7, and XVIII 2.

53. See *ibid.* Figs. 19-20 and 23-26.

54. *Ibid.* Fig. 37.

55. *Ibid.* Pl. XI.

56. *Ibid.* Pl. XI 1:4.

57. See *Archaeologische Mitteilungen aus Iran* V (1935) 29, which corrects the statement in *Samarra* V 1 that the bodies are supine.

considerable detail by Herzfeld in his publication of this site.<sup>58</sup> It is made of a fairly well washed clay with a surface which may be slightly sandy or in some cases quite rough; walls are of medium thickness, only in small vessels very thin. A kind of primitive tournette seems to have been used, but there is no trace of the true wheel. Firing is variable; very few pieces are underfired, but many are overfired, and some are almost entirely vitrified. Circumstances of firing have caused color changes in the paint, which varies from light red or reddish brown to dark violet-brown or even gray-green; polychromy<sup>59</sup> is unknown in Samarran pottery. A slip is very commonly used, and wet-smoothing also is employed; but many examples show neither refinement. Burnishing is not found.

Forms are numerous, and according to Herzfeld each main type<sup>60</sup> has variants:

1. "Schüsseln." Carinate plates, the profile concave above the carination, with rim outturned but not formed, and base rounded or flat and offset.
2. "Fussschalen." Dishes of similar form mounted on high cylindrical hollow base pierced with triangular and lozenge-shaped windows.
3. "Näpfe." Bowls: (a) flaring, with curved profile and rounded base; (b) "Calottes," approximately hemispherical; (c) carinate, profile straight or slightly convex above the carination and convex below, with flat base. The carination here is by no means as sharp as that of the "Schüsseln" and may degenerate into an almost unbroken curve.
4. "Töpfe."<sup>61</sup> Wide-mouthed pots with rounded belly, slight constriction toward the top, slightly flaring rim, and rounded or flat base.
5. "Becher." Vessels of similar profile but considerably taller in proportion to the diameter, usually flat-based.
6. "Töpfe mit kurzem Hals" and "Flaschen mit hohem Hals." Collared jars which differ from the "Töpfe" chiefly in the sharpness of differentiation between body and collar. They tend to be squat and round-bellied, the mouth varying from medium to very wide.

It will be noted that only the first two types are sharply differentiated from the others, whereas types 3, 4, 5, and 6 all tend to merge into one another and differ mainly in proportion or in sharpness of differentiation of body parts.

It is the painted design which provides the most characteristic element of Samarran pottery. The motifs are predominantly geometric and show that the painters had a marked preference for the straight line over the curve. Simple linear designs such as hatching, crosshatching, chevrons, zigzags, and meanders are very common and are effectively utilized; such designs made of multiple parallel lines are especially noticeable.<sup>62</sup> Stepped patterns are characteristic and exhibit various degrees of elaboration.<sup>63</sup> Fringe designs inside bowls are common.<sup>64</sup> Negative design, in which the background is filled in with paint while the design areas are left in the color of the pot surface, is frequently utilized. The painters at Samarra<sup>2</sup> were quite at home in this particular technique; they embellished it by adding painted motifs within nega-

58. *Samarra V*.

59. "Polychromy" as here used implies the deliberate utilization of more than one color on a single vessel. Varying intensities of one color do not satisfy this definition; such variations may be intentionally used by the painter to give a polychrome effect, but, since it is impossible to differentiate such attempts from mere changes in intensity due to accident of firing or variation in density of paint, clarity and consistency of terminology will be best achieved by limiting the term "polychromy" to the use of two or more different colors. The term has been applied by others to a pottery-painting style in which two or more colors of paint are used, but not necessarily on the same vessel; there is no reason to quarrel with such a usage, but it is not employed in this study.

60. Herzfeld's German terms are here used for the sake of convenience, since their English equivalents do not always convey the precise shade of meaning desired.

61. Herzfeld treats "flache Töpfe" and "tiefe Töpfe" in separate chapters.

62. *JNES* III, motifs 9-10 (hatching), 113 (crosshatching), 43 (chevrons), 86-87 (zigzags), 129 (meander), 111 and 120 (multiple-line designs) are examples.

63. *Ibid.* motifs 29-31 are examples.

64. *Ibid.* motifs 191-92 and 200 are typical.

tive areas or by placing painted motifs so as to produce the effect of negative design.<sup>65</sup> The fact that this technique was very common in the Iranian highlands is one of the major reasons for considering Samarran pottery as Iranian in character and presumably in origin.<sup>66</sup> Representational motifs are not uncommon but are apparently confined to "Schüsseln." The most noteworthy representational motif is a "woman with flowing hair," but scorpions, fish, birds, and various horned quadrupeds also appear.<sup>67</sup> The forms are by no means naturalistic; most are stylized to the point where they are primarily geometric with only secondary likeness to the original figures.

Although many elements of design are unusual and characteristic, it is in the syntax of these elements that Samarran painting finds its most truly diagnostic criterion. Horizontal zones of continuous design, undoubtedly the most effective decoration for the round surface of a pot, predominate; elements in these design zones tend to be contiguous, but free elements are occasionally used. When there is only one zone of design, it is usually fairly broad; but the single zone is not common and tends to be confined to the outside of very simple bowls and some pots ("Töpfe"). Even on these vessels a broad zone is frequently accompanied by very narrow subsidiary zones, or simple bands. The characteristic Samarran style of decoration is by multiple zones of design, usually rather narrow; such zones commonly extend from the exterior rim to, or just below, the point of greatest diameter. As a general rule they are separated by narrow plain bands; contiguous zones of different design elements are known but rare. A single vessel usually shows several motifs, each zone frequently having a different design. The spacing, filling, and balancing of these design zones are excellent; the feeling for dark and light areas is equally so. The drawing tends to be in thin lines, but heavy ones are not avoided, and a notable balance of the bold and the fine is achieved. Though free elements in the field are sometimes used to good effect, particularly on plate interiors, they are not characteristic.

In all taller and more closed forms the main design is on the outside, the inside bearing only plain bands or a rather simple design. Bowls and plates ("Näpfe" and "Schüsseln") bear their main design on the interior, and it is in the composition of these interior designs that the Samarran painter achieved his best work. The decoration of a circular surface presents a difficult aesthetic problem; ideally it should stress the two main features of the circle—circumference and radius; and the accomplishment of this double feat taxes the ingenuity of the artist. The success of the Samarran painters is demonstrable by a glance at their work; we cite only one piece, which bears an excellent example of composition within a circle, where the painter has created a wonderful effect of life and movement as well as harmonic balance.<sup>68</sup> Feeling for the form of a vessel is noticeable in the "tiefe Töpfe" also, for the broadest and heaviest design zone is almost invariably at the point of greatest diameter, frequently with a quite narrow zone at the constriction of the neck and a broader one above near the rim. In jars the collar is set off from the body by a separate design; this shaping is more clearly emphasized by the use of incision (simple rows of little gouges) on the top of the shoulder between the collar and the main design zone of the body. The combination of incision and painting is found only on jars.

Several pieces of indubitably Halaf pottery were found at Samarra.<sup>69</sup> The single complete Halaf vessel (No. 249) comes from one of the few grave groups (Grab A<sup>70</sup>) identified; it was found with a "Napf" of usual Samarran type, three simple stone vessels whose forms are

65. *Ibid.* motifs 143 (plain), 85 (embellished), 70 (giving the effect of a negative design) are examples.

66. For the most recent statement on the position of Samarran pottery in Iranian archeology see *SAOC* No. 23, pp. 35 f.

67. *JNES* III, motifs 280 ("woman"; Herzfeld: "demon"), 291 (scorpions), 265 (fish and birds), 261-63 and 267-73 (horned quadrupeds).

68. *Samarra* V, Pl. VI 6 and Fig. 6 (= *JNES* III, motif 265), where the central part of the design is reconstructed.

69. *Samarra* V, Nos. 249 and 294-300, pp. 80 f. and 92-94.

70. See *ibid.* p. 1.

paralleled at Arpachiyah in vessels of Halaf date,<sup>71</sup> a little rectangular-sectioned chisel-like implement of iron, and numerous beads. Other objects found in association with Samarran pottery include an oblate macehead, a slingstone, many flint implements, bone pins with disk-shaped head turned back toward the shaft, numerous simple stone or shell beads, and various pieces of copper.<sup>72</sup>

### NINEVEH

The information from Nineveh comes from a pit dug on the mound of Quyunjiq, abutting on the northwest side of the Ishtar Temple. The dimensions at the top were 20 × 15 meters, and the pit was dug down through 27.5 meters to virgin soil; the batter of the sides reduced the area at the bottom to less than one-fourth that of the top. There are no well defined building levels, but mostly mixed rubbish of hut settlements. Concerning the limitations of such stratification, Mallowan's remarks are worth quoting in full: "We must therefore expect that our evidence will eventually be considerably modified in detail, hoping, at most, that the general framework of our scheme is likely to withstand the test of time, for, even if the dividing lines between strata must remain ill-defined, the evidence rests on a minute study of considerably more than a hundred thousand sherds which succeed one another in a long series, changing in character with the cumulus of ancient habitation. The ceramic development is checked and confirmed by a large variety of small objects associated therewith, providing, often enough, further coherent links of foreign contact. Moreover the soil itself does sometimes mark a change of period, as in the wet levels between Nin. 2 and 3."<sup>73</sup>

Already in stratum 1 several types of pottery are noticeable. Probably the most common is an incised ware, thick and rather coarse, poorly fired, unburnished, and light gray in color, its fabric being said by the excavator to be analogous to that of the rough incised ware of 'Amuq phase B.<sup>74</sup> This fabric continues through strata 1 and 2, diminishing in quantity as painted pottery increases in the upper phases.<sup>75</sup> The incision is simple in character: lines, chevrons, zigzags, and herringbone patterns, frequently accompanied by punctuation; or it may be simple scratching or gouging-out of clay fragments.

Incised pottery with elementary painted design also appears in Ninevite 1, becoming somewhat more common in stratum 2. The incisions are usually small gouges, arranged either in parallel rows or in a sort of herringbone pattern. Occasionally more linear incisions are used, and once rows of little triangular incisions occur.<sup>76</sup> Probably this incised-and-painted ware and also the painted pottery about to be described are in a light-colored fabric rather than the gray of the unpainted incised ware.

A few sherds of dark burnished ware may be similar to the burnished ware so dominant in Syria. There is no statement that any of these sherds bears incision, and none is illustrated.

Two sherds, otherwise undescribed, have "plain red bands on a slightly polished pink slip."<sup>77</sup> It may be noted that neither the burnished ware nor this slipped ware continues into Ninevite 2.

Painted pottery is said to be scarce in proportion to the incised ware in Ninevite 1 (see n. 75). Red and black paint are used, but apparently never both on the same piece; color vari-

71. Cf. *Arp*. Fig. 44:14.

72. *Samarra* V 2-5; but see *Archaeologische Mitteilungen aus Iran* V 29 f., where Herzfeld states his belief that all the metal is of Islamic date, intrusive into the early graves.

73. *AAA* XX (1933) 130.

74. A description of the Nineveh ware has not been published; I am indebted for the above information to Dr. Braidwood, for whom the ware was identified by Mr. Mallowan. For a brief statement on the 'Amuq phases see Braidwood's remarks in *JNES* III 66 f., n. 45, and Table I. The 'Amuq prehistoric phases will be published in full in *OIP* LXI.

75. According to the section through the prehistoric pit (*AAA* XX, Pl. LXXIII) painted pottery does not begin until stratum 2, unidentified "plain sherds" being the sole ceramic yield of stratum 1. The text, however, does not bear this out (see *ibid.* pp. 149-51).

76. For all these variants see *AAA* XX, Pl. XXXVI.

77. *Ibid.* p. 151.



ants from brown to greenish black are found in stratum 2 but are probably due to accidents of firing. The paint is always mat except in the case of one sherd from Ninevite 2 *b* (see p. 26). Simple hatching, crosshatching, chevrons, zigzags, intersecting multiple lines, solid triangles, solid dots(?; only once, incomplete), and one step pattern occur. Design is usually in a horizontal zone, several times accompanied by a simple subsidiary border zone; two examples with rows of solid triangles show multiple-zone design, and one panel design occurs.<sup>78</sup> It is interesting to note, in view of the fact that the excavator seems not to recognize Samarran painted pottery until stratum 2 *b*, that at least three sherds in stratum 1 bear typically Samarran designs<sup>79</sup> and that most of the other motifs would not be impossible in a Samarran context. The motifs of 2 *a* are mostly similar to those of 1; only one, however,<sup>80</sup> shows any marked resemblance to Samarran design. In 2 *b* the painted pottery is definitely Samarran in type; fringes, caning, steps, meanders, and chevron rows appear alongside the more familiar hatching, crosshatching, and intersecting lines. One sherd has metope design in lustrous paint;<sup>81</sup> this is probably a Halaf piece, perhaps intrusive, perhaps indicative of the beginning of the Halaf period.

Of forms, bowls with slightly rounded sides and fairly straight upper part are easily the most common.<sup>82</sup> The rims bend sometimes inward, sometimes slightly out; they are usually tapered from both interior and exterior, but occasionally show a fairly clear interior bevel. Sherds with similar rims and almost vertical sides<sup>83</sup> may belong to bowls or to the collars of jars (cf. Herzfeld's "Flaschen mit hohem Hals" from Samarra<sup>3</sup>). Pots with wide mouth and only slight indication of shoulder are paralleled at Samarra<sup>4</sup> (see p. 6); flat-based bowls also are found at Nineveh.<sup>84</sup>

Few objects other than pottery are published. "Not less than fifteen crude lumps of clay," supposed to be jar-sealings, were found in stratum 1; many have string impressions or linear markings, but none bears the imprint of a seal. A fluted cone, also of clay, is probably a game piece. A flint industry existed but is not described in detail, no differentiation by levels being made. The flints include flakes, scrapers, knives, and blades with serrated edges; some were set in bitumen. Obsidian, in abundant use throughout the prehistoric levels, is presumed to be of Vannic origin. "Low down in Nin. 2 stratum" was found an obsidian pin or stud with flat top and sharp point, not unlike those found in southern Mesopotamia in association with Ubaid-period painted pottery (see p. 86).

A celt found in stratum 2 *b*(?)<sup>85</sup> is of a type said to persist "at least as late as Jemdet Nasr." Several small worked stone pieces are called "miniature implements"; three perforated stones<sup>86</sup> are probably pendants or amulets, the "ax" shape being not uncommon for these ornaments. The use of some little rods<sup>87</sup> is unknown, although Mallowan suggests that they possibly served for making punctate designs on pottery. These tiny objects belong to strata 2 *a*(?) and 2 *b*(?).

Spindle whorls are said to be common at all periods, but according to meter levels given on the plates none is illustrated from a point below 2 *c*. Two clay beads from stratum 2, phase

78. *Ibid.* Pl. XXXV 7.

79. *Ibid.* Pl. XXXV 2, 9, 13. The Samarran character of these motifs was first mentioned by McCown in *SAOC* No. 23, p. 35, n. 44.

80. *AAA* XX, Pl. XXXVII 6.

81. *Ibid.* Pl. XXXVIII 22 and p. 154.

82. *Ibid.* Pl. XXXV.

83. *Ibid.* Pl. LXX 23 and p. 144. Stratum designations used in the text do not always agree with the meter levels given

on the plates; in such cases I am assuming that the excavator's opinion as expressed in the text is the more reliable. Objects figured in the plates but not mentioned in the text I have assigned to the strata indicated by their meter levels; but such attributions are obviously suspect and are here qualified by a question mark.

86. *Ibid.* Pl. LXVIII 18, 31, 41.

87. *Ibid.* Pl. LXVIII 32-33, 39.

83. E.g. *ibid.* Pl. XXXV 20.

84. See *ibid.* Pl. XLVIII 1-2, 8-9.

undesigned, are reported. Bone awls and points occur. No metal was found. A fragment of stone possibly belonging to a vessel occurs in stratum 2.<sup>88</sup>

Although, as has been stated, there is no real architecture, Ninevite 1 seems to have been at least in part a hut settlement, which left "considerable traces of decayed wood and ashes."<sup>89</sup> A band of large rough stones seems to mark the dividing line between strata 1 and 2; Mallowan says there is no gap between them culturally. In stratum 2, according to the section, there is "light soil, charred wood, debris of settlement."<sup>90</sup>

### TELL ARPACHIYYAH

This site, northeast of Mosul, lies completely open and defenseless; the original settlement was actually in a hollow, into which water from the surrounding area must have drained. The hillock stands 5.5 meters above the modern plain, with a maximum diameter of 67 meters at the base. It has a gentle slope of approximately 10 degrees on the southwest; on the other three sides, especially on the northwest, the slope is much sharper owing to denudation and erosion. The surface debris is thickest on the lower slopes of the hill and scarce in proportion as the sides approach the plain. The principal surface debris occurs in an area about 100 meters square. The maximum diameter of the area over which excavations were conducted is approximately 125 meters; this does not reach the limits of the ancient site, but "it was obvious that the extreme outskirts of the settlement lay at no great distance beyond."<sup>91</sup> Probably the settlement was at all times of about the same size as the modern villages in the neighborhood, and usually would not have had more than 200 houses. The total height of the mound from virgin soil is 10.5 meters; it was excavated only 5.5 meters down from the top, yielding ten building levels, which are numbered beginning at the top (TT 1-10).

There is apparently no stratified deposit of pre-Halaf material at this site; the excavators did not reach the bottom of the Halaf deposit in the tell itself, but in the outlying area they found Halaf pottery down to virgin soil. Mingled with the earliest Halaf pottery, however, were some sherds of other wares. One incised sherd found just above virgin soil is said to be identical in clay and technique with the Ninevite 1 incised ware.<sup>92</sup> Specimens of punctate ware with stamped circles likewise occur in the earliest levels. Incised burnished ware of Sakçagözü type is said to occur before TT 10, although not in the very earliest levels.<sup>93</sup> A few sherds of incised-and-painted ware like that found at Nineveh come from strata corresponding approximately to TT 10. Sherds of Samarran painted pottery were found,<sup>94</sup> but their exact place in the Arpachiyyah stratigraphy is uncertain, since the text is far from explicit; probably we may place their earliest appearance somewhat above virgin soil but still before TT 10.<sup>95</sup> It is stated that "no Samarra sherds were actually found on virgin soil"; it must be noted, however, that this may be due to accident of excavation.<sup>96</sup> A few dark gray to black burnished sherds occurred in the earliest levels before TT 10; these are compared with pottery which was common in the earliest period at Tell al-Halaf,<sup>97</sup> and one may suspect that they are of the same fabric as the few burnished sherds found at Nineveh.

88. *Ibid.* p. 148.

91. *Arp.* p. 7.

89. *Ibid.* p. 134.

92. *Ibid.* p. 174.

90. *Ibid.* Pl. LXXIII.

93. *Ibid.* p. 177.

94. As derivative Samarran sherds we would include *ibid.* Fig. 77:7, 19, 29, and possibly 4. Fig. 77:18 and 21-22 we consider to belong to the classic Samarran repertoire; see *JNES* III 68. It is implied by the excavator (*Arp.* p. 177) that the "Samarra ware" sherds are of nonlocal clays. The clays, however, have not been microscopically analyzed.

95. See *Arp.* p. 169. At least five building levels are assumed between TT 10 and virgin soil (*ibid.* p. 19), which would imply a fair amount of time.

96. See *ibid.* p. 169. We have no way of knowing how large an area was opened to virgin soil. Mallowan says (*ibid.* p. 17) "over a fairly wide area"; but the sections (*ibid.* Fig. 4) indicate that virgin soil was reached in Fd IV4 and Fd IV5 only and show one dimension only in each case.

97. *Ibid.* p. 175.

All objects other than pottery assignable to the levels earlier than TT 10 seem to belong to the Halaf milieu and are treated in the discussion of the Halaf period (see pp. 32-37).

### TELL SHAGHIR BAZAR

For the first time we now leave Iraq, for Tell Shaghir Bazar is far to the northwest in the drainage of the Khabur River and within the bounds of modern Syria. The mound measures approximately  $400 \times 300$  meters at its base; the highest point is at the south, 21 meters above plain level. The east side has a subsidiary hillock and a very steep slope, the west and north sides are fairly steep, and the south has the easiest slope. In the first season of excavation (1934/35) the mound was tested with pits at various places, Area M at the northwest being selected for the major part of the excavation. This area near the edge of the mound, where it was most subject to denudation, was deliberately chosen so that the building levels in the center of the tell would be as little disturbed as possible. As a consequence of this choice, the architectural remains of the sounding are fragmentary and incoherent, but walls and floors are sufficiently well preserved to delimit the main occupation levels. The area of the top of the pit is approximately  $20 \times 25$  meters, and the sounding extends through over 15 meters of debris to virgin soil.<sup>98</sup>

As at Arpachiyah, so at Shaghir Bazar no levels belong wholly to a pre-Halaf horizon. Level 15, the first settlement, on virgin soil, although possessing some non-Halaf types of pottery, already has Halaf painted pottery. Non-Halaf pottery of that level<sup>99</sup> includes examples of the following fabrics:

1. Rough incised ware like that of Ninevite 1, here light drab in color.
2. Burnished gray ware with fine-line incision in rows of hatched triangles, perhaps comparable with the incised "Neolithic" ware of Sakçagözü.<sup>100</sup>
3. Buff ware, well fired, highly burnished, and unornamented.
4. Black ware with pattern burnish. This is the first occurrence of such ware in Mesopotamia, but it is common in 'Amuq phase B.
5. Burnished black ware with rocker-impressed design in zigzag pattern done with the edge of a shell. Similar decoration, mainly on a red-washed fabric, occurs in 'Amuq phases A-C.
6. Burnished black ware with fine-line design incised after firing.

It is to be regretted that no indication of the total quantity of this non-Halaf pottery or of the proportions of the different wares or types of decoration is given. The number of varieties represented is large; if each illustration actually represents a number of sherds, we have here a fine assemblage of early non-Halaf ceramic material. However, as far as we know, the illustrated pieces may comprise the total finds. Again, we know neither the exact circumstances of the finding of this material nor its relation to the other pottery of the level; we presume that it comprises the "cache of monochrome burnished gray and black ware" mentioned by the excavator,<sup>101</sup> the implication being that it was found separate from the painted pottery. This would indeed be interesting, for it might indicate that burnished and incised wares precede the earliest painted pottery in this area. It may be noted that a miniature jar of black burnished ware<sup>102</sup> appears probably in level 13 (found at -20 m.).

Samarra painted pottery is said to predominate over all other types in levels 15-13.<sup>103</sup> Of the three so-called "Samarra" sherds figured from level 15,<sup>104</sup> however, one (No. 17) is clearly Halaf, both in shape (cf. Fig. 1:1) and in design. The other two (Nos. 15-16) and possibly No. 14 have designs which may be derivative Samarran. Possibly the level 15 pottery repre-

98. *Iraq* III 5-7.

99. *Ibid.* Pl. III 8-13 and pp. 52 f.

100. *AAA* I (1908) Pl. XLIV 1.

101. *Iraq* III 11.

102. *Ibid.* Fig. 20:15.

103. *Ibid.* p. 13.

104. *Ibid.* Pl. III 15-17.

sented in Mallowan's Figure 2 is Samarran, but it is too sketchily drawn to permit certainty on that point. An unstratified sherd<sup>105</sup> showing a broad dark band of paint and a zone filled with rows of little gouges may represent Samarran incised-and-painted technique or a local variation of it.

In view of the occurrence of Halaf pottery in level 15 it is our belief (contrary to Mallowan's opinion) that the first settlement at Shaghir Bazar belongs to the Halaf period. The non-Halaf wares may perhaps represent an earlier deposit made by seminomadic peoples wandering in the area.

#### TELL AL-HALAF

This famous site, which gave its name to the culture characterized by the painted pottery which it yielded, is also in the Khabur drainage, west of Shaghir Bazar and almost on the present Anatolian border. Although its earliest remains stand apart from those of the Hassunah culture, we include them in this chapter because of their pre-Halaf date. The main excavation at the site dealt with a city of historic times, but within the area of the citadel numerous pits were sunk from the historic levels down to bedrock.<sup>106</sup> Invariably the sequence of remains was as follows: just over virgin soil, coarse unpainted pottery; above, the same combined with painted pottery; then, the latter alone.<sup>107</sup> The painted pottery belongs chiefly to the Halaf period. The middle and upper parts of the prehistoric deposit therefore presumably date to that period, and the depths are probably pre-Halaf in date and contemporaneous with the Hassunah culture in northern Mesopotamia.

The earliest pottery<sup>108</sup> is almost always thick-walled, made of a coarsely levigated gritty clay, and badly fired. The surface has a slip, which may be gray (rarely black), yellow-brown, or red, and is usually well burnished. The red vessels seem to be made with greater care than the others, to have thinner walls, and to show signs of better firing. The forms are chiefly bowls, some flaring, others with inturned rims; one has a low ring base, but all other preserved bases are flat. Knobs or flat lugs just below the rim are fairly common and presumably served as handles.<sup>109</sup>

Some of this early pottery is unburnished and especially rough in manufacture and is considered to be a class of coarse domestic ware. In spite of its coarseness, however, certain refinements such as loop handles, spouts, formed rims, and offset bases are found only in this group. An approximately spherical form, which may be hole-mouthed or have a short neck and which sometimes has loop handles or spouts, seems to be most common. Sharply carinate bowls also appear, as well as simple shallow bowls whose curved sides may bend in or out.<sup>110</sup> One interesting piece from this group is a rim fragment with the figure of a nude female worked in relief.<sup>111</sup> She is apparently represented seated with legs spread wide apart; one hand rests upon her abdomen, while the other is raised about to the level of her head. This example of plastic decoration on pottery is unique in this age.

There are several examples of Samarran pottery, both classic and derivative. Three rim sherds are considered to be imported from Samarra;<sup>112</sup> two of these bear the familiar Samarran meander. Adaptations of the Samarran fringe motif in the Halaf period are mentioned on page 43; in imitation of the Samarran style is a beaker fragment whose closely spaced design zones show step patterns, a negative wave or zigzag (the execution of the piece is so poor that it is

105. *Ibid.* Fig. 27:19.

106. See *Tell Halaf I*, Beilagen 3-4, for sections of various cuts.

107. *Ibid.* p. 25.

108. *Ibid.* pp. 25-31.

109. *Ibid.* Pls. I-II and XXXIX-XL. The fine vessels shown on Pl. XL 5-7 are not mentioned in the text; we suspect them to be of later date.

110. *Ibid.* Pls. III-IV and XLI.

111. *Ibid.* pp. 30 f. and 101, Fig. 1, Pl. CVI 6.

112. *Ibid.* p. 65 and Pl. XC 11-13.

impossible to know which was intended), and heavy crosshatching.<sup>113</sup> A tiny rim fragment bears what seems to be a negative meander in lustrous paint.<sup>114</sup> A fragment which looks like a jar rim has a typical Samarran caning pattern.<sup>115</sup> We mention the Samarran material at this point in order to complete our discussion of Samarran pottery, but the examples from Tell al-Halaf seem to have been found with the material of the Halaf period and not with the older, unpainted pottery.<sup>116</sup>

Some objects other than pottery vessels are attributed to the age of the pre-Halaf unpainted ware, on the basis of either association or likeness to the pottery. Three or four fragments of conical clay objects with hollowed bases, called "post-idols" and considered to be figurines, are said to show the same technique of manufacture as the unpainted pottery.<sup>117</sup> Also in that technique is a somewhat similar, but slightly more anthropomorphous, piece with stumps of arms in addition to the pillar-like body.<sup>118</sup> Several animal figurines are of gray fabric such as is used in the pre-Halaf pottery,<sup>119</sup> and a clay spindle whorl is said to be in the technique of the unpainted pottery.<sup>120</sup> Flint and obsidian artifacts occur throughout the prehistoric deposit, and no distinction is made in the text between implements found with painted pottery and those found below it. In both flint and obsidian the finds are mostly simple blades, occasionally with some retouching.<sup>121</sup>

Unfortunately for attempts at comparative stratigraphy, the pre-Halaf material from Tell al-Halaf seems to be in no way connected with the Hassunah culture.<sup>122</sup> We have mentioned that the Samarran pottery seems to occur in a Halaf-period milieu.

#### OTHER SITES

Tepe Gaura<sup>123</sup> has as yet yielded no remains of pre-Halaf date. The material found in a burial pit at the bottom of a cut near the base of the mound, originally suggested as pre-Halaf,<sup>124</sup> has proved on further study to be of Halaf type (see p. 22). It is wholly possible, of course, that levels of the Hassunah period may lie in the center of the mound beneath the present limit of excavation, which is several meters above plain level.

Pottery with clearly Samarran designs has been found in the Mosul region by an Oriental Institute survey, especially in a small sounding, as yet unpublished, at Tepe Chenchi near Khorsabad.

Burnished and simply incised pottery appears scattered through a great deal of the area of northern and northwestern Iraq, especially in the Sinjar region, where many fragments of

113. *Ibid.* Pl. XC 7.

114. *Ibid.* p. 67 and Fig. 56.

115. *Ibid.* Pl. XLVII 11.

116. *Ibid.* pp. 65-67. The description is included with that of the other painted pottery, and there is no mention of any Samarran material having occurred with the earliest pottery.

117. *Ibid.* p. 101 and Fig. 148.

118. *Ibid.* p. 101 and Pl. CVI 4.

119. *Ibid.* pp. 102 f., Pls. CVI 8, 10 and CVII 1-3.

120. *Ibid.* p. 116 and Pl. CXIII 30.

121. *Ibid.* pp. 107-9, Pls. XXXIV-XXXV and CIX-CXI.

122. With the possible exception of the sherds shown *ibid.* Pl. XCVIII 1-4, which might, according to appearance, be specimens of Hassunah "archaic painted" and "standard incised" wares. It will be remembered that "archaic painted" ware has a lustrous appearance (see p. 2), a feature which would account for the inclusion of the Tell al-Halaf pieces in the category of lustrous painted pottery (*ibid.* pp. 69 f.).

123. The writer has had the privilege of consulting Arthur J. Tobler's *Excavations at Tepe Gawra II* in manuscript, and that publication is the source of all information about Tepe Gaura which appears in the present study unless there is specific indication of another source. Unfortunately it is not possible to give page and plate references to *Tepe Gawra II*, but serial figure numbers for drawings of pottery and other objects are used when possible. It should be emphasized that references to the various preliminary reports are made for the purpose of supplying illustrations rather than information, since statements in the earlier reports have naturally been revised in some cases by the final publication.

124. *Asia XXXVIII* (1938) 543 and Fig. 3.

burnished pottery have been collected by a Harvard survey. Some of these appear to be of fabrics similar to those of the 'Amuq early burnished series, but we know nothing of their chronological position in Mesopotamia. In publishing the results of another survey of the Sinjar region, Seton Lloyd mentions the presence of pottery similar to that of Samarra<sup>2</sup> and Ninevite 2 *b*; but the one illustrated sherd supposed to show this style bears a design so simple that it might belong to any of the prehistoric painted wares.<sup>125</sup>

Baghouz, a site on the Euphrates, offers a fairly impressive series of Samarran pottery.<sup>126</sup> No other definitely Samarran pottery has been found on the Euphrates drainage.

A survey in the Jabbul plain turned up some material said to resemble that of Ninevite 2 *b* (which should be of Samarran type), but again the piece shown is inconclusive.<sup>127</sup> As far west as Carchemish coarse dark pottery which may have rough incision is said to occur;<sup>128</sup> its connection with any of the dark wares we have been discussing is dubious. Carchemish and Til Barsib have yielded nothing suggestive of Samarran. At Tell Judaidah Braidwood found two sherds of a type resembling Samarran, although coarser, in the mixed range of material which can only be dated to a period between 'Amuq phases *B* and *F*. At Sakçagözü two sherds appear to be of derivative Samarran style.<sup>129</sup>

### COMPARATIVE STRATIGRAPHY

The material just surveyed comprises what we know of Mesopotamia prior to the establishment of the Halaf culture (see Table 1). Chiefly on the basis of the material from Hassunah, we are cognizant of a real assemblage from this early age, and on that account we are adopting the term "Hassunah period" for the pre-Halaf age, although not a few of the sites show types of pottery (in particular dark burnished ware) which are unrepresented at Hassunah.

Nineveh and Hassunah, the only stratified sites, corroborate each other very well. Without attempting to be any more precise at equating levels, we may say that Ninevite 1 and 2 *a* correspond to Hassunah I *b*-III, while Ninevite 2 *b* corresponds to Hassunah IV-V, the appearance of Samarran pottery in fair quantity being the defining factor. Obviously these are not exact equations in time, that is, Ninevite 2 *b* in the area which we now know probably does not cover the same span of time as do Hassunah IV-V. Hassunah I *a* probably precedes anything known from Nineveh. The unpainted pottery from Shaghir Bazar 15 probably falls somewhere within the Hassunah period, but it cannot be definitely dated.

Excavations at Hassunah have definitely established the chronological position of Samarran pottery, which had already been indicated by the Nineveh sequence and by the occurrence of Halaf material at Samarra<sup>2</sup> and assumed by McCown<sup>130</sup> and Braidwood and Perkins.<sup>131</sup> The finding of Halaf and Samarran pottery in the same graves at Samarra<sup>2</sup> indicates at least a certain period of contemporaneity of the two styles of pottery-painting, but Hassunah and Nineveh give definitive evidence that Samarran preceded Halaf. At Arpachiyyah Samarran pottery is said not to occur until after the appearance of Halaf; but this statement cannot weigh heavily against the evidence provided by Hassunah and Nineveh, especially since we do not accept as Samarran most of the pottery so called by Mallowan. At Shaghir Bazar what may be derivative Samarran painted ware and Halaf painted ware both appear in level 15, but how early in the Halaf period this level is, is uncertain (see pp. 27-29). That the Halaf cul-

125. *Iraq* V (1938) 128 and Fig. 4, Group I; also p. 138.

126. See *JNES* III 51-53.

127. See R. Maxwell Hyslop *et al.*, "An archaeological survey of the Plain of Jabbul, 1939," *Palestine Exploration Quarterly* LXXIV (1942) 24 and Pl. VIII 15:1.

128. *Iraq* I 154.

129. *AAA* XXIV, Pl. XXV 1-2 and p. 134.

130. *SAOC* No. 23, pp. 35 f. and Table II.

131. *JNES* III 65-69.

ture survived and developed long after the disappearance of Samarran pottery is incontestable; every site we know brings testimony to that effect.<sup>132</sup>

The sequence of pottery in the Hassunah period seems to be as follows: (1) coarse ware and some burnished ware; (2) simple painted, incised, and painted-and-incised wares; (3) Samarran pottery added to 2. When the Halaf period begins, 3 and to a lesser extent 2 survive. Most of the sites do not show the complete sequence, but in no case is the order contradicted. It may be noted that there is no sharp break; the older wares die out gradually, and the newer ones appear more or less gradually. Samarran pottery is never a dominant element in the culture; it is distinct but always in the minority numerically.

### EXTENT AND ORIGIN OF THE HASSUNAH CULTURE

Evidences of this culture are found sporadically all along the way from the Tigris to the Mediterranean. Nothing is known south of Samarra<sup>2</sup> except at Baghouz on the Euphrates; probably southern Mesopotamia was still too wet for habitation (see p. 73).

At Hassunah the earliest coarse ware may well represent an indigenous culture, the character of the deposits suggesting a people still in a seminomadic state. The burnished ware co-existing with it may be related to the great burnishing industries of the Syro-Cilician area. Both the "archaic painted" ware of Hassunah and the Hassunah "standard" wares (including the comparable material from Nineveh) may have western analogies—rough incised pottery in 'Amuq A and somewhat similar painted pottery in the proto-Chalcolithic of Mersin.

The Hassunah culture seems to be the product of the following: western influences (represented by the burnished, the simple incised, and the simple painted ware) and another influence (arguably local) represented by the coarse ware. Within the Hassunah period both incised and painted wares are refined and developed, and the two techniques are combined.

Knowledge of the Hassunah material precludes the use of such terms as "Sakçagözü culture" for the pre-Halaf material, since the Syro-Cilician type of burnished pottery is very much in the minority in Mesopotamia. The Hassunah culture probably received some stimulus from that of Syro-Cilicia, but it is not the same culture. Here we hesitate to invoke the popular explanation of descent from a common source, since the earliest stage of the material represented at Hassunah is itself so primitive that we can only with difficulty presuppose an even cruder parent stage, but it is possible that Hassunah I a is a step more advanced than Jericho IX or the Mersin Neolithic.

The various deposits of the Hassunah period represent a village culture on the Neolithic level; no metal occurs *in situ*. There are domestic plants and animals and built clay houses. The racial types are unknown. The stage of technical development reached before the end of the period is not inconsiderable, with the Samarran pottery representing the apex of artistic achievement. Apparently there was some idea of an afterlife, if we may judge by the practice of burial with objects.

132. This includes Tepe Gaura. The idea that "Samarra ware" occurred after the Halaf period and the use of the term "Obeid-Samarra" for levels XIX-XII (see e.g. *Asia XXXVIII* 542 and Fig. 3) have been given up in the final publication of the earlier levels of Gaura (*Tepe Gaura II*).

## II

## THE HALAF PERIOD

**T**HIS culture period, named for the site at which its characteristic pottery was first discovered, is evidenced over a wide area, extending in its various ramifications from the Syrian coast to the Zagros Mountains. We have a fairly large amount of material for this period, coming mostly from the following sites:

Tell Arpachiyah: levels 10-6 in the tell, also deposits below one meter in the surrounding area.

This is the clearest sequence of material which we have, and it is sometimes not too explicit.

Virtually all the material comes from outside the tell proper, with the exception of that from the "burnt house" in TT 6, and the correlation of levels outside the mound with those inside is by no means precise. We can usually distinguish Halaf from Ubaid remains, but more exact attribution within the Halaf period is frequently difficult.

Tepe Gaura: level XX in the mound, a burial pit and levels *a-f* in a sounding at the southeast base (Area A), and unstratified material from a sounding at the northeast base.

Samarra<sup>2</sup>: a few fragments of pottery from graves.

Tell Hassunah: levels VI-X.

Nineveh: stratum 2 *c*. This is the uppermost phase of stratum 2, with a depth of only about one meter; the existence of Halaf pottery is its diagnostic criterion. Settlement debris separates it from 2 *b* below, possibly indicating some lapse in time between the two phases; but so many elements of the earlier phase carry over into 2 *c* that any important time gap is improbable.

Tell Brak: pottery only.

Tell Shaghir Bazar: levels 15-6, with 8-6 representing a transition to the Ubaid period. The stratigraphy, based on building levels, seems acceptable, but the amount of published material is not large.

Tell al-Halaf: unstratified material, virtually nothing but pottery, useful only for comparative purposes.

Tell Aswad: Halaf material found in limited area in survey.

Carchemish: some unstratified pottery.

## POTTERY

## TELL ARPACHIYAH

Arpachiyah, with the greatest amount of published material and the best stratification, is the type site for the Halaf culture, which there seems divisible into three phases.<sup>1</sup>

The levels earlier than TT 10, excavated only in the outlying area around the tell proper, form a fairly definite unit which represents the earliest phase of the Halaf culture yet found in Mesopotamia, arguably the oldest existing anywhere. At the other end of the time scale come

1. This division does not imply a lack of continuity within the period; on the contrary, there seems to be an unbroken cultural sequence at Arpachiyah from the earliest levels through level 6, and a similar continuity is to be observed throughout the Mosul region from the first appearance of Halaf material to the time when it begins to merge with that of the incoming Ubaid culture.



the gorgeous polychrome pottery and associated objects of TT 6, the *floruit* of the Halaf culture, now known chiefly from the large deposit found in the "burnt house." This edifice, apparently a craftsman's workshop, was destroyed by the people who put an end to the Halaf settlement at the site; much of the pottery was deliberately smashed, and the building was burned. Comparatively little material from the outlying area has been attributed to a level corresponding with TT 6 by Mallowan; on the basis of depth of find-spot or style we consider that certain other pieces may be contemporaneous with that level.

Between these two cultural units is a middle phase represented in the mound by levels 10-7<sup>2</sup> and in the outlying area by material from about 1.5 to 2.5 meters below the surface. Virtually all the objects of this phase come from outside the tell proper, and we shall not attempt to designate them in terms of specific building levels. Absolute depth is an unsatisfactory criterion for ascertaining date, but in this case it is all we have. The material from this meter of deposit seems to have a character of its own, although clearly connected with the preceding and succeeding phases; this middle phase therefore is more than a mere transition.

We may for convenience label the three phases of the Halaf period at Arpachiyah "Early," "Middle," and "Late" (see Table 1).

In the Early phase the fabric of the pottery is light in color—buff, cream, or pinkish; an apricot shade is known, although not very common. A slip, either cream or apricot in color, is sometimes used; it is said not to adhere firmly. The pottery, whether slipped or plain, may be burnished. The paint is either red or black, the shades of each varying, and may be mat (so usually) or lustrous; the decoration is exclusively monochrome. Variable firing has caused considerable variation in the tones of the paint. Kilns of even this early phase are found on the site, and apparently all pottery is of local manufacture. Mallowan makes much of the fact that the Arpachiyah potters used a highly ferruginous clay, capable of being fired at a very high temperature.

The excavator emphasizes also the extreme rarity of unpainted pottery in the Halaf period. However, a survey of northern Iraq made by Harvard University revealed considerable amounts of unpainted pottery contemporary with Halaf painted ware at Arpachiyah, Shaghir Bazar, Tell al-Halaf, and other sites. The writer has seen among the finds of this survey numerous pieces of unpainted buff to brown pottery, sometimes quite fine in quality, found in levels which also contained Halaf painted ware. Likewise a fair amount of rough "cooking-pot" ware appears to coexist with the painted ware.

In the Middle phase the use of slip and of burnishing becomes more common, and in the Late phase (TT 6) considerable technical improvements are discernible. The pottery is fine, hard, and well fired, possessing a slip which is usually burnished and firmly adherent. The vessels are almost all thin-walled and nicely made, some of the sharply carinate pieces very cleverly done.

In the Early phase shallow, concave-sided, flat-based bowls (Fig. 1, form 1) are easily the most common form.<sup>3</sup> Next in order of popularity are jars, usually with rounded bodies (sometimes almost globular) and flaring necks (form 2),<sup>4</sup> occasionally squat with short necks.<sup>5</sup> The "cream bowl," a peculiar shallow bowl with rounded base (usually), markedly carinate profile above the base, and widely flaring mouth (form 3), is characteristic of the Middle phase but may begin earlier, since two specimens are attributed to "TT 10 or earlier."<sup>6</sup> A few simple rounded bowls occur.<sup>7</sup> Most of the forms are fairly crude, but a few jars are nicely shaped.<sup>8</sup> In

2. For the transitional character of level 7 see below, p. 38, n. 243.

3. E.g. *Arp.* Fig. 72:5.

4. *Ibid.* Fig. 68:1, 4.

5. *Ibid.* Fig. 71:10.

6. *Ibid.* Figs. 62:5 and 63:1.

7. *Ibid.* Fig. 71:7-9.

8. Especially *ibid.* Fig. 67:2.

unpainted pottery two features unknown in the painted ware exist—spout and ring base.<sup>9</sup> A crude figure of a bird with hollow body, standing on a pedestal base, may be a theriomorphic vessel,<sup>10</sup> it was found just above virgin soil and probably belongs to the Early phase.

In the Middle phase concave-sided bowls continue, but the cream bowl is the characteristic form.<sup>11</sup> There is a series of low, squat jars with wide mouths and unformed rims (form 4),<sup>12</sup> also other, sometimes slightly taller, jars of finer form and possessing certain refinements (e.g. beveled rim or ring base).<sup>13</sup> Bowls with rounded profiles and slightly inturned rims occur.<sup>14</sup> Two unusual vessels<sup>15</sup> are a shallow dish with rather flaring sides and ring base and a beaker with bulging oval body constricted below the rim and mounted on a high, hollow, slightly splayed foot (form 6). In the large series of miniature vessels this phase shows a few unusual features. Three tiny bowls<sup>16</sup> have long tubular spout at right angles to the side and very close to the rim (form 5); a similar vessel occurs in the Early phase.<sup>17</sup> A rough squat pot with a crude painted design has pierced lug handles,<sup>18</sup> the earliest of this type known. Most of the other miniatures are simple bowls with flat bases and rounded sides. The shapes of this phase are in general more highly developed than those of the Early phase. Formed rims, ring bases, clear distinction of body parts (especially in the cream bowl) indicate a surer ceramic technique.

Stated to occur between levels 10 and 6 is a horizontally ribbed ware, which may be decorated with paint,<sup>19</sup> also a coiled ware whose ribs are nicked, possibly in imitation of basketry.

In the Late phase the most common shape is a simple, shallow, flat-based plate (form 7).<sup>20</sup> This is the profile typical of the "polychrome plates," which are the finest ceramic product of the Halaf period. In two polychrome plates the sides bend inward about halfway up and then flare widely from a sharp break.<sup>21</sup> In respect to the break in profile this form resembles form 8. One example with similar profile but much deeper,<sup>22</sup> found in an ancient dump, is probably to be attributed to this phase. Two bowls with slightly concave sides occur,<sup>23</sup> one resembling the bowls typical of the Early phase. An object which looks like a shallow dish with almost straight sides has its main design on the "underside"<sup>24</sup> and is probably a lid rather than a vessel (see also pp. 25, 28, 30). Simple flat-based bowls with rounded sides and usually slightly inturned rims occur.<sup>25</sup> Perhaps a variant of this form is one new in the Late phase—a deeper bowl with almost vertical sides which are bent sharply inward at the bottom to taper to a small, slightly concave base (form 9).<sup>26</sup> Squat, sometimes carinate, jars such as occur in the Middle phase (form 4) continue, and here again is found a miniature jar with pierced lug handle.<sup>27</sup> Some miniature jars have sides pierced below the rim for pouring, and one little bowl has a trough spout.<sup>28</sup> Other miniatures with trough spouts (undated) may belong to this phase.<sup>29</sup> A most unusual jar<sup>30</sup> is squat with ledge rim, its entire body covered with horizontal ribs (a technique already seen in the Middle phase), over which is painted a polychrome design. Parts of this jar were found in level 6, and the remainder was found in level 5; to which period the jar be-

9. *Ibid.* Figs. 43:3 (miniature) and 79:5 for spouts; Fig. 43:25 (miniature) for ring base. The last mentioned is a very nicely made vessel with an unusually refined rim. One wonders if it really belongs to the Early phase, since its form contrasts with the primitive shapes usual in that phase.

10. *Ibid.* Pl. V b.

11. See *ibid.* Figs. 62–63.

12. E.g. *ibid.* Fig. 66:4.

13. *Ibid.* Figs. 64:7 and 76:1.

14. *Ibid.* Figs. 64:1 and 66:6.

15. *Ibid.* Figs. 58:3 and 65:4.

21. *Ibid.* front. and Fig. 54:4. These are the only definitely dated published examples of this form. The resemblance of these carinate plates to the Samarra? "Schüsseln" is marked.

22. *Ibid.* Fig. 66:5.

23. *Ibid.* Figs. 57:2 and 69:5.

24. *Ibid.* Fig. 58:1.

25. E.g. *ibid.* Fig. 71:1.

26. *Ibid.* Fig. 60:3.

16. *Ibid.* Figs. 42:10 and 43:2, 4.

17. *Ibid.* Fig. 43:3.

18. *Ibid.* Fig. 42:8.

19. *Ibid.* p. 174.

20. *Ibid.* Fig. 53:1.

27. *Ibid.* Figs. 59:2, 5 and 64:2.

28. *Ibid.* Figs. 42:11–12 and 41:10.

29. *Ibid.* Fig. 41:9, 11.

30. *Ibid.* Pl. XX a and pp. 127 f.

longs is uncertain, since similar technique is not uncommon in the Ubaid period. Another vessel whose date is questionable is a beaker with slightly concave sides and rounded base.<sup>31</sup> Its form and its find-spot (1 m. below the surface) suggest that it may belong to the Ubaid period, when beakers—uncommon in the Halaf period—are frequent. It is, however, said to have lustrous paint, a type seldom used by the Ubaid painters; the design is inconclusive.

In the Early phase designs, like forms, are simple. The favorite design consists of an unbroken zone of crosshatched running lozenges (Fig. 2, motif 1),<sup>32</sup> a motif practically restricted to this phase. Next in frequency are zones with crude linear designs broken up into panels or metopes; usually groups of straight vertical lines separate panels of multiple wavy lines (motif 2), multiple zigzags (motif 3), or rows of stipple.<sup>33</sup> Generally all panels of a design bear the same motif, but alternating motifs also occur. The checker design, which is so characteristic of later Halaf pottery, seems to occur only once.<sup>34</sup> Besides simple stippling with fairly large dots, the variety known as "egg-and-dot," wherein rows of large blobs alternate with rows of fairly small dots (motif 4), is found at least once.<sup>35</sup> Aside from the dots, unjoined elements either in zones or in the field occur sparingly. Representational motifs are more frequent here than in the later phases but are by no means common. Rows of birds or quadrupeds occur occasionally, but the most popular representational motif is the bull's head or bucranium. Usually a single bucranium, vertically oriented and in most examples quite stylized, is found in a metope (motif 5); once four bucrania in cruciform arrangement adorn the inside of a dish.<sup>36</sup> In all cases except the example last mentioned the main design is confined to the outside of the vessel. Even the shallow concave-sided bowls, in which interior decoration would be especially attractive, bear only a simple band of paint with pendent scallops or waves (or once a fringe of vertical dashes<sup>37</sup>) on the interior. Draftsmanship is usually mediocre, sometimes very crude; occasionally jars show fine brushwork.

The concave-sided bowls of the Middle phase have more "open" designs than the early ones: horizontal bands with ovals strung at intervals on them, rather widely spaced vertical zigzags, groups of straight vertical or oblique lines crossing horizontal bands.<sup>38</sup> Heavy zones of crosshatching, crosshatched lozenges, etc. such as are seen in the Early phase have vanished completely. The cream bowl, the characteristic shape of this phase, has equally characteristic decoration, which accentuates the separation of body parts inherent in the form. The keeled base has a metope design with alternating solid color and reserved panels; the upper body may have metopes, usually with various kinds of stipple fill (motif 10), or continuous zone design.<sup>39</sup> An unusual example has plain bands of paint along the top and a single zone of unconnected solid circles with dot borders around the base.<sup>40</sup> Most of the cream bowls have on the interior a simple rim band with pendent waves (motif 11). Jars may have continuous zone design or metopes, the latter being the more frequent on the very squat specimens; the inside of the rim is very simply decorated. Turned-rim bowls bear checker patterns in a broad zone covering the greater part of the outside of the body.<sup>41</sup> From level 7 comes a bowl (profile not illustrated) which bears an unusual interior design. It is bordered by a zone of fine checkers, and the center has two crossed zones each containing a filled-checker design which consists of alternating stippled squares and dark squares with negative quatrefoils.<sup>42</sup>

31. *Ibid.* Fig. 65:2.

33. *Ibid.* Figs. 71:6, 71:3, and 64:5, 8 and 69:1 respectively.

34. *Ibid.* Fig. 59:7.

35. *Ibid.* Fig. 65:3.

36. *Ibid.* Figs. 76:2 and 56:1; whether the latter should be attributed to the Early phase is dubious; it may belong to level 10.

37. *Ibid.* Fig. 71:5.

38. *Ibid.* Figs. 69:6, 70:6, and 69:4 respectively.

39. *Ibid.* Figs. 62-63.

32. See *ibid.* Fig. 72.

40. *Ibid.* Fig. 62:3.

41. *Ibid.* Figs. 64:1 and 66:6.

42. *Ibid.* Pl. XIX 6.

The design repertoire in the Middle phase is much larger than that in the Early phase, and the draftsmanship is considerably improved. Stippling, both simple and egg-and-dot, is common, being used in zones, in the field, and in checkers.<sup>43</sup> Open cables, usually in horizontal rows, are also frequent; some zigzags and wavy lines occur.<sup>44</sup> The sole example of crosshatched running lozenges, the favorite motif of the Early phase, appears on the inside of a ring-based dish.<sup>45</sup> Completely stylized bucrania, horizontally oriented (motifs 6-9), are used in several instances;<sup>46</sup> no vertically oriented bucrania can be definitely dated to this phase. The frequency of checker designs is noticeable, sometimes simple dark and light checkers, but more often what we term "filled checkers"—that is, a pattern in which both dark and light squares contain a design (motifs 12-13).<sup>47</sup> The dark squares may contain a quatrefoil in reserve, and the light squares are usually stippled. Such checker patterns are common from this time until the end of the Halaf period, being particularly highly developed in the polychrome plates of the Late phase. The Middle phase thus shows the beginning of a fondness for over-all patterns, rather than a tendency to restrict the design to narrow horizontal zones. On the other hand, where horizontal zones are used, the design tends to be much more open than in the Early phase; unjoined elements are frequent, especially rows of circles bordered by dots (motif 15).<sup>48</sup> Metope design is still probably the most common type of composition. Jar necks are usually set off from the body by bands of paint, and frequently the entire neck is covered with paint. Broad bands of paint commonly border the design zones in concave-sided bowls and cream bowls.

In the Late phase various patterns built on filled checkers or squares and diagonals in various combinations are the most characteristic. The negative quatrefoil is a common element in filled-checker patterns (motif 13).<sup>49</sup> New to this phase as a pottery design, although found in the Early phase on a seal pendant (see p. 33), is a zone of squares each of which contains a St. Andrew's cross (motif 16).<sup>50</sup> Likewise new is a simple diaper pattern used in solid blocks or very broad zones (motif 17).<sup>51</sup> Negative design<sup>52</sup> is more exploited here than in the preceding phase, but is by no means as common as it is in the Ubaid period. Simple bands, cables (motifs 14 and 18), waves, and lozenges occur, usually in combination with other and more elaborate motifs.<sup>53</sup> The "double-ax" or "butterfly" motif (used in motif 12) is found in metopes;<sup>54</sup> interlocking triangles appear on a ribbed jar,<sup>55</sup> already mentioned, which may belong to this phase or may be still later. Unjoined elements are relatively rare. Circles bordered by dots (motif 15), found once in the preceding phase, occur here once in a zone and once as fill; a zone of dotted circles also is used.<sup>56</sup> Series of little V's turned sideways and double horizontal bucrania also occur.<sup>57</sup> All these motifs are elaborated by the use of polychromy, one of the diagnostic criteria of the Late phase, which appears chiefly on plates. The main colors are red and black, the shades varying widely; when used over the common apricot slip a trichrome effect is obtained, which is sometimes further enhanced by the use of details in white added over the darker paints.<sup>58</sup>

43. See *ibid.* Pl. XIX 6 and Figs. 62:2, 4; 63:2; 64:1, 7, 9; 65:1, 4; 66:6-7; 76:3-4.

44. See *ibid.* Figs. 58:3, 59:3-4, 64:3, 66:1, and 70:6.

45. *Ibid.* Fig. 58:3.

46. *Ibid.* Figs. 74:22-23 and 76:3-5.

47. E.g. *ibid.* Figs. 64:1 and 66:6-7.

48. *Ibid.* Fig. 58:4.

49. E.g. *ibid.* Pl. XV.

50. *Ibid.* Fig. 60:5-6.

51. *Ibid.* Pl. XV.

52. *Ibid.* Pl. XVI a and Fig. 55.

53. *Ibid.* Figs. 54:4 and 53:1, Pl. XV.

54. *Ibid.* Fig. 58:2.

55. *Ibid.* Pl. XX a.

56. *Ibid.* Pls. XVII a, XVIII, and XV respectively.

57. See *ibid.* Figs. 55, 60:4-5, 63:3, and 64:2.

58. It may be mentioned here that no stratified piece with white *stipple* over dark paint has been published, although numerous examples of this combination are assigned to the Halaf period. As to stratification, Mallowan states (*ibid.* p. 167) that white stipple "never occurs earlier than TT 8 and is most frequent in TT 6-7," whereas *ibid.* pp. 18-21 he restricts it to "TT 6-7 and corresponding levels" of the outlying area.

No strikingly new schemes of composition are employed in the Late phase. Jars still usually bear a broad design zone or a series of narrow ones at or near the shoulder;<sup>59</sup> once, in a miniature vessel, the design covers the entire exterior (except the flat base).<sup>60</sup> Simple bowls with inturned rims also have single-zone design.<sup>61</sup> The deep, straight-sided bowls characteristically have an all-over pattern covering the entire vertical surface of the exterior.<sup>62</sup> Plates without exception have zone design on the exterior, either a single relatively broad zone with one closely knit motif or, more commonly, several narrow zones in which very simple motifs (most commonly a cable, motif 18) are separated by plain bands.<sup>63</sup> In all these plates the main design is on the interior; this feature separates them from the bulk of the earlier Halaf pottery, where even the shallowest and most wide-open vessels bear their chief design on the exterior. The interior rim designs of these plates, like the designs on the outside, most usually comprise a series of rather narrow zones, contiguous or very closely spaced; characteristically only two motifs are used in alternation, but a third, very small motif is in one case used to separate the main zones.<sup>64</sup> A single broad band of continuous design also may occur on interior rims, in either a checker or a diaper pattern.<sup>65</sup> Multipetaled rosettes, the petals numbering from eight to thirty-two, are the most common center design (motif 19).<sup>66</sup> Cruciform designs also occur in the center: a negative quatrefoil in a concave-sided square, a simple linear cross with a double bucranium at the end of each arm, a "Maltese square" (motif 20).<sup>67</sup> A unique design consisting of zones of unjoined double bucrania covers the entire inner surface of a peculiar plate whose profile resembles that of the cream bowl.<sup>68</sup>

As already stated the pottery of the Late phase is technically superior to that of the earlier phases as regards quality of clay, firing, slip, draftsmanship, use of color, etc. Aesthetically also it may be considered superior to its predecessors; indeed, it represents the finest artistic product of the Halaf period. The combination of vivid colors, though it seems sometimes a little gaudy to the Western eye, is in keeping with the love of brilliant color which has always been characteristic of the Orient.

Particularly in the composition of the designs on the plates an architectonic feeling is manifested. The Arpachiyah painters deal admirably with the difficult problems involved in the decoration of a circular surface. They differ from the painters of the Samarran pottery in their solutions, notably in the more closely knit coverage of the surface with design; the Arpachiyah plates, while not overcrowded, are almost always very full, and the designs are much more minute in detail than those of the Samarran pottery. To the writer's mind the Halaf painting never reaches the height of achievement of the Samarran, being most noticeably lacking in the sense of movement which the Samarran painters manage to suggest so vividly. The Halaf painters rely wholly on balance and symmetry and create fine, but static, compositions.

The destruction of Arpachiyah 6 seems to have cut off the Halaf culture there at its peak of achievement, for no pottery which looks in any way decadent has been found at the site. That the Arpachiyah 6 pottery is not the final product of Halaf ceramic art is suggested by the finds from Tepe Gaura, to which we now turn.

#### TEPE GAURA

This mound, northwest of Arpachiyah, stood 70 feet above the modern plain, and was tall and steep, although not very extensive at the base. Toward the northwest it originally faced

59. E.g. *ibid.* Figs. 60:2 and 59:5.

60. *Ibid.* Fig. 64:2.

61. E.g. *ibid.* Fig. 60:1.

62. E.g. *ibid.* Fig. 60:5.

63. E.g. *ibid.* Fig. 53:1.

64. *Ibid.* Pl. XV.

65. E.g. *ibid.* front. and Pl. XIV.

66. E.g. *ibid.* Fig. 53:1.

67. *Ibid.* Figs. 55 (Mallowan calls this design "a Maltese cross with curved arms" *ibid.* p. 114) and 56:2 and Pl. XVIII respectively.

68. *Ibid.* Fig. 63:3.

a stream, and here the side of the mound is steepest; on the southeast the rise is more gradual, and it was on this side that a trial trench 5 meters wide was made at the beginning of the excavations.<sup>69</sup> When further excavations were undertaken, levels were stripped systematically down through level X, and then only about one-third of the mound was marked off for future digging and taken down through level XVI. In XVII–XIX the excavations were limited to a 25-meter square, and level XX was reached only by trenches (see p. 13, n. 123).

The remains of level XX show clearly that it belongs to the Halaf period, although some of the pottery is of Ubaid type. The bulk of the Halaf material, however, was gained from two soundings at the base of the mound. One, at the northeast, showed no stratification at all but merely a thin layer of debris immediately above virgin soil. The other, at the southeast (Area A), revealed what seems to have been a dump in the Halaf period and yielded largely soil washed down from the mound; although there were no building levels, artifacts occurred in six roughly separate layers (*a–f*, *a* being the uppermost). Tobler emphasizes the fact that this cannot be considered true stratification, and examination of the material shows no perceptible evolution from lower to higher layers; this material must therefore be considered as a unit. Below layer *f* there was found a pit sunk about 5 meters into virgin soil and completely filled with earth in which skeletons and some artifacts occurred. Apparently the pit was first used as a well or cistern, for the sherds found near the bottom are soft and patinated as if they had lain in water. Later, perhaps after the well had begun to be filled with soil, the pit was used for burials, and no less than twenty-four skeletons were found at different levels (see p. 42).

It is with the pottery found in the various Halaf deposits that we are now concerned. We shall begin with the groups of vessels from the pit, then deal with the pottery from levels *a–f* of Area A and from the northeast base cut, and conclude with that from level XX in the mound. This will give a roughly chronological progression, although apparently some pottery from the soundings is as late as any from level XX.

At the bottom of the pit were found four vessels of well levigated brown clay. One is a bowl, somewhat like form 1 but with more flaring sides, which has a chocolate-brown wash inside and outside. The other three are flat-based jars with squat bodies and rather narrow, slightly flaring necks. One is undecorated, and one has traces of black on the exterior. The third jar is unusual in several ways: its neck is straighter; there are four pierced lug handles on the shoulder; and the bulging body bears two design zones with multiple waves painted in red on a cream slip (similar to motif 2 but not divided into panels).<sup>70</sup> Three other squat jars were found with the burials, two with fairly wide necks (somewhat similar to form 4), the other with narrow neck and beveled rim. The last named is decorated with zones of hatched running lozenges in red on a cream slip. The design zone on one of the other jars is divided into panels by vertical lines in bister paint on a grayish slip, and the shoulder of the vessel has pierced lug handles. The third jar is undecorated. A simple bowl or plate with a profile like that of form 7 has a design which seems based on multiple paired bucrania.<sup>71</sup> A peculiar carinate bowl of light red fabric with buff slip has a counterpart in profile at Arpachiyyah<sup>72</sup> and bears on the interior rim an irregular design in bister paint in which crosshatched panels alternate with panels containing a row of joined ovals.<sup>73</sup>

The other pottery from Area A and that from the northeast base cut may be considered together. The fabric is light red to reddish brown in color and well levigated; white grits, possibly crushed limestone, occur in the larger vessels. All are handmade. Vessels were apparently

69. See *AASOR* IX (1929) 23 and 27.

70. For these four vessels see *Tepe Gawra* II, pottery figs. 8, 2, 1, and 5 respectively.

71. For other motifs using multiple paired bucrania see *Arp.* Figs. 75:2 and 76:5.

72. *Ibid.* Fig. 66:5.

73. For these five vessels see *Tepe Gawra* II, pottery figs. 6, 4, 3, 7, and 9 respectively.

fired at a high temperature, for the fabric is quite hard. The surface is usually wet-smoothed or slipped in a light color. Almost all pieces are painted, characteristically in lustrous paint; colors used are red, brown, bistre, and black, and the decoration may be monochrome or bichrome. Designs are almost exclusively geometric and linear in character, representational motifs being confined to birds and very stylized bucrania.

Forms are few and simple. There are bowls and plates with variously curved profiles, including concave-sided bowls (form 1), simple plates (form 7), carinate plates (form 8), and straight-sided bowls (form 9). Most of these have their main decoration on the interior,<sup>74</sup> usually a rosette (like motif 19 but with numerous variations) or a "Maltese square" (motif 20, usually with much smaller square and larger arms) surrounded by one design zone or several zones. Two centers have "snowflake" patterns, one being similar to the design on a bowl from Samarra<sup>75</sup>; and one Gaura center has a cross, each arm of which ends in a stylized bucranium, reminiscent of Arpachiyyah designs.<sup>76</sup> A quatrefoil center also has parallels at Arpachiyyah.<sup>77</sup> While the designs on these Gaura vessels in general resemble those on the Arpachiyyah Late Halaf plates, some suggest a stage of declining artistic powers. To take published examples for illustration, the carinate plate shown in *BASOR* No. 66 (April, 1937) Figure 8 (= *Tepe Gawra* II, pottery fig. 12), with its multipetaled rosette center and broad bands separating zones of crosshatching and of running lozenges, has too small a center pattern to balance the surrounding heavy rings; and the plate shown in *BASOR* No. 65 (Feb. 1937) page 4, Figure 2 (= *Tepe Gawra* II, pottery fig. 11), which has two patterns in one zone and the same two in reversed positions in the next zone, has a rather confused appearance. These vessels seem to the writer to indicate the next step after the static perfection of the plates of Arpachiyyah 6—the beginning of decadence, when artistic feeling gives way to reliance solely on technical abilities. It might be argued that these Gaura vessels are contemporary with the fine products of Arpachiyyah 6 but are merely less good pieces. However, the presence in the same group of material of elements suggestive of Ubaid pottery lends weight to the suspicion that these Gaura vessels are later and that Gaura therefore has material from a time which is unrepresented at Arpachiyyah—the latest Halaf and the earliest Ubaid range.<sup>78</sup>

A smaller number of vessels have decoration on the exterior only, and it is noticeable that carinate plates of form 8 do not occur in this group. Among these vessels are three concave-sided bowls (form 1) with solid crosshatching over the exterior, similar to some Early Halaf examples from Arpachiyyah.<sup>79</sup> Deeper vessels, some with irregular profiles, called cups, and footed chalices, some having very extensive decoration on both bowl and stem, occur.<sup>80</sup> Bases are apparently always splayed, while bowls may be slightly flared, incurving, or sinuous—the last somewhat resembling an Arpachiyyah chalice.<sup>81</sup> Zone decoration, sometimes paneled, is the rule. There are squat pots with outturned, sometimes formed, rims;<sup>82</sup> these vessels resemble form 4, although frequently the neck is narrower.

Jars are relatively common.<sup>83</sup> The most usual type resembles form 2 but tends to have a wider and more flaring neck; another type has a straight neck and pierced lug handles on the

74. Even one straight-sided bowl (*Tepe Gawra* II, pottery fig. 18) has its chief design ("snowflake" pattern) inside; it is noticeable that at Arpachiyyah such bowls have only exterior decoration.

75. Cf. *ibid.* pottery fig. 19 with *Samarra* V, Fig. 37. The Gaura bowl's outer zone is a checker or step pattern which also recalls Samarran style, but it is polychrome.

76. Cf. *Tepe Gawra* II, pottery fig. 10, with *Arp.* Fig. 56.

77. Cf. *Tepe Gawra* II, pottery fig. 17, with *Arp.* Figs. 55 and 61:2.

78. It is in such speculations as these that one regrets most that the Halaf material from Gaura is not stratified, for it would be most helpful if we knew the stratigraphic relation of the "decadent" pieces and those which show Ubaid influence.

79. Cf. *Tepe Gawra* II, pottery fig. 27, with *Arp.* Figs. 70:2 and 71:2.

80. *Tepe Gawra* II, pottery figs. 34–43.

81. Cf. *ibid.* pottery fig. 40 with *Arp.* Fig. 65:4.

82. *Tepe Gawra* II, pottery figs. 44–49.

83. *Ibid.* pottery figs. 50–62.

shoulder. Body shapes of both types may range from almost globular to pyriform. Design is in a broad zone over the shoulder ending just below the point of greatest diameter; necks usually have plain bands or are painted solidly. Two almost identical jars<sup>84</sup> bear a design which the writer believes clearly shows Ubaid influence—a zone of large interlocking triangles filled alternately with bands of hatched running lozenges and rows of small birds with heads drawn in outline and dot-eyes. The upper border of this zone and the narrow reserved bands between the triangles contain rows of solid lozenges. The interlocking-triangle motif and the use of small painted fill in reserved bands are typically Iranian, and both features are characteristic of the Ubaid period.

Other Ubaid-like features appear on a miniature vessel covered with black paint except for a zone with a truncated-zigzag pattern (cf. Fig. 5:13) and on a cup with the Figure 5:19 motif in brown paint.<sup>85</sup> In the University Museum collections, which the writer has had the privilege of examining, there are some definitely Ubaid sherds labeled as coming from Area A as well as some polychrome pottery which we suspect is of the recently discovered Ubaid polychrome type (see p. 28). Again, it is regrettable that through accident of excavation the Halaf material found at Tepe Gaura does not come from clearly stratified areas.

Level XX, the lowest stratum reached in the excavation of the mound proper, was investigated only by preliminary trenching, and only a small area was cleared. By far the bulk of the pottery is in the Halaf style. A disk-based cup with sinuous sides is the most common form, and one which is not represented in the soundings at the base of the mound;<sup>86</sup> Tobler remarks that very little of the Halaf pottery from level XX is similar to that from the soundings and bases on that fact his conclusion that the material from the soundings is earlier than that of level XX. With that conclusion we cannot agree completely; the bulk of the finds from the soundings may well be pre-XX but, as noted above, there are also pieces which show Ubaid influence and even some definitely Ubaid sherds. Tobler states that the lustrous paint which characterizes Halaf pottery has almost disappeared by now, but the writer found that much of the Area A pottery in the University Museum collections also does not have lustrous paint. Polychromy is still common in level XX, and there is one sherd with white details on a red ground, a technique known in the Late Halaf phase at Arpachiyyah (see p. 20).

Also popular in level XX are shallow plates with broad ledge rims, a form quite unknown in other Halaf deposits or in the Ubaid pottery of the North, but—strangely enough—common in the Ubaid pottery of southern Mesopotamia;<sup>87</sup> the interior designs are of Halaf type, apparently a debased imitation of the rosette-center bowls.

Along with Halaf painted pottery, but definitely less common, occurs a type of undecorated pottery which continues into the early Ubaid period. The fabric is usually buff, well levigated, and fired to a considerable hardness; the surface is rough with no finishing treatment, and the vessels are usually thick-walled. Bowls, long-necked jars of varying profiles, and large, rather squat storage jars are typical forms. It may be noted here that a few sherds with incised decoration, usually zones of chevrons, occur in levels XX and XIX.

The third component of the level XX material is especially important—monochrome-painted pottery of the type which characterizes the Ubaid period. Tobler states that level XX has only isolated sherds of this pottery, while it is dominant from XIX on. One sherd from XX shows a peculiar sinuous-sided zigzag (cf. Fig. 5:12), which is common in the Ubaid pottery of both North and South; a second sherd has a herringbone pattern, which is an Ubaid motif;

84. *Ibid.* pottery figs. 61–62; one is published in *BASOR* No. 65, p. 7, Fig. 4.

85. *Tepe Gawra* II, pottery figs. 64 and 38.

86. Three such cups found in a trial trench are published in *Tepe Gawra* I, Pl. LXII 6, 8, 12, and there attributed to level XIV; it is now assured in the light of more recent finds that they belong to the XX–XVIII range (see p. 46 below).

87. Cf. *Tepe Gawra* II, pottery fig. 72, with our Fig. 9:1 b.



and another has a wave incised within a painted band, a practice which is known in the South in the Ubaid period (see p. 76). It must be remembered that all conclusions are tentative in view of the relatively small amount of level XX which has been excavated, but apparently that level represents the end of the Halaf period, when Ubaid influence is already present in the land. By the time of the next level the balance of cultural influences has shifted, and level XIX is clearly Ubaid, although with a considerable amount of Halaf material surviving.

To facilitate comparison with the other sites the Halaf motifs known at Tepe Gaura are enumerated below:

1. Pit below level *f* in Area A: multiple waves, hatched running lozenges, multiple paired bucrania, panel designs with crosshatching or joined ovals, and plain panels separated by vertical lines.
2. Levels *a-f* of Area A and northeast base cut: motifs 1, 6, 8-9, 12-13 (plus many other variants of filled-checker designs), 14-15, 18-19, 20 (also in numerous variants), 21-22, running lozenges with various types of fill, crosshatched zones, multiple waves, "butterflies," swags, quatrefoils (both in zones and as bowl centers).
3. Level XX: checkers, quatrefoils, reserved triangles, crosshatched scalloped zones.

Although we still have no material to check the stratification at Arpachiyah, the Gaura pottery at least widens our knowledge of Halaf ceramics and provides the late Halaf to early Ubaid transition.

#### SAMARRA<sup>88</sup>

We find at Samarra<sup>89</sup> several pieces of Halaf pottery, apparently imports. The fragments<sup>88</sup> all seem to belong to concave-sided bowls such as are typical of the Early phase at Arpachiyah, and the designs are perfectly acceptable in such a context. The one complete pot<sup>89</sup> is a squat jar with a very short, wide neck; the body design is in metope style and consists of groups of wavy lines separated by vertical stripes. The glazeli-like appearance of the red paint on a reddish-orange slip suits Halaf technique, and the form is comparable with known Early Halaf forms. Though the peculiar "scribbled" design is not paralleled in Halaf context, wavy lines in general are used in the Early phase; and the technical qualities, the shape, and the use of metopes combine to make us believe that this jar is an Early Halaf piece.

#### TELL HASSUNAH

We have mentioned above (pp. 1 and 4) that stratum VI seems to mark the beginning of the Halaf period. Levels VII and VIII are said to be "exceptionally rich in Halaf pottery," which persisted through most of the remaining levels.<sup>90</sup> Since Ubaid pottery begins to appear in XI, we consider levels VI-X as comprising the Halaf period at Hassunah.

Unfortunately the Halaf and Ubaid material is merely mentioned in the Hassunah report.<sup>91</sup> Examination of the plates which show Halaf sherds<sup>92</sup> reveals cables (motifs 14 and 18), bucrania (motif 8), crosshatched lozenges, "double axes," pendent waves or scallops (motif 11), quatrefoils (both positive and negative), rows of chevrons (motif 21), fish scales (motif 22), and checkers (both plain and filled). The sherds are mostly from rims, many exhibiting designs characteristic of the plates at Arpachiyah; no other forms can be identified except perhaps a lid (see also pp. 18, 28, and 30).<sup>93</sup> In the small selection published no development of design

88. *Samarra V*, Nos. 294-300 and pp. 92-94.

89. *Ibid.* No. 249 and pp. 80 f.

90. *JNES IV* 284.

91. We can only deplore the attitude of the excavators of Hassunah that both Halaf and Ubaid pottery have been sufficiently well studied to preclude the necessity of their making a full presentation of their own material. Our knowledge of these early wares is as yet lamentably scanty, and we need very much to know, for example, whether the stratification at Hassunah corroborates the developmental sequence of Halaf pottery at Arpachiyah.

92. *JNES IV*, Pls. XIX-XXI 1.

93. *Ibid.* Pl. XXI 1, bottom row, 2d from right.

is discernible, although level VII has two sherds with patterns known in the Arpachiyyah Late phase.<sup>94</sup> Level VIII has the first recognizable example<sup>95</sup> of the type of plate which is typically Late Halaf at Arpachiyyah. Nothing definitely Early Halaf is shown save two sherds with crosshatched lozenges,<sup>96</sup> and these do not seem to be from concave-sided bowls. The numerous interesting Halaf sherds pictured makes the lack of a full presentation the more regrettable.

It should be noted also that small quantities of Hassunah "standard" wares and of Samarran pottery appear in levels VI–VIII.<sup>97</sup>

#### NINEVEH

All of Ninevite 1 and two phases of Ninevite 2 pass before the advent of the Halaf type of painted pottery, with the probable exception of a single sherd with metope design in lustrous paint found in level 2 *b*.<sup>98</sup> In level 2 *c*, however, Halaf pottery suddenly appears and from its beginning far outnumbers all other types.

The concave-sided bowl (form 1), unknown in the preceding phases, is the characteristic form of 2 *c*. Squat, wide-mouthed pots of types known also in the preceding levels recur.<sup>99</sup>

A slip is frequently used, sometimes apricot but more often cream; it adheres firmly to the body and is "polished" (probably burnished). The paint—sometimes lustrous—is red or black, the shades varying; two sherds are said to be polychrome.<sup>100</sup> However, the first is certainly, the second is probably, part of a bowl of the familiar concave-sided type, on which polychromy never appears at any other site. The design on the first is characteristic of the Early phase at Arpachiyyah; that on the second, while not characteristic, likewise suggests the Early phase. The drawings of the two sherds show no differentiation of colors, and we are inclined to believe that the "polychromy" mentioned by Mallowan is accidental, due to variation in firing temperature or in intensity of paint.<sup>101</sup>

In design there are further reminders of Arpachiyyah. Stippling, whether simple or of the egg-and-dot variety, is the most common motif and is used either in bands or in the field.<sup>102</sup> Multiple waves and zigzags, crosshatching, metope-style decoration—all characteristic of the Arpachiyyah Early phase—are typical here.<sup>103</sup> But in addition level 2 *c* carries over many Samarran-type designs<sup>104</sup> based on parallel lines—multilinear chevrons, zigzags, woven or caned patterns—which are typical of the earlier phases of stratum 2. Such designs are not found at Arpachiyyah among the Halaf pottery.

Nothing at Nineveh (except polychromy, if present) is definitely later than the Early phase at Arpachiyyah, but connection of two sherds<sup>105</sup> with the Middle phase is possible. One bears a design of horizontal bucrania. No examples of bucrania so oriented are certainly dated to Arpachiyyah's Early phase, but there are so many undated examples of this motif that it cannot be said that the horizontal orientation does not occur within the Early phase also. The other sherd bears metope decoration utilizing egg-and-dot stippling.

94. *Ibid.* Pl. XIX 2 below, top row, 2d and 3d from left (filled-checker and diaper patterns).

95. *Ibid.* Pl. XIX 2 above, bottom row, left.

96. See *ibid.* Pl. XIX 2 above and below.

97. *Ibid.* Fig. 5.

98. AAA XX, Pl. XXXVIII 22.

99. *Ibid.* Pl. XLVIII 5.

100. *Ibid.* Pl. XLII 16 and 21, p. 157.

101. The fact that no other site shows polychromy coincidental with this Early type of pottery does not, of course, preclude the possibility that it might happen at Nineveh; but it does render that possibility more remote. Cf., however, R. Campbell Thompson's statement (*ILN*, July 6, 1932, p. 98) that the painted pottery of stratum 2 is frequently in three colors "with geometric patterns in lustrous reds and black on a burnished apricot or cream slip."

102. AAA XX, Pl. XLII 2, 4, 6–7, 11, 13, 16, 18–19.

103. *Ibid.* Pl. XLIII 9, 13, 19, 23.

104. *Ibid.* Pl. XLIV 4, 19, 8.

105. *Ibid.* Pls. XLIII 4 and XLII 11.

## TELL BRAK

This site is on the Jaghjagha River, one of the tributaries of the Khabur. It is a large tell, some 800 × 600 meters in extent, and 40 meters high at its highest point. A broad and fairly low ravine separates two "peaks," one of which was a residential quarter while the other contained temples and public buildings.<sup>106</sup> Just what materials of Halaf date have been excavated is not certain, but Mallowan states that "it is evident that there must have been an extensive prehistoric settlement of the T. Halaf period."<sup>107</sup>

Various elements comparable with Halaf material from other sites occur. These include a fragment of a simple checker pattern combined with the dot-circled motif 15 and several examples of bucrania, some vertically oriented (which suggests the Early phase) and a "mouflon" type which resembles our motif 9.<sup>108</sup> A stippled design which Mallowan has called "huts and flowers" and has considered to be Samarran we believe to be Early Halaf.<sup>109</sup> Other representational motifs occur, including a bird with humped body and head drawn in outline with dot-eye, which is quite similar to those on two jars from Gaura Area A (see p. 24); a similar bird appears on an undated sherd from Shaghir Bazar.<sup>110</sup>

A straight-sided bowl, its profile concave at the base (a variant of form 9), has a design of quatrefoils such as occurs in the Late phase at Arpachiyyah and also late in the Halaf levels at Shaghir Bazar.<sup>111</sup> A plate bears an elaborate interior design based on the pentagon,<sup>112</sup> this motif is unknown elsewhere, but the arrangement of the design is comparable with that of the usual Late Halaf plates. A round-based, inturned-rim bowl with a broad zone of crosshatching is comparable with a bowl from Shaghir Bazar 11–10.<sup>113</sup> Two sherds (fabric not described) bear an adaptation of the Samarran fringe design (see p. 43, n. 261).<sup>114</sup>

## TELL SHAGHIR BAZAR

The information from this site is scanty and inconclusive. For the Early phase we can only mention certain pieces found in levels 15–13. One indubitable piece of a concave-sided bowl with typical Early design occurs in level 15,<sup>115</sup> and the same level produced fragments with vertically oriented and not particularly stylized bucrania, birds, and rows of peculiar "men."<sup>116</sup> It will be remembered that a "cache" of incised and burnished wares also derives from this level, which is on virgin soil (see p. 11). Quadrupeds and a possibly human figure occur in designs of level 14.<sup>117</sup> Level 13 has a sherd with a quadruped and several sherds with bucrania, also a miniature black burnished jar.<sup>118</sup>

106. *Iraq* IX 48 f.

107. *Ibid.* p. 45. The "schematic section" published in *ILN*, Oct. 15, 1938, pp. 698 f., and reproduced in substantially the same form in *Iraq* IX, Pl. LXIV, is not a section in the usual sense, but merely a tabular presentation of the successive cultures of which evidence was found at various places in the mound. Where and how the Halaf remains were found is not stated.

108. *Iraq* IX, Pl. LXXX 25 (checker and motif 15), 21–23 (vertical bucrania), and 24 ("mouflon").

109. It occurs at Arpachiyyah (see *Arp.* p. 165) and Shaghir Bazar (see *Iraq* III 50) as well as at Brak (*Iraq* IX, Pl. LXXX 6). Stippling is virtually unknown in Samarran design, and curved-line motifs are rare. For examples see *JNES* III, motifs 334 (stippled or dotted), 122–23 (waves), and 157 etc. (quatrefoils). An analysis of the Samarran pottery has convinced the writer that such a design as the "huts and flowers" is not compatible with the artistic conceptions of the Samarran painters.

110. *Iraq* IX, Pl. LXXX 18; cf. *Iraq* III, Fig. 27:8.

111. *Iraq* IX, Pl. LXXX 13. The form is very similar to that of a bowl from Shaghir Bazar 7 (*Iraq* III, Fig. 22:6). For the motif, cf. *Arp.* Pl. XVI a and *Iraq* III, Pl. II 6.

112. *Iraq* IX, Pl. LXXIX 4.

113. Cf. *ibid.* Pl. LXXX 15 with *Iraq* III, Fig. 22:3.

114. *Iraq* IX, Pl. LXXX 1–2.

116. *Ibid.* Figs. 26:1, 9 and 27:11, 22.

115. *Iraq* III, Pl. III 17.

117. *Ibid.* Fig. 27:2, 13, 21.

118. See *ibid.* Figs. 27:1, 26:2 (Mallowan's "naturalistic" type of bucranium), 26:10 (his highly stylized "mouflon" type), and 20:15.

Level 12 has a beaker with high, hollow, splayed foot which somewhat resembles a piece (form 6) from the Middle phase at Arpachiyyah (see p. 18), likewise a jar with painted neck and egg-and-dot stippling on the shoulder.<sup>119</sup> Horizontally paired bucrania occur in the same level,<sup>120</sup> and there is a miniature unpainted bowl with straight tubular spout<sup>121</sup> which is very like some from Arpachiyyah (form 5). A well shaped jar with outrolled rim bears a design of paired horizontal bucrania;<sup>122</sup> both form and motif, although not the combination, occur at Arpachiyyah in the Middle phase. A concave-sided bowl<sup>123</sup> bears a rather open type of design such as the Arpachiyyah Middle phase favors. But in level 12 we find two carinate bowls (form 8 and similar) with decoration utilizing white stippling over dark paint;<sup>124</sup> at Arpachiyyah certainly the shapes and probably this type of decoration (see p. 20, n. 58) are Late, and we believe it probable that Shaghir Bazar 12 does not end until after the beginning of the Late phase at Arpachiyyah.<sup>125</sup>

Bowls with nearly vertical sides (form 9) begin in the Middle phase at Arpachiyyah but are much more numerous in the Late. Such bowls, with slightly or markedly inturned rims, occur at Shaghir Bazar in levels 12-6. A shallow utensil from level 12, with crosshatching all over the flat "bottom,"<sup>126</sup> probably served as a lid. Similar objects occur in the Late phase at Arpachiyyah, at Hassunah(?), and at Tell al-Halaf (see pp. 18, 25, and 30).

Both levels 11 and 10 have forms which are perfectly in keeping with those of Arpachiyyah 6, but neither forms nor designs are conclusive. The fish-scale motif (motif 22), which occurs in 10, is said to be very common in Arpachiyyah 8-6, although no stratified examples are published.<sup>127</sup> The "mouflon" type of bucranium (as in motif 9) seen in Shaghir Bazar 9 or 8<sup>128</sup> is found at Arpachiyyah also, but without context. Shaghir Bazar 8 has a chalice<sup>129</sup> which shares with the beaker of level 12 and that of the Middle phase of Arpachiyyah the idea of a bowl on a high, hollow base.

From level 7 come a horizontally ribbed sherd with polychrome design painted over the ribbing, which recalls a ribbed jar from Arpachiyyah 6-5 (see p. 18), and a sherd with a fringe design which seems to be related to a Samarran motif (see p. 43).<sup>130</sup> Two plates from level 7 have their chief decoration on the interior.<sup>131</sup> The first of these, in polychrome, has a rosette center and a simple border zone of crosshatching which would be not at all improbable in the Late phase at Arpachiyyah. Polychrome pieces from levels 7-6,<sup>132</sup> although frequently bearing Halaf motifs, seem to be representatives of Ubaid polychrome pottery. The difference is difficult to put into words; we can say only that this new style of painting seems frequently to adapt Halaf motifs, putting them in different combinations and to different uses than does the true Halaf style. It is no censure of the excavator to transfer his "polychrome Halaf wares" to the Ubaid period, for the existence of Ubaid polychrome pottery was not known until very recently, and it has always been assumed that polychromy is a hallmark of the Halaf period. Now the excavations in the 'Amuq plain in Syria have established the existence of a polychrome variant of Ubaid painted ware, and on the basis of that material the writer has been able tentatively to recognize similar pottery from Tepe Gaura (see p. 24) and from the Harvard survey of northern Iraq and northeastern Syria. Dr. Braidwood agrees that the whole

119. *Ibid.* Fig. 24:4 and 6 respectively.

120. *Ibid.* Fig. 26:19.

121. *Ibid.* Fig. 20:10.

122. *Ibid.* Fig. 25:5.

123. *Ibid.* Fig. 21:1.

124. *Ibid.* Figs. 28:2 and 21:2; Mallowan attributes the second *ibid.* p. 43 to levels 13-12 but *ibid.* p. 53 to level 12.

125. For whatever it may be worth, note the amazing similarities in both form and design between a jar from Shaghir Bazar 12 (*ibid.* Fig. 25:4) and one from Tall-i-Bakun in Iran (*OIP* LIX, Pl. 53:8).

126. *Iraq* III, Fig. 25:1.

127. See *ibid.* Fig. 27:17 and *Arp.* p. 167.

130. *Ibid.* Pl. III 6 and Fig. 27:24.

128. *Iraq* III, Fig. 26:14-15.

131. *Ibid.* Pl. II 7 and Fig. 20:16.

129. *Ibid.* Fig. 24:5.

132. *Ibid.* Pl. II 1, 3-7 and Pl. III 7.

of the polychrome pottery from Shaghir Bazar 7-6 would be acceptable in phases D-E of the 'Amuq—that is, the transition to Ubaid and the Ubaid period itself.

Obviously we have in Shaghir Bazar a site not wholly analogous to those on the Tigris drainage. The coexistence in level 12 of elements resembling both Middle and Late Halaf is one indication of its peculiarity. We know that there is a gap in the stratigraphy; Mallowan speaks of the destruction of level 13, followed by a considerable releveling of the site before the building of 12.<sup>133</sup> Whether after level 13 there is a time gap representing most of the Middle phase at Arpachiyyah we cannot say. An alternative explanation would be that Shaghir Bazar is a peripheral representative of the Halaf culture, while Arpachiyyah is nearer the center; it would then be possible that at the former site some cultural elements persist after they are given up in the homeland and not all phases of the culture are equally well represented.

Ubaid-like elements begin as far down as level 9, which produced a jar with pierced lug handles, body solidly painted, and a simple zone of multiple zigzags around the shoulder.<sup>134</sup> The decoration is suggestive of Ubaid painting, though not identical with that of any known Ubaid piece; nothing like it is seen in the Halaf period. Level 8 has a bowl with metope design, quatrefoils alternating with a countercharged gyron pattern;<sup>135</sup> the lanceolate leaves of the quatrefoils are Ubaid rather than Halaf in type (cf. Fig. 5:30), and gyrons of this type are characteristic of the Ubaid culture throughout Mesopotamia. Levels 7-6, though still possessing Halaf elements (e.g. the bucranium, which occurs three times in peculiar forms unknown elsewhere<sup>136</sup>), seem clearly tending toward the Ubaid culture.

There is still a third element at Shaghir Bazar, one which has not been previously encountered; it is perhaps best called "Western," for it is seen in quantity in the 'Amuq and at other West Syrian sites. From level 12 on we get a comparatively large number of bowls with simple zone designs which differ from those of most of the Halaf material found in Iraq.<sup>137</sup> It is significant that Dr. Braidwood, in looking over this material, picked as analogous to his 'Amuq finds precisely those pieces which the writer had previously selected as strange to the Halaf culture as it is known in Iraq. The Western Halaf and the Eastern Halaf, if we may thus designate the two variants, coexist from level 12 onward, and Ubaid elements also are present at least in levels 8-6.

#### TELL AL-HALAF

Publication of the final report on the prehistoric finds from Tell al-Halaf has greatly increased our knowledge of the Halaf culture in the West. Unfortunately we are still handicapped by the fact that the pottery classification is purely typological, with no indication of stratigraphic distinctions. However, several interesting factors which have chronological implications may be pointed out.

In the first place, the Early Halaf phase as we know it at Arpachiyyah seems to be lacking at Tell al-Halaf. Neither the concave-sided bowl (form 1) nor the rather globular jar (form 2) occurs in normal form,<sup>138</sup> though the squat jar of the Arpachiyyah Early Halaf is paralleled.<sup>139</sup> The characteristic motifs of the Early Halaf phase—crosshatched running lozenges (motif 1) and panel designs with waves and zigzags (motifs 2-3)—are extremely rare and never occur exactly as they do at the Iraq sites. The fairly frequent use of vertically oriented bucrania is

133. *Ibid.* p. 17.

135. *Ibid.* Pl. II 8.

134. *Ibid.* Fig. 23:6.

136. *Ibid.* Fig. 26:11-13.

137. Again the distinction is difficult to put into words. But see e.g. *ibid.* Fig. 23 for bowls of level 12, from one of which motif 21 is taken as typical.

138. Two exceptions must be mentioned in the case of the bowl; see *Tell Halaf I*, Pls. VIII 3 and XXII 14. The former has approximately the profile of form 1 but is covered with a solid wash of color, a feature which distinguishes it from the usual Halaf pottery. The latter is decorated with a painted zone of lozenges and is closer to the Iraq type.

139. Cf. *Arp.* Fig. 71:10 with *Tell Halaf I*, Pl. XII 6.

the only feature (with the possible exception of the bowls mentioned in n. 138) which might imply that the Early Halaf phase is represented at Tell al-Halaf.<sup>140</sup>

There is clear evidence of contact between Tell al-Halaf and Iraq in the Middle phase. The cream bowl (form 3) has several variants here, and squat jars with wide mouths and unformed rims (form 4) are common.<sup>141</sup> A pair of high ring bases<sup>142</sup> may be from beakers like form 6. Some of the cream bowls at Tell al-Halaf have decoration which accentuates the marked break in the profile,<sup>143</sup> but none has a double metope composition like motif 10. Motifs comparable with those of the Middle phase include egg-and-dot stippling, numerous checker patterns, and paired horizontal bucrania.<sup>144</sup> Ribbed ware also occurs (see below).

The greatest number of parallels are with vessels of the Late Halaf phase. Numerous plates comparable with forms 7-8 occur; deep bowls with vertical sides and sharp taper to the base (form 9) are common and occur in numerous variants.<sup>145</sup> Shallow vessels with designs on the "underside," probably lids, of which isolated examples occur at Arpachiyah, Hassunah(?), and Shaghir Bazar (see pp. 18, 25, and 28), are very common at Tell al-Halaf.<sup>146</sup> Ribbed ware, which is found in both the Middle and Late phases in Iraq, occurs at Tell al-Halaf both plain and with painted design over the ribs.<sup>147</sup> In design there are many parallels with the Iraq material of the Late phase. We have mentioned the occurrence of filled-checker patterns, including that with negative quatrefoils (see n. 144); such patterns, which begin in the Middle phase, are characteristic of Late Halaf. Tell al-Halaf also has the St. Andrew's cross in squares, the diaper pattern, and the fish-scale pattern.<sup>148</sup> Polychromy—bichrome and trichrome—occurs and includes the use of white stipple over dark paint. Distinction is made between polychrome specimens with lustrous paint in the technique of the Halaf monochrome-painted pottery, which are proportionately rare, and quite different mat-painted polychrome pottery.<sup>149</sup> Here presumably the typological sequence corresponds with the chronological sequence which we know elsewhere; for most of the polychrome pottery with lustrous paint bears Halaf motifs, and thus should date from the latter part of the Halaf period, while the mat-painted is of Ubaid type (see p. 58).<sup>150</sup>

We have so far discussed only what the Tell al-Halaf material has in common with the Eastern Halaf. The site also shows examples of the Western designs which we observed at Shaghir Bazar (see p. 29).<sup>151</sup>

In motifs and composition of design Tell al-Halaf has little which is new; there seems to be a greater fondness for cruciform patterns on the interiors of plates and low bowls than there is in Iraq and less inclination to divide zones into panels. The chief difference between the material from Tell al-Halaf and that from Iraq lies in the forms; although we have been able to cite numerous correspondences with Iraq, the total picture of the Tell al-Halaf pottery forms is quite different. The so-called "funnel-mouthed" vases ("Trichterrandbecher" etc.) are extremely common,<sup>152</sup> and the broken profiles and flaring mouths which characterize them are

140. Cf. *Arp.* Fig. 76:2 with *Tell Halaf* I, Pl. LIX 1, 3-4, 9.

141. See *Tell Halaf* I, Pls. VII 3, 8; X 13-15, 19-21, 24-25; XII 3-6, 8-10. For wide-mouthed jars with ledge or slightly beveled rims, cf. *Arp.* Fig. 64:7 with *Tell Halaf* I, Pl. XII 1-2, 7, 14.

142. *Tell Halaf* I, Pl. XXV 1, 4.

143. *Ibid.* Pls. VII 8 and X 15, 21.

144. *Ibid.* Pls. XLVIII 7 (stippling), XLIX 5 (simple checkers), LII 13 (filled checkers; cf. motif 12), LI 3 (filled checkers with negative quatrefoils; cf. motif 13), LIII 3-6, 8, 12 and LIX 7 (paired horizontal bucrania, some double).

145. *Ibid.* Pls. XXII 2, XXVII 14, and VIII-IX.

146. *Ibid.* Pls. XXIII-XXIV.

147. *Ibid.* Pls. XXV 3, 6, 9 and LXXXVIII 1, 3, 5-7, 9-10, 12, 14.

148. *Ibid.* Pls. LXXIX 3 (cf. motif 16), XLIX 4 (cf. motif 17), and XLIX 7-9 (cf. motif 22).

149. *Ibid.* p. 71.

150. An interesting motif is an adaptation of the Samarran fringe design (see below, p. 43), which occurs several times (*ibid.* Pls. LXIX 5, XC 14-16, and XCI 1).

151. E.g. *ibid.* Pl. X 8-9, 16, 23.

152. *Ibid.* p. 44 and Pl. VII.

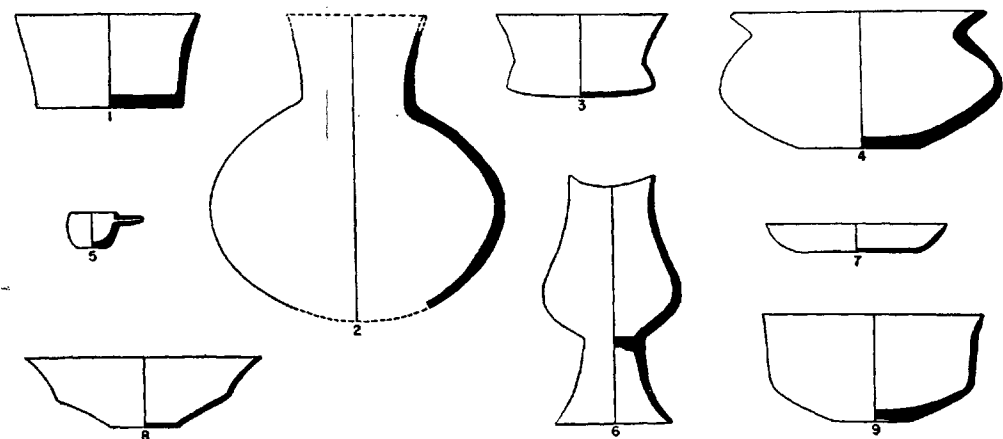


FIG. 1.—Halaf pottery forms. Scale, 1:5.83

FIG. 1

- |                          |                          |                           |                                |
|--------------------------|--------------------------|---------------------------|--------------------------------|
| 1. <i>Arp.</i> Fig. 70:1 | 4. <i>Arp.</i> Fig. 66:4 | 6. <i>Arp.</i> Fig. 65:4  | 8. <i>BASOR</i> No. 65, Fig. 2 |
| 2. <i>Arp.</i> Fig. 68:4 | 5. <i>Arp.</i> Fig. 43:2 | 7. <i>Arp.</i> Pl. XVII b | 9. <i>Arp.</i> Fig. 60:3       |
| 3. <i>Arp.</i> Fig. 62:2 |                          |                           |                                |

FIG. 2

- |                           |                           |                           |                                 |
|---------------------------|---------------------------|---------------------------|---------------------------------|
| 1. <i>Arp.</i> Fig. 72    | 7. <i>Arp.</i> Fig. 74:17 | 13. <i>Arp.</i> Fig. 66:7 | 18. <i>Arp.</i> Pl. XIII        |
| 2. <i>Arp.</i> Fig. 71:6  | 8. <i>Arp.</i> Fig. 75:8  | 14. <i>Arp.</i> Pl. XIII  | 19. <i>Arp.</i> Fig. 53:1       |
| 3. <i>Arp.</i> Fig. 71:3  | 9. <i>Arp.</i> Fig. 75:16 | 15. <i>Arp.</i> Fig. 58:4 | 20. <i>Arp.</i> Pl. XVIII       |
| 4. <i>Arp.</i> Fig. 65:3  | 10. <i>Arp.</i> Fig. 63:2 | 16. <i>Arp.</i> Fig. 60:6 | 21. <i>Iraq</i> III, Fig. 23:3  |
| 5. <i>Arp.</i> Fig. 76:2  | 11. <i>Arp.</i> Fig. 62:2 | 17. <i>Arp.</i> Pl. XV    | 22. <i>Iraq</i> III, Fig. 27:17 |
| 6. <i>Arp.</i> Fig. 74:20 | 12. <i>Arp.</i> Fig. 64:1 |                           |                                 |

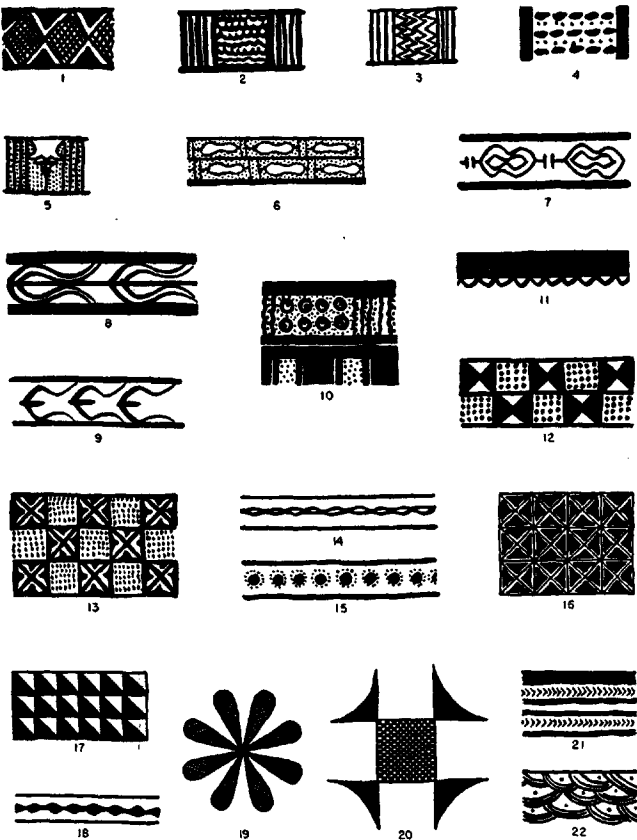


FIG. 2.—Halaf pottery motifs





not known in other Halaf pottery, except in the cream-bowl type. Bowl form 9 has numerous variants unknown in Iraq.<sup>153</sup> A type of squat jar with short, straight neck, unformed rim, and usually four lug handles<sup>154</sup> is not known among the Eastern Halaf pottery. Lug handles are not common in the East in the Halaf period but become so in the Ubaid period; possibly at Tell al-Halaf this type of vessel occurs at a time when Ubaid elements are coming in. The designs on the lug-handled vessels are of the Western Halaf type, which, it will be remembered, does not begin at Shaghir Bazar until sometime after the establishment of the Eastern Halaf there. A series of bow rims from Tell al-Halaf,<sup>155</sup> presumably from jars, also represents something unknown in the East, and Dr. Braidwood informs me that in the 'Amuq this type of rim does not occur until phase D, which represents the transition from Halaf to Ubaid. The large number of supposed lids at Tell al-Halaf is unusual; they were probably used on such vessels as the squat jars with short, straight necks already mentioned as being strange to the Eastern Halaf.

#### TELL ASWAD

Tell Aswad is a site on a branch of the Balikh River which has been tested. No intact pottery was found here, but Mallowan states that there are enough painted sherds "of T. Halaf ware and Ninevite 2 fabrics" to date the last settlement to the Halaf period.<sup>156</sup>

#### CARCHEMISH

Carchemish is still another site which presents a mixture of material. The relatively large proportion of vertically oriented bucrania and quadrupeds, often in a stippled field,<sup>157</sup> is an Early Halaf feature, but there is nothing conclusively of that phase. Paired horizontal bucrania and negative quatrefoils<sup>158</sup> suggest the Middle or Late phase. A shallow, straight-sided bowl resembling the familiar bowl with concave sides (form 1) bears a band of truncated chevrons;<sup>159</sup> this may be of Halaf date, but the motif looks suspiciously Ubaid. Since the photographs are not accompanied by descriptions of the fabrics of the individual pieces, it is difficult to decide what pieces are certainly Halaf, certainly Ubaid, or dubious. Fragments of high, hollow bases suggest footed beakers (perhaps of form 6), but the reconstruction of these bases and more particularly of the bowls which stood upon them is uncertain.<sup>160</sup>

#### OTHER SITES

The Samarra<sup>2</sup> occurrence marks the southernmost limit of Halaf pottery;<sup>161</sup> it is not found in southern Mesopotamia, which seems to have been uninhabited at the time. A few sherds occurred at Nuzi (see p. 55). Halaf-like material has been found at Şamıramaltı on Lake Van, but comparatively little has been published. Apparently the typical lustrous paint over a slip is present; one published form is a squat carinate jar with wide, flaring mouth and a band of simple chevrons.<sup>162</sup> Halaf material is not found at all in Iran, perhaps because of the barrier of the Zagros Mountains or because a well established culture existed in Iran at the time. Sherds of Halaf pottery were found by Mallowan at Tell Mefesh near the Balikh River in an Ubaid-period settlement, and probably a Halaf settlement awaits excavation there.<sup>163</sup> The purely Syrian extension of the Halaf culture is dealt with by Braidwood in his study of the comparative stratigraphy of Syria.<sup>164</sup>

153. See *ibid.* Pls. VIII-IX; only Nos. 3 and 5-6 on Pl. IX are very close to Iraq examples.

154. *Ibid.* Pl. XIII 1-7.

155. *Ibid.* Pl. XIV 3, 5, 10.

156. *Iraq* VIII 124.

157. *Iraq* I, Pl. XX.

158. *Ibid.* Pls. XX and XVIII.

159. *Ibid.* Pl. XVIII, bottom left.

160. *Ibid.* pp. 152 and 157:15.

161. We do not believe that any of the pottery from Hajji Muhammad, near Warka, is Halaf.

162. Edward Bowen Reilly, "Test excavations at Tilkitepe (1937)," *Türk Tarih, arkeologya ve etnografya dergisi* IV (1940) Fig. 11:1.

163. See *Iraq* VIII 129 and Fig. 8:7.

164. See *OIP* LXI.

## FIGURINES

A large, crudely modeled clay figure of a bird found just above virgin soil at Arpachiyah presumably belongs to the Early phase; its body is hollow, with a hole in the back, and stands on a pedestal base.<sup>165</sup> It might be considered a theriomorphic vessel rather than a figurine.

In the Middle phase at Arpachiyah appear female figurines of clay. Such objects are among the best-known products of the Halaf period. We find here two types: one, somewhat "naturalistic," occurring in rubbish found near a tholos assigned to the period of TT 10, in which the body, though crude and with sexual attributes exaggerated, is recognizably rendered;<sup>166</sup> the other, found mostly near the upper end of the Middle range, in which the body is stylized and resembles Mycenaean "fiddle-idols," only occasionally showing breasts or navel.<sup>167</sup> Some of these figures are clearly represented as pregnant; the more "naturalistic" type, depicted seated or squatting, may be intended to portray women in childbirth. Obviously these figures are allied to the large group of "mother-goddesses" and "Venuses" with whose representations the whole ancient world was populated from Aurignacian times on. Whether the figures from Arpachiyah—or any other such figures—actually represented goddesses, human beings, the principle of fertility, or whatnot we do not intend to imply; there is no good evidence to indicate the specific meaning of such objects.

Only one clay human figurine can be definitely dated to the Late phase at Arpachiyah, and it is only a torso.<sup>168</sup> The modeling is much finer than that of the earlier examples, the breasts are less pronounced, and the arms are better formed; the most noticeable feature is a Maltese cross painted on the left shoulder, perhaps representing tattooing. Painted marks of various kinds, but nowhere in so clear a design, occur on other figures of the Halaf period. A bird figurine ornamented with black paint was found in the "burnt house" of TT 6 and thus belongs to the Late phase.<sup>169</sup>

Numerous clay figurines occur unstratified at Arpachiyah; besides female figures there are several heads of horned animals, arguably bulls.<sup>170</sup>

Female figurines of clay and resembling the squatting "naturalistic" type from Arpachiyah are quite common in Halaf deposits at Tepe Gaura. Tobler describes them thus: "The type produced in that period is characterized by high, pointed knees, pinched heads, arms encircling the breasts, and by painted decoration on the head, and in bands across the neck and shoulders." Facial features indicated in paint are not known at Arpachiyah, but the latter site has so few figurines with heads preserved that we cannot be sure what was the usual practice there. Stylized examples resembling the "fiddle-idol" type also occur at Gaura,<sup>171</sup> but much less frequently.

Only one animal figurine, which possibly represents a mouse, was found in Halaf context at Gaura; strangely enough, it is in black ware, which is not known in the pottery vessels.

A clay figurine, very rough but probably representing a human being, occurs in Ninevite 2 c(?);<sup>172</sup> it is so crude that the sex cannot be determined, but it does not correspond to any of the known types of Halaf figurines. It is noticeable that two examples of the very stylized type of Halaf female figurine occur in Ninevite 3,<sup>173</sup> which does not begin until the Ubaid period.

Some clay figurines from Shaghir Bazar and Tell al-Halaf show Halaf characteristics.<sup>174</sup> At the former site a considerable number were found in level 8, all of them "naturalistic" but

165. *Arp.* Pl. V b and p. 88.

166. E.g. *ibid.* Fig. 47:3.

167. E.g. *ibid.* Figs. 46:5-6 and 45:11.

168. *Ibid.* Fig. 45:10.

169. *Ibid.* Fig. 46:3.

174. *Iraq* III, Pl. I 1-3, Fig. 5:1-4, 6-11, pp. 19 f. and 29; *Tell Halaf* I, Pl. CV.

170. *Ibid.* Fig. 48:1-5.

171. See *AOF* XII (1937-39) 170, Fig. 9.

172. *AAA* XX, Pl. LXXII 9 and p. 146.

173. *Ibid.* Pl. LXXII 1, 4.

more detailed than those of Arpachiyah. Where the head is preserved the figures frequently wear a round, turban-like headdress. The fact that several are clearly depicted as seated on little round stools constitutes possibly a further argument that they are intended to represent women in childbirth. Several are painted with simple bands around the neck, arms, legs, or breasts; whether the paint represents tattooing, ornamental cicatrices, clothing, or ornaments we cannot say.

Animal figures, some painted in the style of the Halaf pottery, occur at Tell al-Halaf.<sup>175</sup>

Two small human figures in stone found in the "burnt house" at Arpachiyah are possibly the earliest sculptures in that material from Mesopotamia. One is female, the body an almost plain rectangular block, slightly indented at the waist, with the breasts modeled and the pubic triangle incised. The head is minute, and the figure has neither arms nor legs.<sup>176</sup> The second figure, only 17 mm. high, is stated to be male, and Mallowan believes it to be Sumerian in character; the photograph is too small to be conclusive on either point.<sup>177</sup>

A female figure in stone from Tell al-Halaf<sup>178</sup> is somewhat similar in style to the stone female figure from Arpachiyah. It has an approximately cylindrical body with very crude modeling and some details of features and ornaments incised. It is broken off at the waist, and the arms, which must have extended at right angles to the body, are also broken. A second stone female figurine,<sup>179</sup> of which only the lower part of the body is preserved, is almost identical in position and modeling to the clay figures of squatting females.

### GLYPHIC

Stone "seal pendants," which are characteristic of the Halaf culture, begin in the Early phase at Arpachiyah;<sup>180</sup> they are small and generally crudely shaped objects perforated for suspension, with incised linear designs and sometimes drill holes on one or both of the faces. They were certainly used as seals, for impressions of their characteristic designs are numerous.<sup>181</sup> One seal pendant bears the square-and-St.-Andrew's-cross motif mentioned under pottery; this design occurs in Iran also, both on stamp seals and on pottery, but apparently not at so early a date.<sup>182</sup> Aside from these pendants true stamp-seal forms—plano-convex perforated objects—appear;<sup>183</sup> these bear the same type of simple linear design as the seal pendants. It may be noted that one of these stamps is made of glazed frit, the earliest known example of the use of this material in Mesopotamia.

In the Middle and Late phases at Arpachiyah the same type of seal pendant continues, but examples which can be dated to these phases are not numerous.<sup>184</sup> Two seal impressions showing different types of designs are from Ubaid levels but are apparently considered by Mallowan to belong to the Halaf period;<sup>185</sup> the first is described as "a beautiful impression of a boar," and the other was made by a small circular seal with a kind of rosette.

Stamp seals were found in Halaf deposits at Tepe Gaura, also impressions on clay, two of which have rope marks, indicating that the stamped pieces were used as sealings (and therefore presumably as marks of ownership) just as we know them to have been employed in later times. More common, however, are seal pendants like those of Arpachiyah, with linear de-

175. *Tell Halaf I* 102-4 and Pls. CVI-CVII.

176. *Arp.* Pl. X a 920 and p. 99. Mallowan says that this is better modeled than the clay figurines, but the photograph does not corroborate that statement.

177. *Ibid.* Pl. X a 921 and p. 99.

178. *Tell Halaf I*, Pl. CVIII 1-4.

179. *Ibid.* Pl. CVIII 5-6.

180. *OIP* LIX, Pls. 82:3 (seal) and 46:1 (pottery). See *SAOC* No. 23, pp. 33 ff., for a discussion of the relative dating of cultures in Mesopotamia and Iran.

181. *Arp.* Fig. 50:15, 18-19.

182. *Ibid.* Figs. 50:13, 25 (Middle) and 51:10 (Late).

180. *Arp.* Fig. 50:2, 8, 11.

181. *Ibid.* p. 98.

182. *OIP* LIX, Pls. 82:3 (seal) and 46:1 (pottery). See *SAOC* No. 23, pp. 33 ff., for a discussion of the relative dating of cultures in Mesopotamia and Iran.

183. *Arp.* Fig. 50:15, 18-19.

185. *Ibid.* p. 98 (A 609 and A 616).

signs, including the square-and-St.-Andrew's-cross motif.<sup>186</sup> These occur in the burial pit and level *d* of Area A and in level XX; a pendant found below level XIX, belonging either to that level or to XX, has a clearly engraved swastika.<sup>187</sup> Of stamp seals or impressions the soundings yielded one with linear design like that of the pendants, one with the figure of a quadruped (perhaps a stag),<sup>188</sup> and one with two superimposed animal figures facing in opposite directions. At first one might think that here is proof that stamp seals with animal design, which characterize succeeding periods in North Mesopotamia, begin in the Halaf period; but it should not be forgotten that Ubaid pottery turned up in the soundings at Gaura, and it may be that the animal-style seals also are of Ubaid date.

At Nineveh seal impressions found in two bands which in all likelihood represent a transitional phase between strata 2 and 3<sup>189</sup> are of the animal style well known in the Ubaid period (see pp. 63 f.). As we have seen, this style of glyptic art may perhaps have its beginnings in the Halaf period, but the fact that the bulk of such material is of Ubaid date seems to justify our attribution of the Nineveh examples to that period (see p. 64).

Only one seal pendant from Shaghir Bazar (level 7) is published.<sup>190</sup> A stamp seal with linear markings was found in level 8, and in level 6 one with a little rosette which resembles the rosette seal impression from Arpachiyah.<sup>191</sup> A marble cow's head from level 12 bears linear incisions on the base, and may be a seal.<sup>192</sup> An enigmatic cylinder seal from level 7 defies interpretation. It is an isolated example, no other cylinders occurring in the region until hundreds of years later; in subject and style alike it bears no resemblance to the stamp seals so frequent in the region in the Ubaid and later periods. We believe that it is either a freak or a later product intrusive in a prehistoric level.<sup>193</sup>

No seal pendants have been found at Tell al-Halaf, but several stamp seals occur.<sup>194</sup> The forms are varied—discoid, round-backed, gabled, or with separately worked suspension loop. The designs are chiefly linear; but there is one rosette, reminiscent of an Arpachiyah seal impression, also an animal figure, which has an Arpachiyah parallel.<sup>195</sup>

### STONE VESSELS

A small limestone vessel, a simple round-based form with curved sides and slightly out-turned rim,<sup>196</sup> is the sole stone vessel attributable to the Early phase at Arpachiyah. A considerable series of stone vessels comes from TT 6; besides simple rounded bowls there are several more elaborate forms. Perhaps the most notable is a jar about 15 cm. high with sharp break between shoulder and neck;<sup>197</sup> its importance lies chiefly in the fact that it is made of obsidian and is easily the largest obsidian item known from this early period. The outer surface is rough, and the inner hollow is too small to be very practical; apparently the object was made more as a tour de force than as a vessel for actual use—unless it is unfinished. A rounded bowl which may belong to the Late phase (from TT 6-5) has a sharp little inward curve just below the rim.<sup>198</sup> A notable object from the "burnt house" in TT 6 is an almost flat troughlike piece with low sides and open ends.<sup>199</sup> It is stated that in the "burnt house" such objects were asso-

186. *Tepe Gawra* II, ornament figs. 17-19 and 30-32.

187. *Ibid.* ornament fig. 56 (= *Asia* XXXVIII 537, Fig. 2).

188. *Tepe Gawra* II, seal figs. 11 and 123 respectively.

189. *AAA* XX 135-38; p. 135 and Pl. LXXXIII cannot be harmonized.

190. *Iraq* III, Fig. 7:12.

191. *Ibid.* Fig. 7:4 and 6 respectively.

192. *Ibid.* Fig. 7:33.

193. *Ibid.* Pl. I 5; see also *Cyl. Seals*, p. 228.

194. *Tell Halaf* I, Pls. XXXVIII 11-17 and CXIV 13-19.

195. Cf. *ibid.* Pl. XXXVIII 15 and 12 with *Arp.* Pl. IX a 616 and 609 respectively.

196. *Arp.* Fig. 44:11.

198. *Ibid.* Fig. 44:8.

197. *Ibid.* Fig. 44:15.

199. *Ibid.* Fig. 52:4.

ciated with little rounded bowls of the type just mentioned and with paint. Hence the excavator suggests that the combination is a painter's outfit, the flat trough being the palette and the little bowl the water-container.<sup>200</sup> A squat little jar with flat base<sup>201</sup> is somewhat similar in rim profile to the "water bowls" but is not so well made; another vessel with such a rim is the smallest stone vessel yet known.<sup>202</sup>

Several stone bowls found in undated context at Arpachiyyah are attributed to the Halaf period; they are all of the "water-bowl" type, though their base forms vary.<sup>203</sup> The chronological position of such bowls is doubtful. According to Mallowan the type occurs in the "burnt house," and we have mentioned an example from TT 6-5. One found in Ubaid context Mallowan suspects is an heirloom from Halaf times.<sup>204</sup> However, such bowls are common in the early Ubaid levels (XIX-XVII) at Gaura (see p. 62).

A miniature "water bowl" was found in the northeast base cut at Tepe Gaura. The soundings also yielded a concave-sided stone bowl, very like our pottery form 1, and another shallow bowl, with rounded sides and incurving rim. One bowl is decorated with semicircles in red paint, an unusual method of decoration for stone, suggesting the stonecutter's dependence on the potter's craft. Four stone "palettes" like those from Arpachiyyah were found in the northeast base cut, and the type also occurs in level XX; some show traces of paint.

Shaghir Bazar has no stone vessels save a "palette" (from level 10 or 11)<sup>205</sup> very similar to those of Arpachiyyah. A similar object in clay appears at Shaghir Bazar in undated context.<sup>206</sup>

An alabaster bowl with simple rounded profile and incurving rim was found at Tell al-Halaf.<sup>207</sup>

#### TOOLS AND WEAPONS OF STONE, BONE, AND CLAY

Simple flint and obsidian flakes and blades occur at Arpachiyyah, Gaura, Nineveh, Shaghir Bazar, Tell al-Halaf, Tell Aswad, and Carchemish.<sup>208</sup> Polished stone celts occur at all sites with Halaf remains.<sup>209</sup> In Arpachiyyah 6 one was found with the imprint of its wooden haft clear in the soil;<sup>210</sup> it shows that the celt was used as an ax, bound to a curved haft. A limestone object said to be a macehead was found in the same level.<sup>211</sup> Several maceheads occur at Tell al-Halaf, and that site also has some stone implements with shaft holes, probably to be considered as hammer-axes.<sup>212</sup> Pestles or grinders, usually of basalt, occur at Gaura in the burial pit of Area A and in the northeast base cut.

Bone points or awls are found at Arpachiyyah, Gaura, Shaghir Bazar, and Tell al-Halaf;<sup>213</sup> in many specimens an epiphysis is left, suitable for a handle, though Mallowan thinks it was generally built up with bitumen, for one specimen of uncertain date shows such a handle intact. Two almost flat pieces of bone from Arpachiyyah are suggested to be palettes,<sup>214</sup> and

200. *Ibid.* pp. 76 and 100.

201. *Ibid.* Fig. 44:5.

202. *Ibid.* Fig. 44:6. It is less than 1 cm. high; the catalogue measurement of .017 is obviously an error for .007.

203. *Ibid.* Fig. 44:4, 7, 9.

204. *Ibid.* Fig. 44:10 and p. 76.

205. *Iraq III*, Fig. 7:32.

206. *Ibid.* Fig. 6:19.

207. *Tell Halaf I* 120 and Pl. XXXVII 24.

208. *Arp.* p. 102 and Pl. XII b; *AAA XX* 143; *Iraq III* 22; *Tell Halaf I* 108 f.; *Iraq VIII* 126 and Fig. 13:9-18; *Iraq I* 149 f.

209. *Arp.* pp. 100-102 and Pl. VIII b; *AAA XX* 144; *Iraq III* 22; *Tell Halaf I* 109-11; *Iraq I* 149 f. and Fig. 2; *JNES IV*, Fig. 21:11.

210. *Arp.* Fig. 52:12 and p. 102.

211. *Ibid.* Pl. X c.

212. *Tell Halaf I*, Pls. XXXVI 13-25 and CXII 16-21.

213. *Arp.* Pl. XII a and p. 103; *Iraq III*, Fig. 8:13; *Tell Halaf I*, Pl. XXXVII 23.

214. *Arp.* Pl. XII a 713-14 and p. 100.

flat bone tools from Arpachiyyah and Shaghir Bazar may be potters' burnishers.<sup>215</sup> A more or less adz-shaped bone tool with a perforation in one end was found at Tepe Gaura in Area A.

Conical and biconical clay spindle whorls, in one case with incised nicks as decoration, occur at Nineveh apparently in level 2.<sup>216</sup> A conical whorl appears in Shaghir Bazar 6 or 5, and conical and biconical specimens are found at Tell al-Halaf.<sup>217</sup> Potsherds cut to a rather oval shape and apparently used as smoothers or burnishers occur at Gaura in Area A. Two nail-shaped objects of clay, with expanded heads which are slightly hollowed, were found in the same deposit; their use is unknown. A clay "palette" from Shaghir Bazar is mentioned above.

### ORNAMENTS

The Early phase of Arpachiyyah has produced a nicely cut limestone bull's head, presumably an amulet, and a five-pronged steatite pendant which might represent a hand or possibly an implement.<sup>218</sup> Another possible amulet of limestone, from the Middle phase at Arpachiyyah, represents a bull's hoof.<sup>219</sup> Two little toggle-like objects from the same phase, one of clay and the other of calcite, may be ear or nose studs.<sup>220</sup> New types of ornaments are seen in the Late phase, chiefly from the "burnt house." A reconstructible necklace combines large biconical obsidian beads of flattened cross section with cowries filled with red paint.<sup>221</sup> Numerous flat rectangular obsidian pieces whose ends are perforated from front to back<sup>222</sup> probably were sewn to cloth or leather. Besides obsidian various other stones were used for beads, steatite being the most common. Most noteworthy are "double-ax" beads, perforated down the axis dividing the "blades"; they occur no less than seven times in varying forms.<sup>223</sup> Small beads or pendants in the form of couchant birds also appear.<sup>224</sup>

Area A at Tepe Gaura yielded an obsidian object which seems to be a very stylized human figure, perforated through the head, and a marble bird figure. Obsidian pendants with two perforations apiece were found in the northeast base cut.<sup>225</sup>

A bull's-head amulet in shell, somewhat similar to the Arpachiyyah example, was found in Shaghir Bazar 13 or 12.<sup>226</sup> A marble cow's head (so Mallowan) from level 12 is of a different type; it has linear incisions on the underside, possibly indicating use as a seal.<sup>227</sup> The occurrence of these objects may be allied to the predilection for the bucranium motif on pottery. A biconical obsidian bead flattened in cross section and perforated through the ends was found in level 11.<sup>228</sup> A "double-ax" bead found in level 3<sup>229</sup> is called "almost certainly a survival from the prehistoric period"; it is similar to some Arpachiyyah specimens, except that it is perforated through one end instead of lengthwise.

Lunate pendants of clay and obsidian occur at Tell al-Halaf,<sup>230</sup> and there is a little ax-shaped amulet in stone.<sup>231</sup>

### MISCELLANEOUS

At Arpachiyyah were found five stone models of finger bones associated with one actual finger bone.<sup>232</sup> The two stone figurines mentioned on page 33 formed part of the same group, which may be cult paraphernalia or perhaps pieces belonging to a game.

215. *Ibid.* Pl. XII a 715; *Iraq* III, Fig. 8:15.

216. AAA XX, Pl. LXIX 8-10.

217. *Iraq* III, Fig. 7:15; *Tell Halaf* I, Pls. XXXVIII 23-29 and CXIII 30-35.

218. *Arp.* Pl. VI a 895 and Fig. 51:2. Mallowan suggests *ibid.* p. 95 that the latter is a winnowing fan.

219. *Ibid.* Fig. 51:6.

220. *Ibid.* Fig. 51:20-21.

221. *Ibid.* Pl. XI a.

222. *Ibid.* Pl. XI b.

223. *Ibid.* Pl. VI b, upper rows, and pp. 95 f.

224. *Ibid.* Pl. VI b, center.

225. *Tepe Gaura* II, ornament figs. 52, 63, 55, and 69.

226. *Iraq* III, Fig. 7:26.

227. *Ibid.* Fig. 7:33.

228. *Ibid.* Fig. 7:30.

229. *Ibid.* Fig. 7:1 and Pl. I 7.

230. *Tell Halaf* I, Pls. XXXVII 1-3 and CXIII 1-3.

231. *Ibid.* Pls. XXXVII 9 and CXIII 11.

232. *Arp.* Pl. X a 922 and p. 99.

An important feature is the discovery of metal in Halaf context. A little conical piece of lead was found in the "burnt house" of Arpachiyah 6.<sup>233</sup> Two fragments of copper pins from Arpachiyah whose proveniences are not stated<sup>234</sup> may be of Halaf date. The occurrence of copper and iron in the graves at Samarra<sup>2</sup> may be recalled (see p. 8). A copper bead was found in Shaghir Bazar 12 in context which the excavator believes cannot be intrusive.<sup>235</sup> Four fine copper implements occur at Tell al-Halaf: an ax blade, a spear point, a dagger, and an arrowhead.<sup>236</sup> Although they may be of Halaf date, such technologically advanced forms would be most surprising at that time.

Another significant cultural fact is that grains, stated to be emmer wheat and barley, appeared in the Halaf houses at Arpachiyah.<sup>237</sup>

At Tell Aswad animal remains found in and around a building containing Halaf-type remains include those of pig, sheep or goat, small ox, medium-to-large ox, and small *Equus*.<sup>238</sup>

## ARCHITECTURE

### TELL ARPACHIYYAH

It is stated that in the outlying area there are at least five building levels earlier than TT 10, that is, in the Early phase, but no architectural remains from these levels are described.<sup>239</sup>

Attributable to the Middle phase are remains of no less than ten peculiar buildings called "tholoi"—six in the mound proper (in TT 10-7) and four in the outlying area.<sup>240</sup> In all cases but one only the stone foundations are preserved, and it is assumed that the superstructures were of pisé. The tholoi in the mound are mostly superimposed (Fig. 3), and apparently it is these tholoi which form the basis of Mallowan's stratification, for they seem to be the sole architectural remains below level 6.

Each of the two tholoi of level 10 consists simply of a circular room, its foundations made of boulders and pieces of sandstone set in mud mortar. Each tholos has an internal diameter of 5.6 meters, with walls 70 cm. thick. Partially overlying one of these is the tholos of level 9, which has an internal diameter of 5.5 meters; its walls are 1 meter thick, and its foundations are almost wholly of rough sandstone.

Similar in form and attributed to the same levels by Mallowan are three tholoi found in the outlying area. The lowest of these (in Fc V. 1), more than 2 meters below the surface, is assigned to the time of TT 10; it is smaller than any in the mound proper, having an internal diameter of 4 meters, with walls 50 cm. thick. The other two tholoi are correlated with TT 9. One of these (in Ga IV. 4) is almost completely destroyed, only a fragment of a curving wall having been discovered; an internal diameter of about 4 meters is indicated. The third tholos (in Fd IV. 5) is 4 meters in diameter, with walls 40 cm. thick and foundations of limestone; it is said to be connected by a slight gradient with TT 9.<sup>241</sup> The criterion of depth below the surface used in dating the other tholoi is dubious, but in any case it may be assumed without too much likelihood of error that these six simple tholoi belong close together in time.

In TT 8 appears a more developed type of tholos with a rectangular antechamber or passage attached to the circular room; the plan, which continues in the succeeding level, now looks almost identical with that of Mycenaean "beehive tombs." The later tholoi are larger than the earlier ones and have much thicker walls. The circular room of the tholos in level 8 has walls 1.65 meters thick and an internal diameter of 6.5 meters or more; the total outside length

233. *Ibid.* p. 104.

234. *Ibid.*

235. *Iraq* III 26.

239. *Ibid.* p. 20. The existence of a mud-plaster face inside one of the level 10 tholoi suggested to the excavator the possibility of a building at a deeper level (*ibid.* p. 26).

240. *Ibid.* pp. 25-28.

236. *Tell Halaf* I, Pl. CXIV 23-26.

237. *Arp.* p. 15.

238. *Iraq* VIII 124.

241. *Ibid.* p. 19.

of the tholos is 19 meters. The foundations are a mixture of boulders and conglomerate. A unique tholos in the outlying area (Fig. 4)<sup>242</sup> is assigned to the same level, because of the existence of an antechamber, among other considerations. In addition to a circular main chamber and a passage leading to it, this tholos has an antechamber crossing the passage at right angles. The passage is stepped so that it narrows as it approaches the doorway of the antechamber. Aside from its plan, the building is further distinguished by being partially subterranean, cut into the natural clay, without any stone foundations; the cut faces are smoothed with white lime plaster. This pisé tholos has preserved part of the springing of a dome begin-

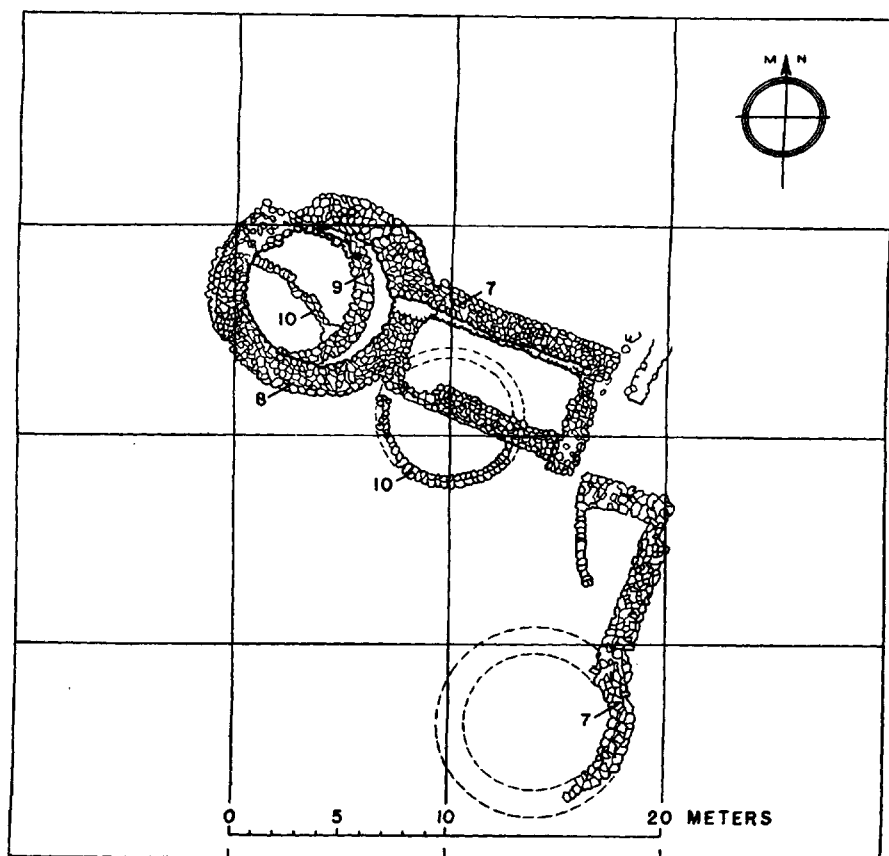


FIG. 3.—Tholoi of Tell Arpachiyah, levels 10-7. Plan of foundations. After *Iraq* II 29, Fig. 13

ning at the floor level; the highest part of the dome would be not over 1.5 meters above the floor.

Directly over the tholos in TT 8 was built another, of exactly the same dimensions, in TT 7. The pisé walls of the former seem to have been stamped down to make the floor of the new structure. A second tholos in level 7 is slightly smaller. It is 16.5 meters in total length, and the internal diameter of the circular chamber is about 6.5 meters. Both tholoi of TT 7 have foundations of boulders, conglomerate, and sandstone.<sup>243</sup>

<sup>242</sup> *Ibid.*

<sup>243</sup> The position of level 7 in the Arpachiyah stratigraphy is dubious. On the basis of "pottery with a peculiar white stippling" (not illustrated) level 7 is considered to be allied with level 6 (*ibid.* pp. 18 f.), i.e., with the Late phase. The



How the circular rooms were roofed is uncertain. They may all have been domed, since the principle of the dome was understood; but it is equally possible that some had flat roofs or none at all.

The use of the tholoi is unknown. Although, as we have stated above, they markedly resemble Mycenaean "beehive tombs" in plan, we can be virtually certain that they are not tombs. No trace of burial—either bones or associated objects—was found within any; and the fact that superstructures were leveled and new tholoi built one on top of another further indicates that these buildings are not burial places. Mallowan believes, however, that they may have some sort of religious character other than funerary (see also p. 66). Two graves (G 51 and G 53) were found against the outside of the northerly tholos in TT 7,<sup>244</sup> and an infant burial (G 52) was found below the foundations of that in TT 9.<sup>245</sup> Furthermore, numerous female figurines and fragments of painted pottery said to have been found in the rubbish adjacent to the tholos in Fd V. 2<sup>246</sup> are possibly part of its original furnishings. Hence the excavator

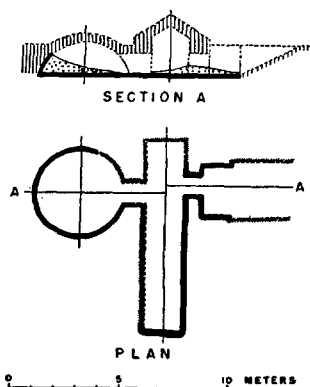


FIG. 4.—Abnormal tholos of Tell Arpachiyah. After *Iraq* II 30, Fig. 14

suggests that the tholoi are shrines, which were perhaps devoted to a cult of the "mother-goddess."

Neither the existence of adjacent burials nor the association with objects of possibly ritual character, however, may be taken as conclusive evidence for the sacred character of these buildings. Burials were frequently made beneath the floors of private houses and against the walls of older houses, and by far the majority of the female figurines seem to have been found in indubitably secular context. Also it may be objected that the furnishings of a shrine would probably have been treated with respect rather than unceremoniously dumped in the debris

evidence of the tholoi, however, links it to the Middle phase; it may best be regarded as a transition between the two phases. It is unfortunate that virtually no objects seem to have been found in the tell below level 6; almost without exception the published artifacts, including pottery, come from the outlying area. With the stratigraphic framework (the building levels) belonging to one area and the objects to another, the cultural stratification of Arpachiyah is difficult to determine.

244. See *ibid.* pp. 34 and 42, Fig. 3. It seems, however, that these burials date from TT 6 (see *ibid.* pp. 122 f.), at which time the tholoi were no longer in use.

245. *Ibid.* pp. 34 and 42.

246. *Ibid.* pp. 27 and 34. In the catalogue (*ibid.* pp. ix f., Figs. 45–47), however, not a single figurine is attributed to this tholos or its square, though three are stated to come from the filling or rubbish of the tholos in Fc V. 1. It is, of course, possible that some of the many figurines marked "T. Halaf level" or "loose in soil" may come from the rubbish adjacent to the Fd V. 2 tholos.

outside.<sup>247</sup> The fact that the stone foundations of these buildings were always respected by later builders and not reused might indicate some notion of "ritual purity" for each new structure. However, general practice in Mesopotamia in later times was to build one temple on top of another without bothering to put in new foundations each time; only when a temple was being founded in an area which formerly had been used for secular purposes was an effort sometimes made to provide a new and clean basis for the temple.<sup>248</sup>

The central position of the larger tholoi is indication that they were of considerable importance to the occupants of Arpachiyyah, whatever function they had. And probably the strongest argument for their religious character (see p. 66 for evidence from Gaura) is that it is difficult to see any secular function for them. Mallowan's suggestion that they served as strongholds to which the villagers could repair in times of war is difficult to accept, chiefly on account of their limited capacity. In no case were there more than two at one time on the mound itself, and the largest has an internal diameter of only about 6.5 meters. The outlying tholoi are all considerably smaller than this, with relatively thin walls, appearing both by position and by structure to be untenable in times of war. That the entire population of the town, even though small, could have stayed within these walls for any length of time seems improbable. Though in form the tholoi resemble "beehive dwellings" of modern times in the area, there was no trace of occupation debris in any of them.

The most important architectural feature of the Late phase (TT 6) is the "burnt house," which appears to be a potter's and craftsman's shop.<sup>249</sup> Located on the mound proper, just above the tholoi, it occupied a position of importance which seems strange for a commercial establishment. It may have been used as a dwelling as well; but the stocks of pottery and other objects, the tools, and the debris clearly indicate that at least part of its function was that of a factory. The building seems to be merely a heterogeneous collection of rooms, with no court and no traces of domestic planning. The walls and floors are made of pisé, and the roof was apparently of clay, wood, and matting. The walls, some of which are nearly half a meter thick, are faced with mud plaster. The excavator speaks of various buildings of this level, but the "burnt house" is the only one described.

A pottery kiln was discovered in TT 8. "It had a circular base less than a metre in diameter and a central pillar which probably supported a domical roof; the pots must have been stacked around the pillar. The flues and vents were probably underground, but these and the superstructure had disappeared."<sup>250</sup>

Beehive-shaped bread ovens occurred in connection with Halaf houses.<sup>251</sup> A very finely built well resting on virgin soil apparently was constructed in early Halaf times and continued in use throughout the period, the wellhead being raised twice as the level of the tell rose.<sup>252</sup>

#### TEPE GAURA

The only building completely excavated in Gaura level XX is a tholos built of mud bricks. The diameter is estimated to be between 5 and 5.25 meters, and the building has three interior buttresses or screen walls, one preserved to a height of nearly a meter. There is only one doorway, which seems to have an antechamber tangent to it. Near-by walls, incompletely excavated, suggest that the tholos is part of a larger complex.

247. The Early Dynastic period offers numerous examples of temple furnishings of older periods being carefully buried in later temples, apparently being regarded as too sacred to throw away. See e.g. *OIP* LVIII 190 f. There is no evidence at Arpachiyyah for destruction by an enemy at this time, which might account for disrespect for old shrine furnishings.

248. E.g. in the Temple Oval at Khafajah (see *OIP* LIII).

249. *Arp.* pp. 16 f. and 105 f.

250. *Ibid.* p. 175.

251. *Ibid.* p. 14.

252. *Ibid.* p. 15

## THE HALAF PERIOD

41

## TELL SHAGHIR BAZAR

Little is known about the architecture of Shaghir Bazar, although fragments of walls were found in every level.<sup>253</sup> Most are built of pisé or plain mud, but mud bricks are known from level 12 on. Level 12 has a stone trough drain also, a feature not found until much later at any other Mesopotamian site. Where bricks have been observed and measured, they appear to be rectangular; the sizes quoted are  $22 \times ? \times 7.5$  cm. in level 10 and  $23 \times ? \times 4$  cm. in level 7. They are set in mud mortar. Remains of a building with an apsidal wall nearly a meter thick, found in level 9, may represent a tholos.

## TELL AL-HALAF

A sloped citadel wall with a rock-hewn moat before it underlies in part the platform of a later palace. This stone wall, surviving to a length of at least 105 meters, is attributed—to what evidence is not stated—to the "Painted Pottery" (i.e., Halaf) layer.<sup>254</sup>

## TELL ASWAD

A building containing remains of Halaf type is built of red mud bricks ( $33 \times 33 \times 10$  cm.) which are laid in mud mortar and covered with fine white lime plaster; the floors are cemented. The building is quite small, the south outer wall being only 6.3 meters long and the rectangular rooms being very narrow. Two low mud pedestals occur, one inside the building and the other against the east outer wall. The most interesting feature is an ox skull lying on the threshold of an interior doorway.<sup>255</sup>

## CARCHEMISH

Some of the larger "kilns" resemble in plan and size the tholoi of Arpachiyah.<sup>256</sup> Their date has not been ascertained. Most of the pottery found in association is Halaf, but some is Ubaid; the "kilns" may well have been in use for a considerable period of time.

## BURIALS

## TELL ARPACHIYYAH

Four burials may be attributed to the Early phase.<sup>257</sup> All are simple inhumations, at least two in pits beneath house floors. The bodies seem normally to lie on the side in a contracted position, accompanied by gifts of pottery, ornaments, implements, etc.

Five graves were found in levels or at depths attributable to the Middle phase. One must, of course, observe great caution in dealing with graves, because it is frequently difficult to determine from what level a grave was dug. Two of the five in question (G 51 and G 53) have pottery which resembles the Late Halaf, and we are therefore attributing them to that phase. Two others (G 52 and G 59) have no associated objects; this leaves only one grave (G 58) which by contents may well belong to the Middle phase.<sup>258</sup> It appears to be under a house floor; the body is flexed and lying on the right side, and numerous gifts accompany it.

253. *Iraq* III 13–17. As to the time covered by the prehistoric levels of Shaghir Bazar, it may be mentioned that scarcely any of the levels in the sounding show walls built directly on top of preceding walls. Usually the alignment differs, and in some cases ash and debris indicate a lapse of time between occupations. We could not, of course, attempt to suggest the length of such intervals or the duration of individual building levels; but it is worth mentioning that the levels at Arpachiyah appear to be directly superimposed without any intervening accumulation of debris. This may perhaps be considered as corroborative evidence for our belief that levels 15–6 at Shaghir Bazar cover the Halaf period and the early part of the Ubaid period (see also pp. 27–29 and Table 1).

254. *Tell Halaf*, pp. 84 and 273 f. Hubert Schmidt's suggestion (*ibid.* pp. 308 f.) of a superstructure of sun-dried brick seems incompatible with the data given on p. 274.

255. *Iraq* VIII, Fig. 2 and pp. 123 f.

256. See *Iraq* I 148 f.

257. *Arp.* p. 42.

258. The exact contents of this grave are uncertain, since the text is inconsistent. The grave catalogue (*ibid.* pp. 42 f.) mentions only one painted pot (A 735, Fig. 64:9). On p. 136 this same vessel is stated to have been found with three other

## TEPE GAURA

Skeletons were found at four levels in the filling of the well in Area A (see p. 22). The lowest, 3.70 meters below the mouth of the pit, is an adult lying in a contorted position. At 3.30 meters below the mouth was found a group of nine adults whose bodies had apparently been thrown into the pit, the bones being intermingled, and 20 cm. above that is another group comprising the scattered bones of twelve adults; apparently associated with the latter group are a squat, lug-handled pot, two stone pendants, and a basalt pestle. Two more adults were found at 2 meters below the mouth of the pit, one of which is apparently a formal burial. The tightly contracted body lies on the left side with the hands to the face; underneath the body and between the hands and knees are impressions of wooden poles. The second individual is sprawled prone, giving the appearance of having been thrown in; near by are animal bones and pottery.

We have noted above that this pit seems to have been originally a well or cistern, and apparently it was used as such for an undetermined length of time. Later it was utilized as a burial pit, or perhaps more accurately, in view of the helter-skelter appearance of most of the skeletons, as a place for the disposal of bodies. The multiple "burials" suggest victims of an epidemic or perhaps of war; it may be significant that the two groups of multiple "burials" are very close together, and they may arguably represent victims of a single catastrophe.

Three graves occurred in Area A above the well, one in level *f*, and the others just below it and possibly dug down from *f*. All are simple inhumations.

## TELL SHAGHIR BAZAR

Several graves were found in Halaf levels, usually simple inhumations oriented east-west with the body in a flexed position and accompanied by gifts of pottery and occasionally other objects.<sup>259</sup>

## COMPARATIVE STRATIGRAPHY

In summary we may say that the Halaf material at Arpachiyah seems divisible into three phases: Early, material from more than about 2.5 meters below the surface in the area outside the mound; Middle, levels 10-7 in the mound and material found about 1.5-2.5 meters below the surface in the outlying area; Late, level 6 and material found about 1-1.5 meters below the surface outside the mound. No other site shows a tripartite division so clearly, but there are corroborative indications. As we have seen (p. 26), Ninevite 2c, which immediately follows the level containing Samarran pottery, has material comparable only with that of the Arpachiyah Early phase (with the exception of two sherds which might represent the Middle phase). Shaghir Bazar (see pp. 27-29) levels 15-13 contain pieces which are paralleled in Arpachiyah Early; level 12 has parallels in the Middle phase, but also elements which suggest the Late phase. Levels 11-10 are tied to Arpachiyah Late by a stone "palette" and an obsidian bead of flattened cross section. Levels 11-6 all have elements in common with Arpachiyah Late, but levels 8-6 seem transitional to the Ubaid period. The Halaf material from Tepe Gaura has numerous parallels in the Late Halaf phase of Arpachiyah, fewer in the earlier phases. The few Halaf pieces at Samarra<sup>3</sup> seem Early Halaf in type (see p. 25). For the published Hassunah material, most of the parallels are in the Middle and Late phases, with

\_\_\_\_\_ painted vessels and some sheep ribs in a votive deposit. The depths of G 58 and of this votive deposit are each given as 1.7 m.; but the grave is placed in "Sq. Fc V. 2," the deposit in "Fc V. 1." Fig. 3 locates the grave in Fc V. 2. On p. 143 the same four vessels are listed as from "Fb V. 1" at 1.6 m. depth!

259. *Iraq* III 17 f.

Late type material beginning in level VII (see pp. 25 f.). Since this is early in the sequence of Hassunah levels, it appears that the phases represented at Arpachiyyah are here telescoped somewhat, but the small amount of material published makes it undesirable to theorize on this point. The few published pieces from Tell Brak suggest Arpachiyyah Early and Late (see p. 27). Tell al-Halaf has parallels in the Middle and Late phases, but only slight indication of Early type material (see pp. 29 f.). Carchemish seems to have sherds of all three phases (see p. 31).

#### SOURCE AND EXTENT OF THE HALAF CULTURE

We have seen (pp. 14 f.) that the Samarran pottery style continues in use in the early part of the Halaf period, and there are also several instances of the adaptation of one characteristic Samarran motif by Halaf painters. The Samarran fringe design commonly appearing inside bowl rims—a row of suspended triangles with a zigzag pendent from their apexes and groups of two or three fringe lines drawn from the zigzag<sup>260</sup>—has been adapted into a motif which has been likened to a row of dancing girls with linked arms. The zigzag may be filled in to form bodies; the fringe lines may be thickened to resemble legs; dots may appear in the free spaces between the “arms”; or a band may be placed below the motif to form a zone. These variants all seem to be far outside the true Samarran style; the utilization of dots is suggestive of Halaf practice, and one such motif found at Tell Judaidah is in lustrous paint. Their classification with the Halaf pottery seems therefore quite reasonable.<sup>261</sup>

The place of origin of the Halaf culture is a matter of considerable dispute. Iranian influences are noticeably lacking, so that Iran is out of the question. What happened in the mountainous area north of Iraq and of eastern Syria we do not know precisely; this area has frequently been suggested as the homeland of Halaf pottery, perhaps because it has been less explored than any of the neighboring regions. Halaf material has been found at Şamramaltı, but what has been published from that site looks peripheral rather than central. As we have seen, the culture could not have originated in southern Mesopotamia. Western Syria and southern Anatolia, the home of the great burnished-ware culture, have never yielded any good Halaf assemblages. On the basis of the material now known, either of two centers of origin seems possible. One is the Mosul region of northern Iraq, and the other is the Khabur region of eastern Syria.<sup>262</sup>

The usual assumption of origin in the region around Tell al-Halaf is probably due to the fact that the characteristic pottery was first found there; one is unconsciously influenced by priority in discovery. However, in view of our present knowledge it is difficult to believe that

260. E.g. *Samarra* V, Pl. XIX 58–59; cf. *JNES* III, motif 200.

261. Other adaptations of the motif are seen at the following sites:

Arpachiyyah (*Arp.* Fig. 77:19), from level 10 or earlier.

Gaura (*AASOR* IX 70, Fig. 45), an unstratified piece from a trial trench. The stipple fill makes the motif almost unrecognizable.

Tell Brak (*Iraq* IX, Pl. LXXX 1–2). We do not know the fabric; these may be Samarran pottery.

Shaghir Bazar (*Iraq* III, Fig. 27:23–24). The latter is from level 7.

Tell al-Halaf (*Tell Halaf* I, Pls. LXIX 5, XC 14–16, and XCI 1). The first four are said to be in lustrous paint; the last, perhaps the farthest removed from the original Samarran motif, Dr. Braidwood identifies by paint and general appearance (on the colored plate) as Ubaid polychrome ware.

Til Barsib (F. Thureau-Dangin and Maurice Dunand, *Til-Barsib* [Paris, 1936] Pl. XXXVI 27).

Sakçagözü (*AAA* XXIV, Pl. XXV 1).

262. Complete publication of the Tilki Tepe (Şamramaltı) material may, of course, change the whole picture by showing that the Halaf culture there is much more specialized and highly developed than the evidence yet published indicates. In that case an Armenian origin for the Halaf culture would be as arguable as a Khabur- or Mosul-area origin. In the light of the currently available material, however, Armenia seems less likely than either of the other areas.

the type of material found at Tell al-Halaf is the norm and that of the Mosul area derivative, for the peripheral character of the Western assemblages tells against the likelihood of that area's being the focal point of a great culture. The differences in character of the Western and Eastern assemblages are brought out by the following features: (1) Western assemblages are not as consistent as Eastern ones. For instance, pottery from Arpachiyyah, Tepe Gaura, Nineveh, and Hassunah shows less variation from site to site than pottery from Shaghir Bazar, Tell al-Halaf, and Carchemish. (2) Eastern assemblages show a clearer sequence; technical qualities, forms, and designs indicate a constant progression from earlier strata to later ones. This might, of course, be accidental, since the manner of excavation of the Eastern sites has given us on the whole better stratification than that of the Western sites. (3) Eastern assemblages are more highly developed than Western ones. Nowhere in the West is there anything comparable to the fine polychrome plates of Arpachiyyah 6. If it is objected that no other Eastern site shows anything of such high caliber, it must likewise be admitted that some of the Tepe Gaura material comes closer to that of Arpachiyyah 6 than does any of the Western material. The fact that we know more in general about the Eastern sites must be taken into consideration in evaluation, but it is fruitless to speculate on how the total picture might change if we had more complete information.

The situation may be analyzed as follows: in northern Iraq we find a characteristic type of pottery stratified in a logical developmental sequence at one site (Arpachiyyah) and comparable material at other sites (Nineveh, Hassunah, and Tepe Gaura) which in no way contradicts, and partially confirms, that sequence. We find in this area no trace of influence from any other source, save at the very beginning (at Nineveh and at Hassunah, where some elements of the preceding phase continue) and at the very end (at Gaura, where elements of the following culture appear). In the Khabur area, however, there is a less complete and less well developed sequence of pottery, with the elements which we have called Western added to those known in the East. Logically, therefore, northern Iraq seems more likely to have been the original home of the Halaf culture. As possible corroborative evidence we may mention other instances in these early periods of movements of cultural elements from East to West. Samarran pottery, which is certainly of eastern origin, is found as far west as the Euphrates (Baghouz), and possibly derivative pieces occur still farther west (Tell Judaidah and Sakçagözü; see p. 14.). Later the Ubaid culture, originating in Iran, spread to the Mediterranean. Of comparable movements of culture eastward into northern Iraq there is considerably less evidence. Western elements in the Hassunah culture have been mentioned above (see p. 15), but in the Halaf period the Western type of pottery design seems not to have penetrated east of the Khabur.

The two areas show the greatest similarity in their pottery at the beginning of the Halaf period. However, in the latter part of the period they share many elements of design which would scarcely have been independently conceived in each—for example, the negative quatrefoil, the various filled-checker designs, the numerous developments of the bucranium. Other types of objects also are found in both areas—lineally incised stamp seals and seal pendants, similar types of figurines, bull's-head amulets, troughlike "palettes," flattened biconical obsidian beads, and "double-ax" beads. These facts seem to indicate continuous, or at least frequent, contact between northern Iraq and the more western sites.

To recapitulate, it seems to the writer that the Mosul area is likely to be the approximate original home of the Halaf culture and that from that area its influences went out in several directions. The physical barrier of the Zagros Mountains and the cultural barrier of the already highly developed Iranian cultures prevented the penetration of the Halaf culture into Iran.<sup>263</sup>

263. But cf. *SAOC* No. 23, pp. 33–35. We cannot accept McCown's belief in Halaf elements in Iran.

The lack of settled habitation in southern Mesopotamia prevented its extension into that region; as far south as Samarra<sup>7</sup> we know that it did go. Northward it spread at least as far as Samramaltu. We know that its products occur in quantity all around Mosul and through the Sinjar region across to the Khabur and the Jabal ‘Abd al-‘Aziz. Still farther west to the Balikh, to the upper Euphrates (at Carchemish), to western Syria (the ‘Amuq and Ra’s al-Shamrah), and to the gates of Anatolia the Halaf culture extended. The cultural influences emanating from northern Iraq weaken as one goes toward the periphery: the Khabur material is a good deal like that of northern Iraq, while that of the westernmost sites is much less close.

Having presented our view, we may point out that the ultimate origin of this or any other culture can never be determined with certainty (in the present state of our knowledge not even with any high degree of probability). All we can do is to indicate the various possibilities and to set forth those factors which in our opinion make some of them more attractive than others.

### III

#### THE UBAID PERIOD

##### THE NORTH

**W**E ARE here dealing with a period which is represented in both northern and southern Mesopotamia; since the remains in the two areas are in many respects different, it seems advisable to discuss them separately. For the North our information comes for the most part from the following sites:

Tepe Gaura: levels XIX–XII, also some unstratified material from the two soundings at the base of the mound. This is the best stratified site and is considered as the type site.

Tell Arpachiyyah: levels 5–1 in the tell and a cemetery. Virtually all the published material comes from the graves.

Nuzi: levels XII–X in pit L4.

Tell Hassunah: levels XI–XIII.

Nineveh: Ninevite 3, at least in part.

Grai Resh: levels IX–VI, with level V transitional to the Gaura period.

Tell Shaghir Bazar: probably levels 8–6.

Tell al-Halaf: some material from the prehistoric deposits.

Tell Mefesh: an Ubaid-period settlement tested in a survey.

##### POTTERY

###### TEPE GAURA

###### LEVELS XIX–XVII

The pottery from levels XX–XVII is considered as a unit in the final Gaura publication, although Tobler makes it clear that two different culture periods are represented. Most of the level XX pottery is in the Halaf style, and we therefore consider XIX–XVII as the first unit of the Ubaid period, although it must be remembered that level XX contains some Ubaid pottery (see p. 24).

Halaf painted pottery persists in these levels, but only in small quantity. One especially interesting piece from XIX is a cream bowl (Halaf form 3; see Fig. 1) with a design which is almost identical with that of a cream bowl from the Early or Middle Halaf phase at Arpachiyyah.<sup>1</sup> Disk-based cups with sinuous sides, which begin in XX, remain characteristic of the Halaf painted ware through XVIII.

The coarse undecorated ware which begins in XX also persists through level XVII, although the bulk of it is found in XX–XIX. The floor of a simple shallow bowl from XVIII has deeply incised concentric circles,<sup>2</sup> and fragments of similar bowls are found in other strata of this group. A short-necked storage jar found below level XIX contained an infant burial.<sup>3</sup> A few sherds with incised decoration occurred in XIX.

The characteristic pottery of levels XIX–XVII is handmade monochrome-painted ware

1. Cf. *Tepe Gaura* II, pottery fig. 73, with *Arp.* Fig. 63:1.

2. *Tepe Gaura* II, pottery fig. 75.

3. *Ibid.* pottery fig. 82.



similar to the Ubaid pottery of South Mesopotamia. Technically this ware shows a distinct decline from the Halaf painted pottery. The fabric is coarser, even gritty, with large white particles often visible; in color it is buff, light brown, green, or greenish gray. It is still well baked (especially the greenish-gray vessels), though it is not so hard as before. Little surface treatment is observable. The black, brown, or red paint is dull and flaky. Motifs are simple and uninspired—chevrons (Fig. 5, motifs 1–2), “arrows” (motif 3), wavy lines (motifs 7 and 25), rows of triangles (motif 17), ladders (motif 24), vertical zigzags (motif 26), “butterflies” (motif 37), circles, and crosshatched bands being among the favorites. Frequently they are roughly drawn. Some Halaf motifs—cables, checkers, fish scales, and stippling—continue to be used by the Ubaid painters; but it is noteworthy that some of the most characteristic and distinctive Halaf motifs, such as rosettes, quatrefoils, “Maltese squares,” bucrania, dotted circles, and bands of connected dots, appear rarely if at all. There is now a new concept of design; the decoration is simpler with less complete coverage of the surface, relying for its effect on the combination and contrast of open background and painted design rather than on repetition and close association of different motifs. The conception of the background as an integral part of the design, instead of dead space against which designs are painted, is an aesthetic advance; but it must be confessed that the level of achievement of this new conception is not high.

Handles, generally pierced lugs, are more common than in the Halaf period and occur especially on jar shoulders. Small jars are often pierced through the upper shoulder, with a slight thickening around the orifice; tubular spouts are found only on a peculiar class of lenticular vessels.

Forms are relatively few and simple. Bowls are particularly common, and bell-shaped bowls (Fig. 6, form 1) are new and characteristic.<sup>4</sup> This type of bowl is especially distinctive because of its decoration, which is usually vertically oriented, consisting typically of a number of panels extending from a band around the rim to another band just above the rounded base. Solidly painted panels, sometimes with a ladder in the center (motif 27), are popular; sometimes between these heavy panels smaller motifs—waves, chevrons, cables, etc.—run vertically. Some of the bell-shaped bowls have horizontal zone designs around the exterior just below the rim instead of vertical panels. Interrupted design, in which the continuity is broken at intervals in the zone (as in motif 15), begins in these levels and continues through XV. Tobler comments on the lack of interior decoration on these flaring bowl rims and suggests that the bowls were meant to be viewed upside down; a bowl from XVII with the figure of a man drawn in “stick-figure” technique and oriented upside down<sup>5</sup> lends support to this theory. Besides the bell-shaped bowls, simple bowls of approximately hemispherical form (form 3) are common.<sup>6</sup> They show no distinctive decoration, but usually have horizontal rim zones (often interrupted) with simple motifs such as single or double waves, zigzags, reversing triangles, and crosshatched pendent triangles (motifs 6, 9–10, 16). A bowl with inturned rim (form 4) occurs in level XVIII,<sup>7</sup> and the form continues in later levels. A rather hemispherical bowl with simple interior decoration just below the rim was found in level XVIII,<sup>8</sup> and this type also continues.

Squat jars,<sup>9</sup> usually similar to or variants of form 7, occur mainly in levels XVIII–XVII; they are usually light green in color with brown or bistre paint. Design is in a simple broad zone on the upper body and includes motifs 1, 9, 24, and 26 as well as crosshatching. A jar more like form 6 has a zone with motif 11, which also occurs in the South (cf. Fig. 11, motif 12). Some heavy rim fragments, presumably from jars, have an inner ledge which is perfo-

4. *Ibid.* pottery figs. 83–92.

5. *Asia XXXVIII* 540, Fig. 11.

6. *Tepe Gawra II*, pottery figs. 93–98.

7. *Ibid.* pottery fig. 100.

8. *Ibid.* pottery fig. 99.

9. *Ibid.* pottery figs. 101–8.

rated; such rims occur in levels XIX–XV. Long-necked jars<sup>10</sup> with squat or globular body (e.g. form 9), the neck usually straight but sometimes flaring and occasionally inturned, are less common. Motifs 1, 6–7, 9, 17, 26, and 28 are found on such vessels.

Undoubtedly the most unusual and interesting type of vessel from these levels is a lenticular, hole-mouth form with a long, tubular, bell-mouthed spout;<sup>11</sup> three complete specimens and various fragments were found. The shape bears not the slightest resemblance to any known elsewhere in the North, and the decoration is equally distinctive. Dark paint covers the major part of the upper surface, leaving in reserve panels or bands in which small patterns are painted. Zigzags (single like motif 9 or multiple), extended chevrons (motif 11), rows of triangles (motif 17), and crosshatching are commonly used. It may be noted that an example of this type of vessel from al-ʿUbaid in South Mesopotamia is in the University Museum at Philadelphia<sup>12</sup> and that other specimens are known from Abu Shahrain (see p. 75). More or less boat-shaped scoops with rectangular horizontal section<sup>13</sup> represent another unusual form; they range from XVIII to XVI.

Decorative motifs from these levels include 1–4, 6–7, 9–20, 24–34, 36–38, 40, and 42, also cables, checkers, fish scales, stippling, and crosshatching. The herringbone pattern occurs in level XVIII, and an interesting piece from level XVII has a “Maltese square” within a circle.

#### LEVELS XVI–XV

The pottery of these levels comprises the second subdivision of the Ubaid ceramics, and the vessels on the whole continue fabric, forms, and designs of levels XIX–XVII. There is only a handful of Halaf pieces; a cream-bowl fragment with a design in lustrous paint on the interior rim as well as on the exterior, a sherd with white stipple, and a polychrome sherd<sup>14</sup> with animal design are interesting. The coarse undecorated ware which begins in level XX has ceased, but undecorated vessels of the regular Ubaid fabric are fairly common.

Ubaid monochrome-painted ware in general shows a decline in quality from that of the preceding levels; the number of shapes is reduced, and the designs become even more stereotyped. Long-necked jars, lenticular vessels, and bell-shaped bowls have disappeared; spouts, handles, and inner-ledge rims are rare. All pottery is still handmade. The fabric is typically brown or light brown, although green and yellow-green pieces are quite frequent; slips occur occasionally, but wet-smoothing is more common. Many of the nicer motifs used in the preceding levels do not occur, and the execution in general is crude. Some new motifs have been added, of which motif 35 is an example; this shows a technique more common in level XIII, in which a reserved area contains painting. (A similar practice was used for the lenticular vessels of XIX–XVII.)

Bowls of forms 3 and 4 are common, inturned rims being characteristic of these levels. Motifs used in horizontal zones on such bowls include 1, 9 (sometimes interrupted), 15, 26, and various wave and scallop patterns. Some vessels called “cups”<sup>15</sup> are in the main similar to the bowls but tend to be deeper and straighter in profile. Level XV has a form<sup>16</sup> very similar to the beakers which characterize level XIII, quite possibly intrusive.

Jars<sup>17</sup> usually have globular bodies, rounded bases, and wide, flaring necks. One from level XV has a zone in which crosshatched panels alternate with panels containing a reserved circle with a gyron pattern (motif 34) inside.<sup>18</sup> There are still squat jars like those of levels XIX–XVII, but they tend to have more rounded profiles; several have overhanging rims. One from

10. *Ibid.* pottery figs. 109–11.

11. *Ibid.* pottery fig. 113 (= *Asia XXXVIII* 538, Fig. 5).

12. No. 15738. Tobler mentions it in *Tepe Gawra II*; see p. 77 below.

13. See *Asia XXXVIII* 538, Fig. 7.

14. *Tepe Gawra II*, pottery fig. 123.

15. *Ibid.* pottery figs. 137–44.

16. *Ibid.* pottery fig. 143.

17. *Ibid.* pottery figs. 148–59

18. *Ibid.* pottery fig. 148.

XVI with a paneled zone shows the "butterfly" motif (motif 37), and one from XV has a zone of opposed scallops which create a negative cable effect.<sup>19</sup> An unusual jar from XV with almost heart-shaped body and sharply flaring neck is solidly covered with lustrous red paint, and a squat jar or pot in gray ware has a red wash or slip.<sup>20</sup> Two scoops like those of XIX-XVII occur in level XVI, and in XV there is a miniature pot with basket handle.<sup>21</sup>

Motifs from these levels include 1, 4, 8-10, 12-13, 15, 20-21, 26, 30-31, 34-35, 37, and 41, also wave and scallop patterns, fish scales, and forked motifs.

#### LEVEL XIII<sup>22</sup>

Level XIII stands quite apart from any other level, although recognizably Ubaid in character. Halaf elements have by this time completely disappeared.

The pottery is technically and artistically at its highest level since Halaf times. It is still handmade. The fabric may be light brown, brown, or red, but shows an increasing tendency to green and greenish gray. All is well fired, the green vessels being particularly hard; the white tempering material usual in earlier levels diminishes. Wet-smoothing and slip, usually buff or cream, become somewhat more popular; some poorer pieces are burnished to render them less porous, but burnish is never used as decoration. New forms and new painted motifs appear, and there are rare examples of new methods of ornamentation—ribbing, incision, and appliqué.

The most popular bowl form has rounded sides and a fairly definite shoulder, although simple bowls like form 3 persist. A carinate bowl with sides concave above the carination resembles forms from Arpachiyyah, mostly of the Late phase.<sup>23</sup> A new form is a large flaring bowl with almost straight sides (form 2), which is also paralleled at Arpachiyyah.<sup>24</sup> Ring bases, which are characteristic of succeeding levels, begin here. Short tubular spouts occur on a few bowls, one of which is covered with a bright red, burnished slip.<sup>25</sup> Bowls have, on the whole, fairly coarse and simple designs, but two are significant. One is the interior design on the large bowl of form 2: a great sweep of paint curving across one side of the vessel, leaving a "scallop" in reserve, and on the opposite side two large contiguous scallops. Such designs, characterized by broad sweeping lines and curves, with relatively large areas of surface left free, and lack of conventional motifs, occur at Arpachiyyah on the same bowl form (see p. 52). The other significant design is a "sprig" motif, found on a simple hemispherical bowl.<sup>26</sup> This peculiar motif is typical of levels XIIA and XII (see p. 51). Somewhat deeper than bowls are "cups"<sup>27</sup> much like those of XVI-XV; the entire exterior of one<sup>28</sup> is covered with two great horizontal zigzags, a design which in size and boldness reminds one of the great sweeping curves on the large bowl of form 2. Another cup is solidly painted outside except for a band at the rim.<sup>29</sup>

The most distinctive ceramic type of level XIII is the beaker (e.g. form 10).<sup>30</sup> There are differences in profile,<sup>31</sup> but almost all the beakers are quite gently curved with a slightly flaring rim; a few have a carination near the base. The height varies from about 6.5cm. to three times that much. All are carefully made, with thin walls, and well fired; green, red, and brown are the

19. *Ibid.* pottery figs. 152 and 151 respectively.

20. *Ibid.* pottery figs. 157 and 135 respectively.

21. *Ibid.* pottery fig. 160.

22. No objects are attributed to level XIV. It may be noted here that a well in which some important objects were found was originally attributed to level XIV (*BASOR* No. 70 [April, 1938] p. 6) but is now known to have been dug from above the top of XIV, and the contents are therefore now attributed to level XIII.

23. Cf. *Tepe Gawra* II, pottery fig. 171, with *Arp.* Fig. 31:6.

24. Cf. *Tepe Gawra* II, pottery fig. 179, with *Arp.* Fig. 32.

25. *Tepe Gawra* II, pottery fig. 185.

26. *Ibid.* pottery fig. 184.

27. *Ibid.* pottery figs. 187-94.

31. See *BASOR* No. 66, Fig. 10; *BASOR* No. 70, Fig. 3.

28. *Ibid.* pottery fig. 187.

29. *Ibid.* pottery fig. 192.

30. *Ibid.* pottery figs. 195-209.

usual fabric colors, and many vessels are wet-smoothed or slipped in cream, buff, or some other light tint. Brown, bistre, and black are common colors for the painted decoration. Besides the ordinary painting technique in which the pattern is outlined in paint, we find the reserved technique, in which the pattern is left in the light ground color while the background is blocked out with paint. The latter is used earlier but is much more common in XIII and occurs on all kinds of vessels; sometimes painted motifs occur within the reserved areas. Beakers are frequently decorated with horizontal zones containing large and boldly painted motifs such as lozenges, checkers, zigzags, plain bands. A new motif found here (motif 39) consists of "flowers" which look somewhat like the "arrows" of motif 3 save for their heavier bases. One beaker has large swags in reserve in a solidly painted ground, another has pendent triangles (motif 14), and two have designs based on vertical lines.<sup>32</sup> A panel design with reserved triangles<sup>33</sup> is considered by Tobler to be architectonic, and he would connect it with the niched walls of the temples of level XIII and with an incense burner found in the Eastern Shrine (see p. 69). The incense burner has seven rectangular "doors" cut in its walls, a triangular "window" cut out above each "door," and a pair of deep vertical grooves between each two "door-and-window" groups.<sup>34</sup>

Jars are not common, and no two have closely similar shapes.<sup>35</sup> Two specimens with slightly outrolled rims resemble form 5, while others have narrower and taller necks; one or two resemble form 7 but have more definitely modeled rims.<sup>36</sup> One specimen has herringbone incision on the upper body, and two jars are entirely covered with horizontal ribs whose edges are nicked.<sup>37</sup> An unusual jar has two mouths, and there is a basket-handled vessel reminiscent of that in XV.<sup>38</sup>

The motifs of level XIII do not follow the usual scheme. In many cases an old motif is changed and elaborated considerably. Many which were originally vertical are now oriented diagonally, and triangle and lozenge rows usually have negative designs within the larger units. Motifs include 1, 4-5, 9, 12, 14, 18, 20, 22-26, 29 (with scallops on only one side), 30, 34, and 36-39, also checkers, plain bands, patterns based on vertical lines, and perhaps a cable. Less susceptible of cataloguing are the very large zigzags, either in plain bands or with elaborate fill, the large reserved swags, and the bold curves on the bowl of form 2.

#### LEVELS XIII-XII<sup>39</sup>

These are the last levels to contain painted pottery in any abundance and mark the end of the Ubaid period. Here for the first time there is enough material for types and subtypes to be represented by numbers of vessels instead of isolated pieces. This increase is due partly to the large number of urn burials found, but there is also an increase in the amount of pottery found in occupational debris.

Some of the pottery is handmade, but the tournette is rather widely employed. A coarse, thick fabric is common, and sand is apparently the only tempering material. The color is most commonly green, but light brown and red-brown occur. All is well baked, some (especially the green) almost vitrified; distorted vessels whose walls are crumpled as a result of over-firing are peculiar to these levels. Surface treatment becomes more common; the brown vessels are often slipped, and the green wet-smoothed. There is a notable increase in the amount of

32. *Tepe Gawra* II, pottery figs. 199, 201, 203, and 205 respectively.

33. *Ibid.* pottery fig. 204 (= *BASOR* No. 66, Fig. 6).

34. *Tepe Gawra* II, pottery fig. 228.

35. *Ibid.* pottery figs. 210-24.

36. *Ibid.* pottery figs. 210-11, 214 (perhaps intrusive), and 216.

37. *Ibid.* pottery figs. 217-18 and 220.

38. *Ibid.* pottery figs. 221 and 225 respectively. It may be noted here that basket handles are fairly frequent on Ubaid pottery in the South.

39. Most of the material comes from level XII.

undecorated pottery, but decorated vessels are still predominant. Design reverts to the old style of levels XIX–XV; few motifs originating in level XIII and little of the originality manifest in the decoration of the XIII pottery continue. A few ribbed pieces are found.

Bowls of form 3 are present, and round-based, shouldered bowls like those of XIII are still common in XIIA but appear only sporadically in XII. These in profile resemble form 4 but have a faint carination to emphasize the slope toward the rim; one bears motif 22.<sup>40</sup> Several shouldered bowls are decorated with the “sprig” motif (motif 23) and belong to a peculiar ceramic class characterized by this one motif painted in black or brown over a red slip. This type of decoration, which is relatively frequent in these two levels, does not resemble any decoration known in earlier Ubaid levels; a red slip as background for painted decoration is particularly unusual. It is therefore suggested by Tobler that the “sprig”-decorated pottery is imported, perhaps from the Iranian highlands, while Speiser had previously pointed out a parallel from Shaghir Bazar<sup>41</sup> (see also p. 58).

The outstanding feature of these levels is the ring base, which appears on all types of vessels, but especially on bowls. Ring-based bowls form the largest and most typical group of bowl forms, one of the characteristic classes of these levels; some have sharp carination, and one is concave above the carination. The more shallow of these have interior designs, one bearing a very elaborate pattern based on the “Maltese square.”<sup>42</sup> Deeper examples have their decoration in zones around the exterior. An unusual decorative feature is an animal figure modeled in clay and attached to the floor of a bowl.<sup>43</sup> Flat-based bowls are rare and are all undecorated.

Fine beakers like those of level XIII are now unknown, but deep ring-based “cups” are fairly common and are sometimes used as burial urns. There are two footed chalices,<sup>44</sup> a form which has not been seen since Halaf times. Deep pots with fairly vertical sides are common and often used as burial urns. They are quite large as a rule and more often plain than painted. They are well baked, usually of a green or greenish-gray fabric. Characteristic of these levels are “U-shaped” pots, whose name is almost self-explanatory; they have rounded bases, nearly vertical sides, and small overhanging rims. A subclass has a very slightly curved profile, slanting a little toward base and rim, and sometimes a pronounced ledge on the exterior just below the rim. When these pots bear painted designs, the painting is usually inferior; one noteworthy example bears a “sprig” design.<sup>45</sup> Pots with more pronounced shoulders, flaring rims, and ring bases are by no means as common as the U-shaped pots; but short-necked, almost globular pots which are sometimes spouted are popular. Several of the spouted pots are in a very coarse, gritty fabric, presumably a domestic, “cooking-pot” ware.

Storage jars become common for the first time; the forms are quite homogeneous, all having rounded bodies and bases and short, fairly constricted necks. The painting is very simple, with running lozenges, rows of triangles, “butterflies,” hourglasses, checkers, waves, etc. being used rather indiscriminately. Small jars, plain or painted, are usually globular with rounded bases and short, quite straight necks. There are two narrow-necked bottles, one red-washed with crosshatched incision on the shoulder.<sup>46</sup> Shallow bowls with perforated bases, presumably funnels, begin in XIIA but are not common until XII; several other vessels with perforations in various places occur, and there is a basket-handled vessel.<sup>47</sup>

The following painted motifs are known: 7–8, 17–18, 22–23, 29, and 37, also running lozenges, swags, a “Maltese square,” hourglasses, checkers, and—most unusual—a pattern of swimming ducks.<sup>48</sup>

40. *BASOR* No. 62 (April, 1936) Fig. 3.

41. *BASOR* No. 68 (Dec. 1937) p. 9.

42. *Tepe Gaura II*, pottery fig. 251.

43. *Ibid.* pottery fig. 275. This provides evidence against the idea of a foreign origin for “sprig”-decorated pottery, for the U-shaped pot is a typical Gaura XIIA–XII shape with no foreign analogues.

44. *Ibid.* pottery fig. 318.

45. *Ibid.* pottery fig. 323.

46. *Ibid.* pottery fig. 265.

47. *Ibid.* pottery figs. 270–71.

48. *Ibid.* pottery fig. 252.

## TELL ARPACHIYYAH

The pottery of the Ubaid period at Arpachiyyah comes almost exclusively from a cemetery,<sup>49</sup> only a few published pieces being from the building levels in the mound. Apparently the houses contained the same sorts of pottery as the graves, though it is stated that on the whole the pottery from the graves is inferior to the other.<sup>50</sup> We could wish that the house material were published more fully, for with it we might succeed in solving the problem of the cultural sequence at Arpachiyyah. Since there is no superposition of graves in the cemetery, the sequence of its ceramic material cannot be determined. However, a small group of graves and some deposits of pottery apparently associated with them appear very close to the surface, while the majority of the graves are considerably deeper. The excavator believes that the "subsurface" material is sufficiently different in style from that of the deeper graves to mark an Early and a Late phase of the Ubaid period.<sup>51</sup> Unfortunately some of the most significant Arpachiyyah features are not found at all at Gaura, whereas those elements which present the best stratigraphic evidence at Gaura are not all present at Arpachiyyah. In general the Arpachiyyah material seems poorer, with a far less extensive design repertoire than that of Gaura.

Bell-shaped bowls (form 1) are present at Arpachiyyah, but only one has vertical panel design (cf. motif 27),<sup>52</sup> which is typical of this type of bowl at Gaura (see p. 47); otherwise the Arpachiyyah examples all bear horizontal design zones on the exterior just under the rim, a feature known at Gaura in connection with the bell-shaped bowls but more common for bowls of other shapes. Interrupted design is frequent on these Arpachiyyah bowls, and designs are generally small and relatively fine.<sup>53</sup> These bowls all belong to the Early group with the possible exception of the one with vertical panel decoration (see p. 55, n. 85). The other bowl shapes form an unbroken series from the flaring-profile through the almost vertical-sided (form 3) to the inturned-rim (form 4). The bowls are all fairly deep; there may be a slight carination in the profile, or there may be a continuous curve from rim to base. Bases are most commonly round but in the carinate bowls may be flat instead; the carinate, flat-based forms are much more frequent in the Late than in the Early group.<sup>54</sup> Bowls with flat bases and straight, sharply flaring sides (form 2) are exclusively Late; these bear unusual decoration—broad sweeping bands, usually curving asymmetrically, over the interior while the exterior is plain or decorated with a single zone.<sup>55</sup> One hemispherical bowl with a grooved rim has a zone design on the interior, none on the exterior;<sup>56</sup> similarly decorated bowls are found at Gaura in levels XVIII and following (see p. 47). Heavy rims sloping toward the inside appear on other Arpachiyyah bowls;<sup>57</sup> one of the latter, belonging to the Late group, has a small tubular spout just beneath the rim. Deep, flat-based bowls with more or less sinuous sides (similar to form 10) are mostly of the Late group.<sup>58</sup> Two of them bear a type of design which is characteristically Late: the major part of the surface is covered with paint, and a narrow zone or a sweeping curve is left in reserve. Such "light-in-dark" painting is closely allied to the reserved style characteristic of Gaura XIII (see p. 50), but Arpachiyyah, with two exceptions,<sup>59</sup> does not show painted motifs within reserved areas.

Jars with rounded or occasionally carinate bodies, wide mouths, and short, flaring necks (form 5) occur in both groups but are more common in the Early group.<sup>60</sup> Squat jars with bulging bellies (form 7), known at Gaura in levels XIX–XV, appear almost exclusively in the

49. See *Arp.* pp. 12 f.

50. *Ibid.* p. 65.

51. *Ibid.* Fig. 29:1–2, 4–5. It should be mentioned here that forms may be assumed to belong to both the Early and the Late group unless otherwise specified.

52. See *ibid.* Figs. 26–31.

53. See *ibid.* Fig. 32.

54. *Ibid.* Fig. 29:7.

55. E.g. *ibid.* Fig. 30:5–6.

56. *Ibid.* pp. 65–70.

57. *Ibid.* Fig. 38:2.

58. *Ibid.* Figs. 31:5–6 and 36:1–2.

59. *Ibid.* Fig. 37:4–5.

60. *Ibid.* Figs. 33:5–6, 9; 34:6; 35:3; 39:3; and 41:19.

Late group at Arpachiyah. As at Gaura they are decorated with a single broad zone or (more rarely) multiple narrow zones on the shoulder, usually edged with a broad band at the point of greatest diameter. Some of these vessels have pierced lugs;<sup>61</sup> but the lugs are restricted to the Late group, although at Gaura they appear from the earliest levels. One of the lugged jars bears a peculiar design somewhat suggestive of the Gaura "sprig" pattern. Allied to these jars but with better formed necks and shoulders and usually more distinct carination are squat jars of forms 6 and 8.<sup>62</sup> Several unusual specimens belong to the Late group. One well shaped example has the whole upper body covered with brownish-purple paint save for round "medallions," each filled with a painted rosette.<sup>63</sup> Another has a metope design of groups of small vertical "leaves" (cf. motif 30) alternating with larger single "leaves" oriented diagonally.<sup>64</sup> Three jars of the Late group have very sharp carination, once with profile slightly concave below it. They bear "light-in-dark" designs.<sup>65</sup> The most peculiar jar<sup>66</sup> is very squat, with an outrolled rim, and is completely covered with a plum-red slip except for a narrow zone on the shoulder which bears a solid cable framed by half-cables. This jar is further ornamented with groups of little knobs worked up out of the body clay along the point of greatest diameter. This unique piece was found in a grave with a typically Ubaid jar (form 9),<sup>67</sup> but the body in this grave was supine and extended, the sole example of extended burial at Arpachiyah.<sup>68</sup>

Long-necked jars of form 9, known at Gaura in levels XIX–XV, are present here too;<sup>69</sup> they are mostly round-based and decorated with a single design zone on the shoulder just beneath the neck or covering the whole upper body. Two such jars with great "festoons" sweeping across the design zone<sup>70</sup> exemplify the apparent predilection of the Arpachiyah painters for bold curved design. Two jars of the Late phase are flat-based and painted in the "light-in-dark" technique, one with a plain horizontal band in reserve, the other with a great curved reserved band sweeping from base to neck.<sup>71</sup> An unpainted jar of the Early group has an ovoid body and a long neck with funnel mouth.<sup>72</sup>

Two vessels of unusual shapes are attributed to the Late group. One is a beaker<sup>73</sup> comparable in form with some of the beakers from Gaura XIII; its decoration is in the "dark-on-light" technique and consists of a metope design of "butterflies" alternating with groups of wavy vertical lines. The other unusual vessel<sup>74</sup> is a large globular urn with hole mouth; the rim has an inner ledge which is perforated vertically, a feature occurring not infrequently in Gaura XIX–XV (see pp. 47 f.). The urn bears a narrow design zone filled with motif 7.

A crude theriomorphic vessel in the form of a dove is of the typically Ubaid greenish fabric decorated with black paint and is tentatively attributed to the Ubaid period.<sup>75</sup> A miniature bowl with ring or hollow base is painted with a flower-like motif and dots,<sup>76</sup> a design which does not look at all Ubaid. A sherd with the figure of a recumbent animal modeled in relief shows an unusual form of decoration.<sup>77</sup>

We have said that Arpachiyah has a paucity of motifs as compared with Gaura. A type of

61. *Ibid.* Fig. 34:1, 5.

62. E.g. *ibid.* Figs. 34:3 and 36:7.

63. *Ibid.* Fig. 37:5.

64. *Ibid.* Fig. 34:3. Diagonally oriented motifs are quite common in southern Mesopotamia.

65. *Ibid.* Fig. 36:3, 7–8 (the last from G 18). We attribute the vessels from G 18 to the Late phase on the basis of style, although by depth that grave belongs to the Early phase.

66. *Ibid.* Fig. 37:4.

68. *Ibid.* p. 39, G 21.

67. *Ibid.* Fig. 35:10.

69. See *ibid.* Figs. 35–36.

70. *Ibid.* Fig. 35:1, 6. One of the carinate jars (*ibid.* Fig. 37:2) bears a somewhat analogous design, which is quite in congruous with the marked break in the profile.

71. *Ibid.* Fig. 36:4–5.

73. *Ibid.* Fig. 33:10 and p. 63.

72. *Ibid.* Fig. 39:11.

74. *Ibid.* Fig. 38:1.

75. *Ibid.* Fig. 42:14 and pp. 74 f. The catalogue (*ibid.* p. viii) states that the piece was found in a Halaf level.

76. *Ibid.* Fig. 42:2.

77. *Ibid.* Fig. 48:10.

ornamentation rather commonly found at Arpachiyyah—namely sweeping bands and curves either painted or in reserve—is rare at Gaura. Arpachiyyah frequently uses a much heavier line than does Gaura in motifs such as 6 and 8; single plain broad bands also are common at Arpachiyyah. However, the designs are sometimes very small and precise, especially on bowls with flaring profile.

In summary we have the following characteristics for the Early group: bell-shaped bowls (form 1) common, frequently with interrupted designs; jars of forms 5 and 6 rare; only one bulging-bellied squat jar (form 7); long-necked jars (form 9) frequent; designs tending to be smaller and finer than those of the Late group. The Late group has all the bowls with flaring sides (form 2) and interior design; possibly one bell-shaped bowl (form 1); the majority of the sinuous-sided, flat-based bowls (similar to form 10); most of the carinate, flat-based bowls; the great majority of the jars including the bulging-bellied variety and a few with long necks (form 9); “light-in-dark” painting; a general fondness for bold, simple motifs, although small precise ones still occur; no interrupted designs; in general finer and more careful shaping of the vessels, with clearer distinction of parts; virtual monopoly of flat bases, formed rims, handles, and spouts.

As to technical characteristics of the Arpachiyyah Ubaid painted pottery, Mallowan states<sup>78</sup> that it is inferior in quality to the Halaf ware, coarse in texture and rough in surface, with slip very infrequently used. The surface is rarely burnished, and the mat paint often adheres poorly; firing apparently was not so well controlled as it was in the latter half of the Halaf period. It is also interesting to note that the clay used for the vessels is different from the fine ferruginous material used by the Halaf potters at the site, a further indication of a break in continuity between the two cultures at Arpachiyyah (see also p. 21). The color of the fabric varies from light drab to greenish, that of the paint from black through brown to greenish; apparently red paint on pinkish surface is unknown. The Early pottery is said to be of coarser clay and to show inferior firing, though the decoration exhibits careful workmanship.<sup>79</sup>

Unpainted pottery is stated to be scarce in proportion to painted, though not so scarce as it is in the Halaf period.<sup>80</sup> The forms are all simple, mostly rounded bowls and jars; perhaps the most interesting is a very roughly made double-mouthed jar of light pinkish fabric.<sup>81</sup> A few unpainted pieces come from the building levels in the mound—a rough miniature bowl from TT 5, two shallow flaring bowls and a round-bottomed jar with fairly narrow neck from TT 4, and a large urn with flaring neck and small ring base from TT 3.<sup>82</sup> The last mentioned is the most important, for it is the only complete example in gray burnished ware from the site. Mallowan considers that it is related to Ninevite 3 urns of gray burnished ware, but the two forms bear little resemblance to each other.<sup>83</sup>

There are stated to be other pieces of gray burnished ware besides the urn mentioned above. Red burnished sherds also occur, the majority belonging to “flat bowls of *Nin. 3* type”;<sup>84</sup> since Ninevite 3 shows several bowl forms, this is not an explicit description. The appearance of red and gray burnished wares and of one sherd which is gray burnished on one side and red burnished on the other suggests connections with the South and with Ninevite 3 and 4.

We must now see whether the Arpachiyyah material can be fitted into the stratified sequence revealed at Gaura. Bell-shaped bowls (form 1), which are common in Gaura XIX–XVII, are Early at Arpachiyyah with one possible exception; but only one from Arpachiyyah has vertical panel decoration, which is characteristic of such bowls at Gaura, and it is the one of dubious

78. *Ibid.* pp. 64 f.

79. *Ibid.* p. 69.

82. *Ibid.* Figs. 41:4, 39:5–6, 40:3, and 40:5 respectively.

83. *Ibid.* p. 71; cf. AAA XX 163 and Pl. LI 12.

84. *Arp.* pp. 71 f.

80. *Ibid.* p. 70.

81. *Ibid.* Fig. 41:18.



date.<sup>85</sup> Bowls of form 2 are Late at Arpachiyyah and confined to level XIII at Gaura. Squat, bulging-bellied jars (form 7), which at Arpachiyyah occur almost exclusively in the Late group, are found mainly in levels XVIII–XVII at Gaura; however, the jars of the two sites are by no means identical. Jars of form 9 occur predominantly in the Early group at Arpachiyyah and are found in Gaura XIX–XVII. Carinate, flat-based bowls, most of which are Late at Arpachiyyah, resemble beakers of Gaura XIII (form 10); and the one Arpachiyyah beaker belongs to the Late group. The bowl with tubular spout resembles in form one from Gaura XIII (see pp. 49, 52). Details do not correlate well; for pierced inner-ledge rims occur in Gaura XIX–XV, while at Arpachiyyah this type is common apparently in the Late material,<sup>86</sup> and pierced lug handles, which are Late at Arpachiyyah, occur as early as level XIX at Gaura. The “light-in-dark” painting of the Arpachiyyah Late group suggests the reserved technique of Gaura XIII, and both have similar bold, sweeping designs.

It seems reasonably clear that the Late phase of Arpachiyyah is connected with Gaura XIII. Nothing in the Late group is suggestive of the Gaura XIX–XV range with the exception of the form 7 jars and the form 1 bowl with vertical panel decoration (if it is Late), and in both cases the evidence is not conclusive. The form 9 jars and the majority of the form 1 bowls are early at both sites; at Arpachiyyah interrupted designs are Early, and at Gaura they seem to be confined to levels XIX–XV. It therefore seems likely that the Arpachiyyah Early material fits somewhere in the Gaura XIX–XV range, although it probably covers a shorter span of time. In view of the lack of boat-shaped scoops and lenticular vessels and the scarcity of bell-shaped bowls with vertical panel decoration at Arpachiyyah, we believe that the Early material is closer to the end than to the beginning of the Gaura XIX–XV range.

#### NUZI

This site, near Kirkuk, has yielded a little material of Ubaid type. Three test pits were sunk beneath the historic levels in order to determine the sequence of the early cultures, but only one (in L4) revealed Ubaid pottery. Levels XII–X in this pit all contain painted sherds of normal Ubaid fabric and design,<sup>87</sup> including motifs 1, 6–7, 10, 19, 26, and 33–34. Rosettes in reserved medallions are almost identical with those on a jar from Arpachiyyah, and another rosette resembles one known in ‘Amuq phase D.<sup>88</sup> Broad, curving bands<sup>89</sup> suggest designs of the Late phase at Arpachiyyah. A polychrome piece with a red and a black band is said to have been found.<sup>90</sup> Occasional sherds of Halaf painted pottery occur,<sup>91</sup> but there are so few that it seems unlikely that Nuzi was occupied by the Halaf people, at least in the area tested. Shapes of the Ubaid painted pottery are not too well known, but there are rims which might belong to any of the Ubaid jar forms.<sup>92</sup> Level X yielded a complete jar of form 9,<sup>93</sup> but it has a black surface, with the entire body covered with raked incisions. An inturned-rim bowl like form 4 was found in level XA (between XI and X) along with two others, whose sides bend inward more sharply.<sup>94</sup> Decoration on bowls is usually in zones below the rim, not infrequently with the main design inside the vessel if the profile is flaring; jar necks may be painted solidly.<sup>95</sup>

85. Mallowan puts it in the Late group, apparently on the basis of its broad, heavy design, but we believe it is more probably Early for the following reasons: It was found in grave 49, which was intrusive into TT 7; all other examples of form 1 from Arpachiyyah are Early; analogy with Gaura suggests an Early date.

86. The type is said to be “common in TT and in the surface levels” (*Arp.* p. 67); the only example illustrated is Late (*Ibid.* Fig. 38:1).

87. See *Nuzi*, pp. 591–96 and 601, Pls. 47–48. These plates show Ubaid sherds from the near-by site of Kudish Saghir also; since the material from that site is not stratified, we are not including a discussion of it in the text.

88. *Ibid.* Pl. 48 EE and GG (cf. *Arp.* Fig. 37:5) and FF.

89. *Ibid.* Pl. 48 M–N.

90. *Ibid.* pp. 595 f.

91. *Ibid.* Pl. 48 HH and the “orange-red paint group” described on p. 594.

92. *Ibid.* Pl. 43 G, I, T.

93. *Ibid.* Pl. 43 A.

94. *Ibid.* Pl. 42 H, K–L.

95. *Ibid.* pp. 592 f.

Along with the painted pottery comes a considerable amount of pottery with incised decoration, showing linear incision (often in herringbone pattern), combing, and fingernail impressions.<sup>96</sup> Such types of decoration are not found in association with Ubaid painted pottery at other stratified sites, but we cannot doubt their association here. A short-necked, round-bodied pot of coarse reddish ware with rows of incision on the shoulder<sup>97</sup> comes from level X and resembles a form which is popular in Gaura XIII–XII (see p. 51).

Knobbed pottery is not as common as incised but occurs in levels XII–XA. The fabric is usually of medium texture and buff in color; the surface is wet-smoothed, and small knobs are applied more or less evenly over the body. The only recognizable form is a double-mouthed pot.<sup>98</sup> This type of pottery is not found elsewhere in Ubaid context<sup>99</sup> but occurs in later levels at Nuzi (see p. 165) and in the Diyala region from Early Dynastic III to Akkadian times.<sup>100</sup>

Ribbed pottery, represented at Nuzi by two sherds,<sup>101</sup> occurs at Gaura in Ubaid context (see pp. 50 f.). A few pieces of gray burnished ware were found at Nuzi, also red burnished and red-painted or -slipped wares.<sup>102</sup> Gray burnished ware is found also at Arpachiyah and in Ninevite 3 (see pp. 54 and 57), and red wares occur in Gaura XV and XIII, at Arpachiyah, in Ninevite 3, and at Grai Resh (see pp. 49, 54, and 57 f.).

#### TELL HASSUNAH

Levels XI–XIII represent the Ubaid period. Again, as with the Halaf material, we are handicapped by lack of information on the Hassunah pottery. The only illustrated material<sup>103</sup> shows rims from bowls and a few which may be from squat jars of form 6; beyond that we can say nothing as to forms. Many good Ubaid motifs occur, including 4 (rough), 6, 8–10, 14, and 26. A sherd bearing a “Maltese square” in a circle is paralleled in Gaura XVII (see p. 48). Another sherd seems to have a vertical panel arrangement like motif 27 but without the ladder in the center. The small amount of published material permits very little deduction as to comparative dating, but apparently no definitive feature of the Gaura XIII–XII range is found at Hassunah; from present indications we may suspect that occupation of the mound ceased before the time of Gaura XIII and was not resumed until the Assyrian period.

#### NINEVEH

Ninevite 3 exhibits some features which suggest an Ubaid date. The pottery is almost confined to bowl rims; some of these, showing a groove or a slope toward the inside,<sup>104</sup> remind one of Ubaid material from Arpachiyah (see p. 52). Four infant burials in gray burnished urns occur in Ninevite 3; there is one such burial at Arpachiyah (G 22), but the gray burnished urn is too fragmentary to reconstruct.<sup>105</sup> At Gaura, urn burials become common in level XIV and are the most popular type in level XII (see p. 71). A ribbed piece from Ninevite 3 may be connected with those of Gaura XIII–XII (see pp. 50 f.), although the Ninevite example is in gray burnished ware.<sup>106</sup> Painted pottery is almost nonexistent in Ninevite 3, but a sherd of the hard-fired greenish fabric with mat black paint which is typical of the Ubaid period was picked up at Nineveh by Dr. N. C. Debevoise. Although the sherd is a surface find, its presence at the site at least suggests the existence of Ubaid remains somewhere in the mound. Ninevite 3 yielded baked clay sickles of the Ubaid type well known in the South, seal impres-

96. See *ibid.* pp. 598–601 and Pls. 44–46. These plates also include some material from Kudish Saghir.

97. *Ibid.* p. 601 and Pl. 43 B.

98. *Ibid.* p. 598.

99. One jar from Arpachiyah (Arp. Fig. 37:4) has groups of four little knobs around the belly.

100. See *OIP* LXIII, where such pottery is called “studded ware.”

101. *Nuzi*, p. 600 and Pl. 44 P–Q.

104. *AAA* XX, Pl. XLIX 31–32 (grooved) and 18.

102. *Ibid.* pp. 595, 597 f., and 601.

105. *Ibid.* p. 163 and *Arp.* p. 39.

103. See *JNES* IV, Pls. XX 2 and XXI.

106. *AAA* XX, Pl. XLIX 24 and p. 164.

sions comparable with Ubaid impressions from Gaura and Arpachiyyah, and clay female figurines of a type which begins in the Halaf period and continues through the early part of the Ubaid period (see pp. 61 and 64).

With all this evidence we have a right to postulate at least partial contemporaneity between Ninevite 3 and the Gaura-Arpachiyyah material which we have been discussing.<sup>107</sup> On the other hand, correspondences between Ninevite 3 and the "Uruk" levels at Grai Resh (cf. p. 170) suggest that the former persisted into the period following the dominance of the Ubaid culture. The use of the fast wheel (see p. vii) in Ninevite 3 also suggests that possibility, since it was not used at either Gaura or Arpachiyyah in the Ubaid period. The two fabrics characteristic of Ninevite 3 and the beveled-rim bowls (see below) are paralleled in the Warka period in the South,<sup>108</sup> another indication of post-Ubaid date for part of Ninevite 3.

There are two fabrics in Ninevite 3, a dark gray burnished ware which occasionally varies to jet black and a "plain" ware, presumably light in color. The gray ware has as typical forms round-based bowls, either deep or shallow, with wide mouths and slightly outturned rims and squat, markedly carinate, round-based pots with outturned rims.<sup>109</sup> The burial urns mentioned above are of the latter form. Most of the gray pottery is made by hand or on the slow wheel, but a few pieces show the use of the fast wheel. The "plain" ware seems to be more common and shows a greater number of forms. There are numerous pots or large bowls with what Mallowan calls "club-headed" rims, a general term for heavy ledge rims or rims which are slightly sloped but too rounded to be called beveled; such rims often have a small concavity inside forming a little ledge just below the mouth.<sup>110</sup> There are also fairly deep bowls, mostly of light buff fabric, with grooved rims,<sup>111</sup> those from the lower part of the stratum being handmade, the later ones wheelmade and sometimes pebble-burnished. Deep vessels with nearly vertical sides<sup>112</sup> suggest the burial urns of Gaura XIIA–XII (see p. 51) or the beakers of Gaura XI–IX (see p. 167). A similar bowl type has a plain outrolled rim with a groove under it.<sup>113</sup> Rolled, grooved, and ledged rims<sup>114</sup> resemble those of bowls of Gaura XI–IX (see p. 167). Another bowl type has very thin concave walls and a very sharp carination.<sup>115</sup> Lastly there are the famous "votive bowls," flat-bottomed, shallow bowls with straight, flaring sides and beveled rims, always handmade and very coarse; they are frequently found overturned. Level 3 examples are not illustrated, but the type is said to begin in 3 although it is more characteristic of 4.<sup>116</sup>

One piece of a handmade vessel with a bright red burnished slip occurs in Ninevite 3.<sup>117</sup>

#### GRAI RESH

Very little pottery from this site has been published.<sup>118</sup> Ubaid painted pottery is said to characterize levels IX–VI and to occur in level V, which is considered transitional.<sup>119</sup> The painted pottery is said to be "exactly that which occurs between Levels VIII and XIII" at Tepe Gaura.<sup>120</sup> Unpainted bowls whose bases are scraped with a flint implement have Ubaid counterparts in the South (see p. 82). A ribbed piece recalls the ribbed vessels occurring in Gaura XIII–XII (see pp. 50 f.). The unpainted pottery in general is buff with cream slip or pink to orange with slip of the same clay; "by far the most common shape is a round-bottomed jar

107. In spite of Mallowan's frequent attempts to prove connection between Arpachiyyah and Ninevite 3, we think that no close connections between the sites have been demonstrated.

108. See p. 97 for definition of "Warka period" as used in this study.

109. AAA XX, Pl. LI 13 and 12 respectively.

110. *Ibid.* Pl. XLIX 9, 14, 28–29, 38, 42.

111. *Ibid.* Pl. XLIX 31–32.

112. *Ibid.* Pl. XLIX 26, 31.

113. *Ibid.* Pl. XLIX 30.

114. *Ibid.* Pl. XLIX 3, 15–16

115. *Ibid.* Pl. XLIX 4–5.

116. *Ibid.* p. 168.

117. *Ibid.* p. 164.

118. See *Iraq* VII, Pls. II–III.

119. *Ibid.* pp. 15 and 19.

120. *Ibid.* p. 19; but cf. *Iraq* V 132

with a deep almost vertical neck and plain rim."<sup>121</sup> Pink fabric with polished red slip seems to occur only in a type of spherical jar with widely outturned rim. A "smeared" red wash is said to be fairly common, and both double-mouthed pots and "corrugated" ware are claimed. The comparisons with Gaura suggest that levels IX–VI belong to the latter part of the Ubaid period.

#### TELL BRAK

No Ubaid strata have been excavated at Brak, but Ubaid pottery has been found in various places in the site. A bowl of form 3 with an interrupted horizontal zigzag is definitely Ubaid.<sup>122</sup> A nearly globular jar with zones of various scallop motifs in red and black<sup>123</sup> might belong to the same period, although the neck and outrolled rim are not features common in Ubaid pottery. We suspect that certain "prehistoric" sherds,<sup>124</sup> some of which are identified as Halaf, belong to the Ubaid class of polychrome pottery. The "sealing-wax red slip ware" with black painted designs which was found in some quantity beneath the earliest Eye Temple platform has Ubaid-like designs and apparently shapes also (bowl and jar rims),<sup>125</sup> and its description resembles that of the "sprig"-decorated pottery of Gaura XIIA–XII (see p. 51). A conical clay object<sup>126</sup> found underneath the Eye Temple platform may be a pottery vessel of the "coronet" type known from Telloh (see p. 81), or it might have been used architecturally like the rows of jars in the Anu ziggurat at Warka (see p. 110).

#### TELL SHAGHIR BAZAR

Monochrome-painted pottery of Ubaid type is not found at Shaghir Bazar, but Ubaid polychrome pottery occurs in levels 7–6 (see p. 28). This suggests that the polychrome pottery is earlier than the monochrome and that occupation at Shaghir Bazar ceased temporarily before the introduction of Ubaid monochrome-painted pottery at other sites. The sequence is indicated by the 'Amuq stratification, where Ubaid polychrome pottery begins in phase *D* while Ubaid monochrome-painted ware characterizes phase *E*. Unfortunately, Ubaid polychrome pottery is not found in stratified context elsewhere in Mesopotamia.

#### TELL AL-HALAF

We have mentioned above (p. 30) the existence of mat-painted polychrome pottery of Ubaid type at Tell al-Halaf. The amount of this pottery found cannot be definitely ascertained, because the publication does not as a rule specify whether polychrome pieces have lustrous or mat paint; but the polychrome pieces with lustrous paint, which are presumably of the Halaf style, are said to be rare.<sup>127</sup> It seems justifiable to assume that all polychrome vessels without Halaf analogies belong to the Ubaid polychrome class.

Bowls seem to be the most common forms, especially a variety with inturned rim and rounded sides which taper markedly to a small flat base;<sup>128</sup> this shape is closer to the deep bowls of the Halaf period (Fig. 1, form 9) than to any Ubaid form. Some simple inturned-rim bowls (Fig. 6, form 4) appear.<sup>129</sup> There are large, wide-mouthed pots or "kettles" and small, squat jars<sup>130</sup> such as are not known in Iraq, although one example of the latter resembles form 7.

Motifs include 1, 9–10, 13, 14 (interrupted), 16 (solid), 17, 18 (with various kinds of fill), 19,

121. *Iraq* VII 19 and Pl. III, Fig. 7:12.

122. *Iraq* IX, Pl. LXXX 12.

123. *Ibid.* Pl. LXIX 7.

124. *Ibid.* Pl. LXXX 3–5, 7–11.

125. *Ibid.* Pl. XLIV 1–2, 5–8, 10–11.

126. *Ibid.* Pl. XLIII 6.

127. *Tell Halaf* I 71.

128. *Ibid.* Pls. XXVI 2, 4, 8, 10–12; XXVII 1–4, 7–8, and probably 9, 11, 13.

129. *Ibid.* Pl. XXVI 13 and perhaps 15; perhaps Pl. XXVII 12.

130. *Ibid.* Pl. XXVIII 1, 3 ("kettles") and 4–5, 7 (jars).

21, 26 (paneled), and 37. There are also large swags, fringed lines like motif 28 but curved, and joined quatrefoils.<sup>131</sup>

Monochrome-painted pottery which is definitely Ubaid in character is also found at Tell al-Halaf. It has been separated on typological grounds from the bulk of the painted pottery from the site and is considered to represent a decline in the painted-pottery art.<sup>132</sup> The fabric is either dirty greenish white or red in color, with a good deal of straw temper; slip is rarely used, and technique has degenerated in many ways from that of the Halaf pottery.

There are bowls of forms 1 and 3-4, squat jars similar to form 7, and globular jars of form 9.<sup>133</sup> Besides these forms, which are common in Iraq, there are rims which must come from very shallow plates,<sup>134</sup> perhaps similar to a form known in the South (cf. Fig. 9, form 2), and a straight-sided cup or beaker.<sup>135</sup> There are grooved rims such as are found at Arpachiyah and in Ninevite 3, though the shapes of the vessels are different;<sup>136</sup> and there are also numerous rims with a perforated ledge on the inside, presumably to hold a lid.<sup>137</sup>

In designs as well as in forms the Ubaid monochrome-painted pottery of Tell al-Halaf is similar to that of Iraq. The motifs include 1 (also double chevrons filled with hatching), 6 (also double and in broad ribbon-like line), 8 (also pendent wave), 9 (also double zigzag filled with hatching), 14 (interrupted), 16 (also double row), and 18 (with solid lozenges, crudely painted).<sup>138</sup>

An interrupted design of lozenges occurs, and numerous designs make use of fringed lines.<sup>139</sup> Heavy swag patterns are somewhat similar to Arpachiyah "festoon" designs.<sup>140</sup> Considerable use is made of simple bands, narrow or broad.<sup>141</sup> Bowls have one design zone or more than one on the exterior and occasionally plain bands or small motifs on the inside just below the rim. Jars show a broad design zone on the upper body.

The Ubaid monochrome-painted pottery from Tell al-Halaf cannot be precisely dated in terms of the Iraq sequence, but it seems related to that of the Gaura XIX-XV range; after that time the prehistoric settlement at Tell al-Halaf seems to have come to an end, although isolated finds comparable with materials of later periods occur.<sup>142</sup>

Ribbing, linear incision with a tool, and fingernail impressions are all found at Tell al-Halaf,<sup>143</sup> and it will be remembered that pottery decorated with linear incision and with fingernail impressions is found in association with Ubaid pottery at Nuzi (see p. 56). A fragmentary bird-shaped vessel, unpainted, is similar to one from Arpachiyah.<sup>144</sup>

#### TELL MEFESH

Tell Mefesh, near the Balikh River, has recently been tested in a survey and has yielded Ubaid material between the 5-meter and 14-meter contours of the mound, with Halaf material

131. *Ibid.* Figs. 89 and 98, Pls. XXVI-XXVIII. Dr. Braidwood informs me that the vessels shown *ibid.* Pls. XXVI 15 and XXVII 1, 3, 5 are comparable with 'Amuq D examples and that other pieces paralleled in 'Amuq D are shown on Pls. XCII 1, 3, XCV, and XCIX 3-4, 7-8. For an adaptation of the Samarran fringe motif in Ubaid polychrome see Pl. XCI 1 (see above p. 43, n. 261).

132. *Ibid.* pp. 88-93.

133. See e.g. *ibid.* Pls. XXXII 12 (called a lid) for form 1, XXXI 1 (=C 1) for form 3, XXXI 7 for form 4 (upper part only), XXXI 10 (=C 2) and XCIV 1 for jars similar to form 7 (and Figs. 121-23 for rims which may belong to the same type), XXXI 14 (=C 5) for form 9.

134. E.g. *ibid.* Fig. 120.

135. *Ibid.* Pl. XXXII 9. The excavator calls this the Susa type of beaker (p. 93), but we can see no close resemblance.

136. *Ibid.* Figs. 119-20; cf. *Arp.* Fig. 31:8 and AAA XX, Pl. XLIX 31-32.

137. *Tell Halaf I*, Figs. 124 and 133. Similar rims occur at Gaura and Arpachiyah (see above pp. 47 f. and 53).

138. See *ibid.* Pls. XXXI 2, 4, 7, 13 and CII 1-2, 4 (=XXXII 8), 5-8; Figs. 85, 114-15, 129.

139. See *ibid.* Pls. XXXI 1 and XXXII 1, Fig. 117.

140. *Ibid.* Pl. XXXI 8, 10, 12, 14; cf. *Arp.* Fig. 35:1, 6.

141. E.g. *Tell Halaf I*, Pl. CII 2, 6-8.

142. E.g. *ibid.* Pl. CI 8, which, according to Dr. Braidwood, has parallels in 'Amuq F.

143. See *ibid.* Pl. LXXXVIII.

144. *Ibid.* Fig. 136; cf. *Arp.* Fig. 42:14 (head painted).

apparently existing beneath in levels as yet untouched.<sup>145</sup> Both monochrome-painted and unpainted pottery have been found. Bowls of a shape similar to form 1 but with less tapered bases seem to be the most common, but bowls similar to forms 3 and 4 and jars of form 9 also occur.<sup>146</sup> The clay is drab or greenish, and the mat paint is black, reddish brown, or bright red. The exteriors of bowls of form 1 bear either a single broad design zone, which may be divided into parts, or several narrow ones. Plain horizontal bands, chevrons (motif 2), and a zigzag (motif 9) occur. A triangle row like motif 17 has the apexes pointing down, and there is small triangular fill in the alternating plain spaces. "Flowers" (motif 39, with variants) occur in zones or vertical panels. Cross hatched panels resemble motif 22 but lack the plain vertical bordering lines, and a zone of crosshatched hourglasses occurs. Birds with crosshatched bodies and open heads in which the eye is represented occur on two specimens. A jar of form 9 has a zone of hatched running lozenges similar to motif 18. The bowl of form 3 has only dabs of paint below the rim, and a second jar of form 9 and the bowl similar to form 4 are undecorated. The last mentioned is further distinguished by being finished on the tournette, and is the only specimen from the site which is not completely handmade. Mallowan believes that some elements of this pottery, including the paneled designs and the birds, show Halaf influence and suggests a fusion of the two cultures here,<sup>147</sup> a suggestion which tallies with the Gaura evidence (see e.g. pp. 24 f.).

## OTHER SITES

Ubaid painted pottery occurs all through the Sinjar region.<sup>148</sup> Tell Jidle and Tell Zaidan, both on the Balikh River, have Ubaid or Ubaid-like pottery,<sup>149</sup> and similar pottery seems to occur at Carchemish (see p. 31).

## OBJECTS

We have described types of clay female figurines which are characteristic of the Halaf period (see p. 32), but similar figurines occur in Ubaid context. The "naturalistic" type, usually painted with brown or red, appears at Tepe Gaura in levels XIX–XVII.<sup>150</sup> In these same levels occurs a somewhat different type, which is armless and lacks the exaggerated knees and tremendous breasts of the "naturalistic" type; none is represented as pregnant, nor is there an example with steatopygy. Painted details seem to indicate clothing, a skirt and straps crossing over the chest and back. A very stylized figure whose upper part is a mere slab with no indication of details occurs in level XIX. Two stone objects which might represent human figures were found, one in level XVIII and one in XIII.

At Arpachiyah female figurines provide the sole indication of contact between the Halaf and Ubaid cultures. Mallowan states that only two appear to be of Ubaid date, basing his attribution on differences in clay and paint.<sup>151</sup> But numerous others were found in Ubaid context,<sup>152</sup> and we think it likely that they should all be attributed to the Ubaid period. It may be noted that all except one<sup>153</sup> are of the stylized type.

145. *Iraq* VIII 126–29.

146. For forms and designs of pottery see *ibid.* Figs. 7–8 and Pls. XXVII–XXVIII.

147. *Ibid.* pp. 128 f. We are inclined to place the Mefesh material in the early Ubaid period, however, rather than calling it "transitional Halaf–Al-Ubaid" as Mallowan does (*ibid.* p. 139).

148. Pottery from numerous sites in this area was seen by the writer at Peabody Museum, Harvard, deriving from that university's survey of the area.

149. *Iraq* VIII, Fig. 12:32–48, pp. 136 and 156; *Man* XXVI (1926) 41 f. and Pl. C 1. The Jidle pottery from the lowest levels (7–8) of a test excavation is said by Mallowan to be like that of Ninevite 3 and the "Uruk" period; that from level 7 he considers "probably transitional between Uruk and Jamdat Nasr." Numerous "club-headed" rims and gray burnished ware clearly parallel Ninevite 3 (see above p. 57).

150. For an example see *Asia* XXXVIII 539, Fig. 10.

151. *Arp.* p. 87 and Fig. 45:4–5.

152. *Ibid.* Figs. 45:16 (TT 5); 46:8 (TT 4); 46:7 (TT 2); 45:1–3, 12 and 47:5–7, 10–11, 13–15 (subsurface); 47:8–9, 18 (–1 m.).

153. *Ibid.* Fig. 45:16.

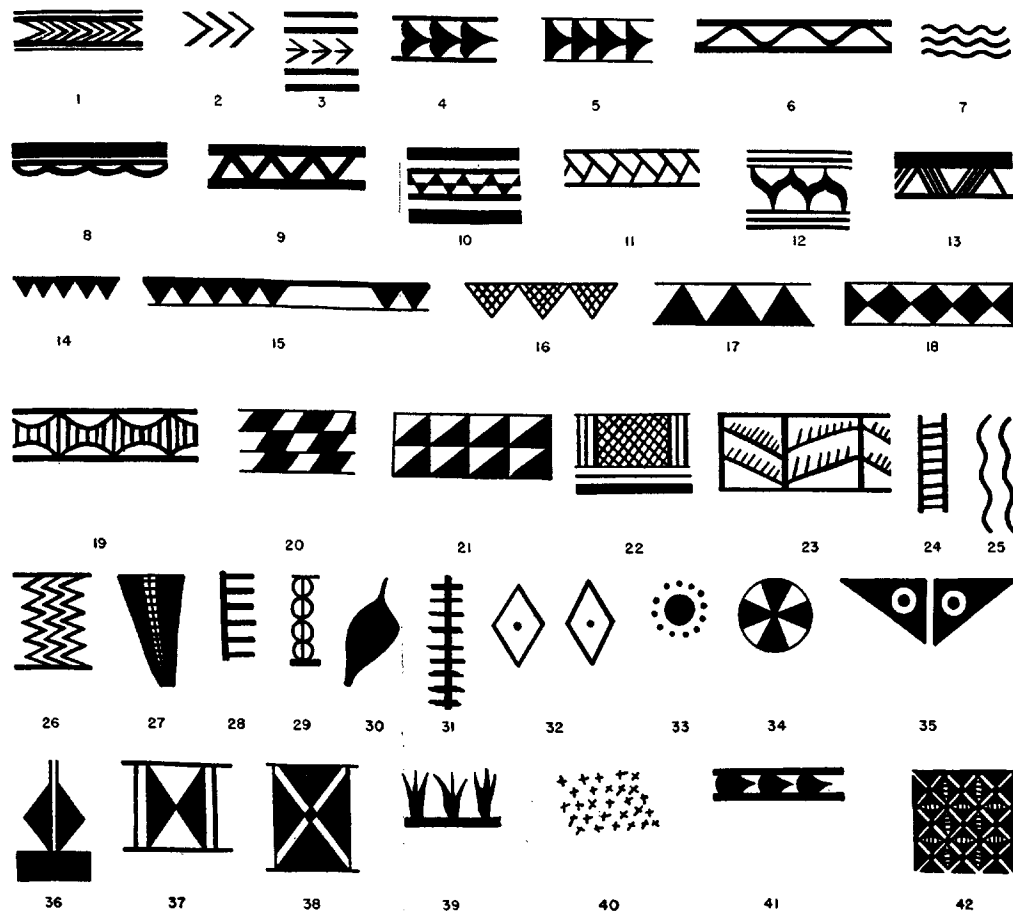


FIG. 5.—Northern Ubaid pottery motifs

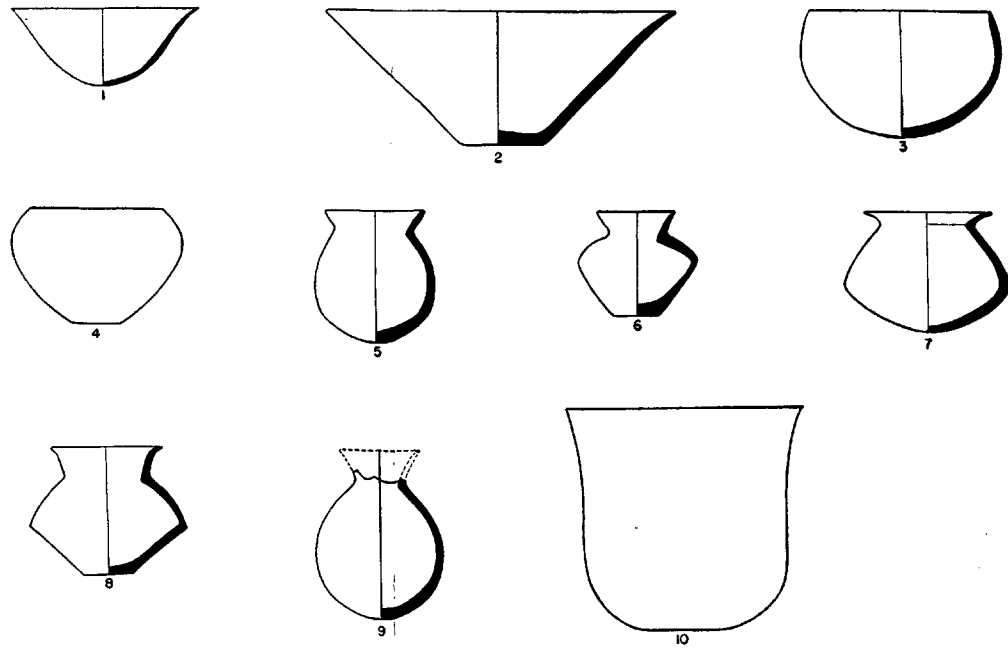


FIG. 6.—Northern Ubaid pottery forms. Scale, 1:5.83

FIG. 5

- |  |  |
|--|--|
| 1. <i>Arp.</i> Fig. 34:2                   | 22. <i>Tepe Gawra</i> II, pottery fig. 173 |
| 2. Gaura: unpublished                      | 23. <i>BASOR</i> No. 68, Fig. 2            |
| 3. Gaura: unpublished                      | 24. Gaura: unpublished                     |
| 4. Gaura: unpublished                      | 25. Gaura: unpublished                     |
| 5. <i>BASOR</i> No. 66, Fig. 7             | 26. <i>Arp.</i> Fig. 35:3                  |
| 6. <i>Arp.</i> Fig. 26:4                   | 27. <i>Arp.</i> Fig. 38:2                  |
| 7. Gaura: unpublished                      | 28. Gaura: unpublished                     |
| 8. <i>Arp.</i> Fig. 26:2                   | 29. <i>Tepe Gawra</i> II, pottery fig. 257 |
| 9. <i>Arp.</i> Fig. 28:5                   | 30. <i>Arp.</i> Fig. 34:3                  |
| 10. Gaura: unpublished                     | 31. <i>Asia XXXVIII</i> 539, Fig. 8        |
| 11. <i>Asia XXXVIII</i> 538, Fig. 5        | 32. Gaura: unpublished                     |
| 12. <i>Tepe Gawra</i> II, pottery fig. 216 | 33. Gaura: unpublished                     |
| 13. Gaura: unpublished                     | 34. <i>Tepe Gawra</i> II, pottery fig. 182 |
| 14. <i>BASOR</i> No. 66, Fig. 13           | 35. <i>Tepe Gawra</i> II, pottery fig. 450 |
| 15. <i>Arp.</i> Fig. 29:1                  | 36. <i>Tepe Gawra</i> II, pottery fig. 203 |
| 16. Gaura: unpublished                     | 37. <i>Arp.</i> Fig. 33:10                 |
| 17. Gaura: unpublished                     | 38. <i>Tepe Gawra</i> II, pottery fig. 214 |
| 18. Gaura: unpublished                     | 39. <i>BASOR</i> No. 66, Fig. 7            |
| 19. <i>Arp.</i> Fig. 38:1                  | 40. <i>BASOR</i> No. 66, Fig. 7            |
| 20. <i>BASOR</i> No. 66, Fig. 7            | 41. <i>BASOR</i> No. 70, Fig. 2            |
| 21. Gaura: unpublished                     | 42. Gaura: unpublished                     |

FIG. 6

- |                                |                                 |
|--------------------------------|---------------------------------|
| 1. <i>Arp.</i> Fig. 29:2       | 6. <i>Arp.</i> Fig. 34:3        |
| 2. <i>Arp.</i> Fig. 32:1       | 7. <i>Arp.</i> Fig. 34:2        |
| 3. <i>Arp.</i> Fig. 28:1       | 8. <i>Arp.</i> Fig. 36:7        |
| 4. <i>BASOR</i> No. 70, Fig. 2 | 9. <i>Arp.</i> Fig. 35:10       |
| 5. <i>Arp.</i> Fig. 35:5       | 10. <i>BASOR</i> No. 66, Fig. 6 |





Fragments of the stylized type of female figurine were found in Ninevite 3.<sup>154</sup> A slablike clay figurine, apparently wearing a high conical headdress, occurred at Tell Mefesh and is compared with Ubaid figurines from Ur (see p. 83).<sup>155</sup>

A fragmentary clay figurine of a nude female, found in a dump at Tell Brak, is called "probably Al 'Ubaid period" (presumably on analogy with figurines of the South; see pp. 83 f.) by Mallowan.<sup>156</sup>

Various animal figures of clay were found at Gaura in levels XVIII–XVI and XIII; some are painted, but in general appearance they are "undistinguished," according to Tobler. A broken figure from XVIII may be part of a zoomorphic pottery vessel. In level XII occur a few figurines of better quality, including a dog with curly tail and a feline with brown painted spots. An animal figure is attached to the floor of a bowl from level XIIA or XII (see p. 51).

Animal figures of clay are found at Arpachiyyah also.<sup>157</sup> A recumbent animal on a potsherd (see p. 53) is another of the rare prehistoric examples of plastic decoration on pottery (see p. 12 for a pre-Halaf example). Another unusual item from Arpachiyyah is an animal figurine with a perforation through the neck in front;<sup>158</sup> this (unfortunately broken) markedly resembles the "ram-vases" found in the Diyala region in Early Dynastic III and later times,<sup>159</sup> which are on wheels and have a loop in front to hold a string. Two bird figurines with painted decoration were also found at Arpachiyyah.<sup>160</sup>

Animal figures of clay occur at Nuzi in level XI.<sup>161</sup>

"Bent nails" of clay such as are characteristic of the Ubaid culture in the South (see p. 86) are found at Tepe Gaura in levels XIX–XV and XIII–XII, the greatest number (17) coming from level XIII;<sup>162</sup> it may be noted that they occur only in secular buildings. Tobler discusses the possibilities of various uses for them and concludes that they are mullers, a suggestion which is quite plausible, since the convex "heads" show signs of abrasion. In this connection it may be significant that conical stone pestles or mullers begin in level XIII, toward the end of the time when the "bent nails" are in use, and continue in succeeding levels. "Bent nails" occur at Arpachiyyah also.<sup>163</sup> A few clay cones also are found at Arpachiyyah; they are not too close in form to those known in the South (see p. 86) but may perhaps, as Mallowan believes, be related to them.<sup>164</sup>

A strange clay object which looks like a model shaft-hole hammer-ax was found in Gaura XV; it has no parallels in the North but rather resembles model hammer-axes from Tell 'Uqair (see p. 85). Three perforated clay disks occur in Gaura XIX–XVIII; similar disks, of uncertain date, from Arpachiyyah are considered jar lids, one having been found in position as such.<sup>165</sup> A clay model wheel with hubs was found in Gaura XIII. Ninevite 3 yielded three baked clay sickles<sup>166</sup> such as are characteristic of the South.

Most numerous among the clay objects are spindle whorls. At Gaura they occur throughout the Ubaid levels, becoming ubiquitous in level XII. Usually they are conical or biconical (the latter often truncated in XII), and they may have simple incised decoration. Almost all the examples from XII are decorated in some way—by incision, punctuation, appliqué (one), or paint (one). Stone whorls, usually conical, begin in XII. Clay whorls occur also at Arpachiyyah, at Nuzi in levels XI–XA, and in Ninevite 3.<sup>167</sup>

More or less conical clay objects which are considered game pieces occur at Gaura. A set

154. AAA XX 147 and Pl. LXXII 1, 3–4.

155. Iraq VIII 129 and Pl. XXVI 2.

156. Iraq IX 214 f. and Pl. LIV 9.

157. Arp. Fig. 48:8–9, 13.

158. Ibid. Fig. 48:14.

159. See OIP LXIII, pottery forms A.96 and C.96.

160. Arp. Fig. 46:1–2.

167. Arp. Fig. 49:15–16; Nuzi, pp. 13 f.; AAA XX, Pl. LXIX 11–16.

161. Nuzi, p. 13.

162. See e.g. Asia XXXVIII 538, Fig. 6.

163. Arp. Fig. 49:8.

164. Ibid. p. 90 and Fig. 49:9–11.

165. Ibid. p. 90 and Fig. 49:22–23.

166. AAA XX 145 and Pl. LXXI 1–2, 4.

whose pointed tops are slightly bent was found in an adult's grave in level XVIII, and a piece from XIII has a little ball on top. A group of objects from level XVI is believed by Tobler to be a set of anthropomorphous game pieces; but we are more inclined to call them very crude and stylized figurines with slightly hollowed, splayed bases, partly on the basis of analogy with certain Ubaid figurines from Warka (see p. 84). Little conical clay objects occur at Arpachiyah and in Ninevite 3.<sup>168</sup> A clay rattle was found in a child's grave in Gaura XVII.<sup>169</sup> Knobbed or horned clay objects with piercings, called "cult objects" by Tobler, begin in Gaura XII. Clay sling-pellets, usually found in caches, occur in Gaura XVI, XIII, and XII; they are usually ovoid, but some specimens from XII are long and cigar-shaped.

Flint and obsidian flakes occur in Gaura XIX–XV and XIII–XII, at Arpachiyah, in Nuzi XII–XA, and in Ninevite 3.<sup>170</sup> Celts like those of the Halaf period are found in the Ubaid levels at Gaura. Tobler comments on the distribution of stone implements thus: "Most types of stone implements (as well as stone seals), although known in all strata up to XIII, become much more common in that stratum, and particularly in stratum XII, after which their popularity declines steadily until it reaches the former low point." Isolated specimens of stone maceheads occur in the early Ubaid levels of Gaura, and they are fairly common in levels XIII–XII. Early ones are all small, often of squat shape; they become pyriform in XII, which has one bossed specimen. Marble is the most used material, and hematite the second. Perforated hammerstones also are known at Gaura, though they are rare in the Ubaid period; a type found in XVI–XV resembles the clay model mentioned above, but most specimens are of simple biconical forms, usually in basalt. We have mentioned above that conical grinders or mullers begin in XIII and that stone whorls, usually conical, begin in XII. Stone objects which might be scale weights have been carefully weighed and studied by Tobler, but no definite conclusions can be drawn.

Mortars, pestles, and other domestic implements, mostly in basalt, occur at Arpachiyah, presumably in the houses.<sup>171</sup> A stone pestle was found in Nuzi XII.<sup>172</sup>

Stone vessels continue to be used in the Ubaid period. Tepe Gaura XIX–XVII yielded several examples of the "water bowl" with concavity below the rim, some of them with disk bases. Jars with necks begin in XII, and one very heavy-walled, squat miniature occurs in the same level. Tiny black steatite bottles, usually four-sided and with incised decoration, are found in XIII–XII; one from XII has an architectonic design like that of the clay incense burner from XIII (see p. 50). "Palettes" with low sides and open ends, which begin in the Halaf period, continue through Gaura XV, and plain flat ones occur in levels XIII–XII; the later ones tend to be smaller but otherwise show little change. Small stone mortars for grinding paint begin to be common in XII, and there is one example in XIII.

We have already spoken of the one stone "water bowl" found in Ubaid context at Arpachiyah, which Mallowan suspects is an heirloom from Halaf times (see p. 35); since we now know from the Gaura material that the type is common in the earlier part of the Ubaid period, Mallowan's suggestion no longer seems reasonable. A fragment of a stone bowl was found in Nuzi XI.<sup>173</sup>

Bone tools are common throughout the Ubaid levels at Gaura, awls occurring with greatest frequency; one awl is hafted in clay and one in bitumen, the latter comparable with bone awls from Tell Uqair and Warka (see p. 85). Flat tools, spatulas or scrapers, also occur. Bone implements, mostly awls and needles, appear in Nuzi XI–XA and Ninevite 3.<sup>174</sup>

168. *Arp.* Fig. 49:13–14; AAA XX, Pl. LXVIII 43.

169. See *Asia* XXXVIII 539, Fig. 13.

170. *Arp.* pp. 102 f. and iv (referring to Pl. XI c: "used at all periods"); *Nuzi*, pp. 12–14; AAA XX 143.

171. *Arp.* p. 104 (levels not given).

172. *Nuzi*, p. 12.

173. *Ibid.* p. 13.

174. *Ibid.* pp. 13 f.; AAA XX, Pl. LXVIII 14–15, 17.

There are not many objects which may be classed as personal ornaments. Simple stone pendants with a single perforation are common throughout the Ubaid levels at Gaura. Some obsidian specimens from the earlier levels, particularly a flat rectangular piece with two perforations from front to back,<sup>175</sup> suggest hierooms from the Halaf period (cf. p. 36), as does a steatite "double-ax" pendant from level XVIII. A little frit pendant from level XII is in the form of a ring with attached suspension tang,<sup>176</sup> almost identical with examples attributed to the Protoliterate period in the South (see p. 147). Four nail-shaped studs from Gaura XVI, XIII, and XII look a little like those known in Ubaid times in the South (see p. 86).

Beads are fairly common at Gaura, being found chiefly in levels XVIII and XII, which produced numerous graves. Apparently they were worn all over the body, as necklaces, bracelets, armlets, anklets, girdles, headdresses, etc.; sometimes thousands occurred with a single body, especially in the graves of level XII. The most common materials of the earlier levels (XIX–XVI) are obsidian, white frit, carnelian, limestone, marble, and clay. Beginning with level XIII white frit, carnelian, obsidian, and limestone are the most common; but turquoise, amethyst, lapis lazuli, agate, quartz, jadeite, beryl, diorite, hematite, steatite, serpentine, bone, ivory, and shell are all used. Shapes are usually very simple: rings, disks, barrels, and cylinders. A few beads have scratched designs.

At Arpachiyah occur "flattened double conoids in terra-cotta and sun-dried clay, decorated with incised markings"<sup>177</sup>—beads which have parallels in southern Mesopotamia (see p. 86) and with which scratched stone beads from Gaura XV, XIII, and XII may be compared.

Altogether nearly six hundred stamp seals and impressions were found at Gaura, not including duplicate impressions of the same seal; the majority are from level XIII or later. Most occur in temples or occupational debris, very few in burials. Seal pendants of Halaf type with linear engraved designs occur in levels XIX, XVII, XVI, XV, XIII, and XII.<sup>178</sup> A flat button shape with a loop at the back begins in level XIX, and a lentoid shape also seems to be early; pyramids and conoids are rare (the latter beginning in XIII); and hemispheres, which are the most popular shape in the following period, do not begin until XII. The sealing surface may be round, square, oval, rectangular, or irregular in outline. A few seals are made of bone, frit, and clay, but the majority are of stone (see foregoing quotation from Tobler concerning distribution of stone objects). Black steatite is the most common material; but agate, carnelian, diorite, hematite, lapis lazuli, limestone, marble, obsidian, and serpentine are all used. Designs are almost always engraved; only seven seals have drilled designs, although the drill was used in the Halaf period (see p. 33). Up to level XII linear and geometric patterns are more popular than representational ones; but animal designs are present. Animal subjects become preponderant in level XII and are more numerous with each succeeding level; the ibex and the saluki are the beasts most commonly depicted.

The linear designs resemble those of the seal pendants and are probably derived from them. Quartered circles with various types of fill seem the most common, but the square-and-St.-Andrew's-cross motif, herringbone, "sprigs," and crosshatching also are used. Two seals with designs based on the quatrefoil suggest Jamdat Nasr style cylinders.<sup>179</sup> Animal-style seals most commonly show a single animal, usually passant but sometimes couchant; frequently small linear motifs are added as fill, giving a balanced effect to the design. Quadrupeds may be combined with birds, snakes, or fish; but such motifs are seldom the main subject. One stamp

175. *Tepe Gawra* II, ornament fig. 71.

176. *Ibid.* ornament fig. 41.

177. *Arp.* p. 98 and Pl. VII b, bottom row.

178. *Tepe Gawra* II, ornament figs. 38 (XIX), 20 (XVII), 22, 25 (XVI), 29 (XV), 35, 39 (XIII), 24 (XII).

179. Cf. *Tepe Gawra* II, seal figs. 67–68, with e.g. *Cyl. Seals*, Pl. VI f.

from level XII<sup>180</sup> shows a pair of intertwined snakes, the earliest known representation of the caduceus, which is an important motif on Early Dynastic cylinder seals in the South; an animal posed as if seen from above<sup>181</sup> is another motif with parallels in the South (see p. 142). Sometimes several animals are arranged around the sealing surface, apparently solely with the idea of making a pleasing design, for such compositions are seldom meaningful. Human beings, apparently all males, occur fairly frequently, alone, in groups, or associated with animals; as in the case of animal groups, these seem to be composed mainly from an aesthetic viewpoint. Once a man is associated with several objects<sup>182</sup>—a triangle, a disk, an arrow-shaped object, and one with three “horns” on top (arguably an altar)—which occur individually or collectively on several other seals and may represent objects associated with worship. Another interesting seal, whose design is clearly meant to depict a scene, shows two men stirring something in a huge pot.<sup>183</sup>

At Gaura little development in the glyptic is visible in the Ubaid period beyond a tendency to increasing complexity of design in the later levels (especially XII); possibly this elaboration is due to the introduction of metal tools. The complex quartered-circle patterns do not become dominant until XIII, and human figures begin in that level, with the exception of one in level XV.<sup>184</sup> However, the number of seals from the earlier Ubaid levels is so small (probably because smaller areas were excavated) that it would be hazardous to say with certainty that any motif does not exist in the XIX–XV range.

Mallowan suggests that all the seal pendants found at Arpachiyah were made in the Halaf period but that many of them survived and continued to be used during the Ubaid period,<sup>185</sup> and some seem to have been found in Ubaid context. Impressions of stamp seals with animal designs occur in Ubaid levels at that site<sup>186</sup> and are similar in both subject and style to the Gaura examples. Impressions with linear designs apparently also occur in Ubaid levels.<sup>187</sup>

At Nineveh seal impressions come from levels intermediate between strata 2 and 3. They occurred in two distinct bands,<sup>188</sup> though there seems to be no difference between the impressions found in the two bands. Most examples show a single animal, as is the case with the Gaura animal designs. Geometric designs also are known but are too fragmentary to reconstruct.<sup>189</sup>

A stone stamp seal in gable form bearing a design of a horned animal was found in the Ubaid settlement at Tell Mefesh.<sup>190</sup>

Little metal is found in Ubaid deposits. Two copper objects, a ring and a rectangular-sectioned awl, occur in Gaura XVII. Tobler, who believes most of the Gaura prehistoric levels to be in the Neolithic Age, sees in these objects imports from some place nearer the assumed center of early copper-working. We are more inclined to take them at face value and to consider them the earliest preserved examples of metal from the Chalcolithic Age. A hemispherical copper button and a copper blade with splayed end occur in level XII. We suggested above that the complex seal designs of XII might have been made possible by the introduction of metal tools. The earliest precious metal is found in a few fluted gold beads from level XII. Arpachiyah yielded a copper blade very similar to that from Gaura; this is said to be of the flat type evidently cast in an open mold and is called a smaller replica of a type known in

180. *Tepe Gawra* II, seal fig. 179.

181. *Ibid.* seal fig. 182.

182. *Ibid.* seal fig. 83 (level XII).

183. *Ibid.* seal fig. 91 (level XII).

187. See *ibid.* Pl. IX a, 4th row; it is stated (*ibid.* p. iv) that most of these are from Halaf levels, so we assume that the others were found in Ubaid context.

188. AAA XX 135 and Pl. LXXIII cannot be harmonized.

189. See *ibid.* Pl. LXIV.

190. *Iraq* VIII, Pl. XXIV 1.

184. *Ibid.* seal fig. 98.

185. *Arp.* p. 91.

186. *Ibid.* Pl. IX a 601–14.

Susa I.<sup>191</sup> A little copper pin was found in Ninevite 3.<sup>192</sup> Many of the copper objects from Tell al-Halaf may be of Ubaid date. For convenience all Tell al-Halaf objects except those attributed to the Hassunah period have been discussed in chapter ii. The metal weapons, however, are particularly likely to be of Ubaid date or still later (see p. 37).

Unusual objects are bone playing-pipes, seven of which were found at Gaura in levels XVII–XII. They are made from leg bones of animals; some are double pipes, in which a natural bifurcation at one end of the bone is utilized. The three earliest examples are apparently simple whistles, but the other four have stops bored in the upper side; chevrons incised on the opposite side probably provided a grip for the thumb. Beginning in level XII, which has one specimen, there are simpler bone tubes, usually with a little bell-shaped “mouthpiece”; it is suggested that these are successors to the pipes.

Grains of emmer wheat and barley are found in various Ubaid levels at Arpachiyah,<sup>193</sup> and large quantities of barley occur in a house at Tell Mefesh; remains of a large ox, a small *Equus*, and a large goat with a spiral horn were also found at the latter site.<sup>194</sup>

## ARCHITECTURE

### TEPE GAURA

In level XIX we find the first of a series of important and interesting temples, of a type which seems to survive until Gaura VIIA—probably for well over a millennium. The temple of XIX is poorly preserved and shows signs of alteration from its original state; but it is clearly of a plan which is more readily seen in level XVIII. Level XIX also has a very large structure (measuring 17×11.50 m.) which seems to be a private house; there is a large inclosed courtyard in front with at least a dozen rooms at the rear and on the east side.<sup>195</sup> Other private houses, well planned and well built, are known; many have simple piers or buttresses which apparently serve purely structural functions.

The temple of level XVIII (Fig. 7) is directly superimposed on that of XIX, the later floor being only 67 cm. above the earlier; here the general outlines of the plan are clear. The full length of the building is uncertain, but the extant portion measures 10.50×7 meters. The plan is tripartite, consisting of a long central room (which is almost certainly the cella) with a row of smaller rooms on either side; the entrance may be from a “porch” formed by projection of the side rooms beyond the central one or from an antechamber in front of the latter. In the cella is a rectangular podium, a common feature of the later Gaura temples. Three simple piers on the north exterior wall are probably structural rather than decorative. Four graves are associated with this temple. The temples of XIX and XVIII have their walls oriented to the cardinal points of the compass, rather than their corners, as is the custom in later temples. Strangely enough, no doorways are found in the XVIII temple; apparently the preserved portions are foundations rather than walls.

In level XVII a much larger area was investigated than in the two underlying strata, but no temple like those of XIX–XVIII was discovered. Instead, above the temple of XVIII is a tholos (the “Southern Tholos”), only partially preserved but resembling that of XX (see p. 40) in general plan. Its inside diameter is probably about 4.25 meters, and the wall is 30 cm. thick. Three irregularly spaced piers or buttresses at right angles to the wall project toward the inside. Another, much better preserved, tholos<sup>196</sup> (the “Northern Tholos”) is irregularly circular in plan with an inside diameter of 4.50 meters and a wall 30 cm. thick. Five

191. *Arp. Pl. X i* and p. 104. It is likely, but not certain, that the Susa I metal objects were cast; see *SAOC* No 23, p. 21.

192. *AAA XX, Pl. LXVIII 5*.

193. *Arp. p. 15*.

194. *Iraq VIII 128*.

195. See *Asia XXXVIII 540, Fig. 16*.

196. See *ibid.* pp. 538 f., Fig. 15.

piers project toward the interior, and perhaps there was originally a sixth, destroyed by a grave dug into the tholos from a higher level. At the south is a doorway only 30 cm. wide, flanked by short spur walls, which Tobler suggests may be vestigial survivals of an entrance passage such as occurs at Arpachiyyah. Numerous graves are associated with each tholos. The suggestion advanced by Mallowan (see p. 39) that tholoi had a religious function is strengthened by the Gaura evidence, for there they occur only in levels in which no temples have been found. It may be argued, of course, that this fact is of dubious value since the greater part of all the early levels remains unexcavated. However, since the temples of XIX–XVIII and the Southern Tholos of XVII are all almost directly superimposed above the tholos of XX, we have grounds for seeing here a sacred area in which the religious edifices—whatever form they may



FIG. 7.—Temple of level XVIII at Tepe Gaura. By courtesy of Professor E. A. Speiser

take—are concentrated. More than one religious structure in a level is possible, as seen in later strata, both XIII and VIII having several temples.

Above level XVII there occurs one of those sharp demarcations between groups of strata which characterize the Gaura remains. Levels XIX–XVII make a fairly coherent group; if XVII seems to break away from the temple tradition, its links with XIX–XVIII are clearly demonstrated by the artifacts. Levels XVI, XVA, and XV form a very compact architectural unit, which has virtually no links with either the levels below or those above. All three are contained in about 1 meter of depth, a fact which indicates rapid succession; XVA reuses some of the buildings of XVI, and XV uses identical plans. The site is divided into two peaks of occupation in these levels, with an “unoccupied depression” between; these peaks had risen to a height of 1–1.15 meters by the beginning of level XIII. No religious edifices of any kind have been found here, but all the levels contain series of long rectangular bins or stalls

such as are not found elsewhere. It may be remarked here that the unity of this group of levels as evidenced by the architecture is confirmed by the artifacts, the pottery in particular being remarkably homogeneous.

In level XVI is a large building which seems to be a private house. It has a long central room or court with smaller rooms, which are not arranged in any coherent plan, on either side; the side rooms extend beyond the central area at one end, forming a fairly large "bay." The plan thus broadly resembles the tripartite temple plan seen in XIX-XVIII; but the arrangement of the rooms is different, since there is no entrance through the "bay," and there are no appointments suggesting a temple. One of the rooms bears traces of wall-painting consisting of a design of running lozenges, the rows alternately red and black, against white plaster. This is the earliest example of wall decoration which we know, and the forerunner of the colored plaster of the temples of XIII. Another large house, almost square, is reused in level XVA and possibly in XV also. Groups of long rectangular bins occur in several places, and it is suggested that they are pottery storerooms or storage places for grain or other materials. Kilns also are found in this level. One is an underground construction which shows an amazing technical proficiency on the part of the craftsmen; another, which seems to have been domed, has a grating on which the vessels could be placed, while the fire was in a hole beneath.

Level XVA has only poor dwellings and some storage stalls, besides the large, almost square, house which continues in use. An interesting feature is a stone-floored fireplace.

In level XV the two peaks of occupation continue, and now there seems to be a separation of function, with the northern peak as an industrial quarter containing kilns or ovens and storage stalls. The eastern peak seems to be a residential area and shows two examples of houses with one end forming a "bay."

It is noticeable that through all the Ubaid levels up to this point mud brick is the common building material; stone is very rare and used only for sills and paving.

Level XIV is represented only by the rubble foundations of a large building of roughly rectangular outline ( $16 \times 12.40\text{--}15.20$  m.). Like the houses of XVI-XV, this building has a large central room or court running the full extent of the structure with smaller rooms arranged asymmetrically on either side. A corner room with an oven is probably a kitchen, but there are no indications of function for the other rooms. The corners of the building are oriented to the cardinal points of the compass, and around the north corner runs a stone-lined and partially stone-covered drain. A few courses of mud brick, apparently part of the superstructure, exist; but most of the superstructure was demolished when the area was leveled in preparation for the construction of the acropolis of level XIII. The extensive use of stone as building material is unparalleled in the other prehistoric levels at Gaura.

In level XIII there is a sudden increase in the amount of monumental architecture, for the entire excavated area consists of an acropolis, approximately 30 meters square. It contains three temples (Fig. 8) lying approximately at right angles to one another and forming three sides of a hollow square, the fourth side apparently being closed off by screen walls. The central courtyard measures  $18 \times 15$  meters; it is paved with fine gravel and stamped clay. An acropolis of this size obviously implies a large and well organized community and an especially well developed religious cult, or group of cults.

The Northern Temple, almost entirely preserved, measures  $12.25 \times 8.65$  meters; its plan, with cult alcoves or shrines parallel to the main room and separated from it only by screen walls, differs from that of the XIX-XVIII temples, but it is probably to be considered as a development out of that tripartite plan, with cella flanked by smaller rooms.<sup>197</sup> The entrance, also contrary to that of the earlier temples, is near the end of one of the long sides, preventing

197. This is the writer's personal view. Tobler believes the level XIII temples to be quite different from the earlier ones and to represent a break in the tradition.

a direct view of the sanctuary. Except for the rear wall, both inside and outside walls have piers, each with a single niche in the center and a step at each corner. At the end where the altar must have stood every corner of cella and side rooms alike is filled in diagonally with a series of steps; the same pattern is employed in the corners of the great outside niche facing the courtyard. The walls are plastered with mud.

Only the front part of the Central Temple remains, the rear portion having fallen down the slope of the mound at some time during the occupation of level XIII. Enough remains to allow at least a tentative reconstruction of the plan, which again shows a long rectangular cella, which may have extended almost to the corner of the Eastern Shrine. Between the cella and the outside courtyard there are four rooms and an air space, an arrangement much more complex than that of the Northern Temple; also in contrast to the latter, the Central Temple has at least three entrances to the cella and possibly a fourth if the building originally extended farther to the southeast. The white-plastered façade at present measures 14.50 meters in

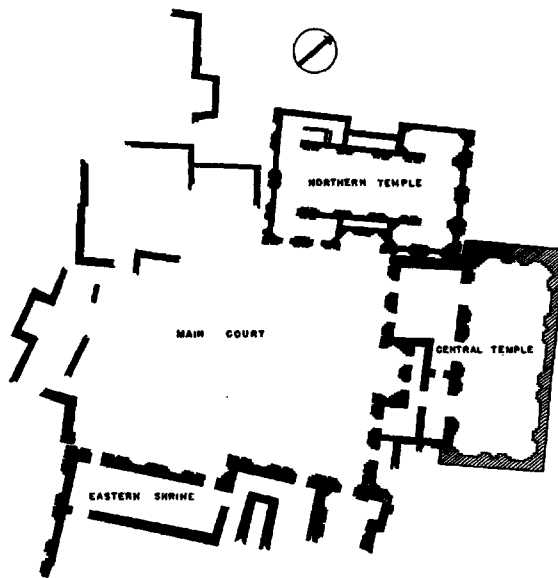


FIG. 8.—Plan of temples of level XIII at Tepe Gawra. Scale, 1:467. After *AOF* XII 166

length; its main feature is the great central niche within which are two elaborately stepped small niches which are cut through to make a double doorway into an antechamber. On either side of the central niche are stepped piers, and the spaces between them and the great niche are broken through 50 cm. above the floor, presumably for windows. The walls and floor of the cella and the walls of two smaller rooms are covered with red-purple paint.

The Eastern Shrine also is incompletely preserved; apparently here too a portion fell over the edge of the mound, and the remaining walls of the rear part seem to have been either deliberately destroyed or left to collapse. The front wall is 20.50 meters long, but the side walls are preserved to a length of only 8.85 meters. The façade is ornamented with niched piers, but there is no great central niche as in the other two temples; this building differs also in that the northeast section of the façade projects 1.70 meters beyond the remaining portion. Four doorways, asymmetrically placed, give access from the courtyard. The walls of the small room at the north corner are painted bright red; the other walls of the building are undecorated. Unfortunately we cannot say where the cella is, although by analogy with the other temples it is



a fair guess that the painted room is an antechamber to it. Another room directly accessible from the court seems to be a storeroom, since it contained numerous pottery vessels and the incense burner mentioned above (p. 50). One of the other small rooms has a floor of reeds laid on wooden crosspoles, an unusual feature. The Eastern Shrine is the only temple of XIII which has graves associated with it, five being found below its floors.

All the temples of level XIII are built of well bonded mud brick of excellent quality, with mortar of clay mixed with ashes. Each temple seems to have its own special brick size:  $36 \times 18 \times 9$  cm. in the case of the Northern Temple,  $48 \times 24 \times 10$  cm. for the Central Temple, and  $56 \times 28 \times 14$  cm. for the Eastern Shrine. Full bricks and lengthwise half-bricks were used. In the Eastern Shrine were found ninety-nine model bricks whose measurements are in scale with those of the Northern and Central temples but not, strangely enough, with those of the Eastern Shrine itself. One suspects that the complex piers may have been worked out with models before the actual bricklaying began.

The method of roofing these temples is problematical. The piers of the Northern Temple could have supported beams, and the other temples may have been similarly equipped in their original states.

The elaborate design, especially of corner piers, bespeaks a considerable previous development of architectural technique. Obviously a pier is in origin a structural member, but it may be ornamented with steps and niches without destruction of its utility; a further development, purely decorative use at points where no structural function is served, might logically follow. But as a rule a building part has to be well established in architectural practice before it is altered in a nonfunctional way; hence we would postulate a fairly long period during which piers were used as supporting members only before ornamentation began to be used. Where and when such a development took place we cannot say; earlier stages of this type of decoration are not discernible at Gaura.

The relative ages of the three acropolis temples at Gaura are a matter of interest. Tobler suggests that the Eastern Shrine is the oldest, on the basis of its (apparently) less coherent plan, evidences of alterations made in it, and the decay of its rear walls. The Northern Temple was probably built second, and finally the Central Temple was squeezed into the remaining space, which would account for the irregular form of the latter. It is noticeable that where the buildings are contiguous both the Northern Temple and the Eastern Shrine have piers on the exterior walls while the Central Temple does not; it seems obvious, then, that there was a time when these walls were visible, that is, before the Central Temple was built. Another indication of the relative dates is that the bricks of the Central Temple are almost exactly the size of those used in level XII, while those of the other two are considerably smaller.

Obviously the acropolis does not give a complete picture of the architectural remains of level XIII, no secular buildings having been uncovered. Such buildings may be in the unexcavated southern and western sectors of the mound, or at the base, or possibly in both places.

Level XIIA yielded only scanty remains; apparently at least a portion of this stratum was removed when the more extensive level XII was built. It is interesting to note another break in continuity, for the walls of XIIA are not in any way connected with those of XIII, and apparently the acropolis area was no longer considered sacred when XIIA was built. Level XIII stands completely alone, unconnected architecturally with the levels above or below.

Level XII, which reuses some walls of XIIA, although thickly populated, contains nothing which can be definitely identified as a religious building. About half the area of the mound has been excavated, and the main settlement seems to be in the northern and eastern sectors, which are quite crowded. A structure at the north edge is suggested as a watchtower guarding the path up the northwest slope, a feature which would suggest connection between level XII and the succeeding strata if the identification of the structure were more certain.

The outstanding feature of level XII is the building containing the "White Room." This building probably originally measured  $12.30 \times 11.75$  meters. It has a tripartite plan, which seems to be as characteristic of the North—or at least of Gaura—as the plan with rooms around a central court comes to be for the South.<sup>198</sup> The White Room extends the full length of the building and is entered from outside by a double doorway; the irregular ranges of rooms on either side also have direct access from the outside. The walls of the central room are white-plastered (hence its name); against the rear wall is a bench, and above the latter are two niches.<sup>199</sup> The side rooms contain an oven and various other household objects—pottery, spindle whorls, celts, obsidian implements—as well as seal impressions. Like most of the buildings in level XII, the White-Room building has many graves beneath and around it. A secular nature is suggested by the domestic objects just mentioned, but possibly the White Room itself had a religious function. A smaller replica of this building stands not far away,<sup>200</sup> and rather large buildings of unknown function occur elsewhere in the level.

Sun-dried brick is still the characteristic building material; the brick size is generally  $47-48 \times 25-26 \times 6-8$  cm., resembling that of the Central Temple of level XIII, as we have said. Bricks of level XII are of somewhat similar size, but those of XII are thinner than those of any later stratum. Walls here are uniformly thicker than those of later levels. Stone is very rare and used only for paving.

The occupation of level XII seems to have come to a sudden and violent end. Some buildings in the northern sector, including that containing the White Room, were apparently destroyed by fire; their walls are fire-marked, and a thick ash layer covers them. Objects are strewn about in confusion, and skeletons probably belong to victims of a struggle. Other parts of the level show no such traces, and Tobler suggests a conquest by enemies who quickly overran the settlement once they had forced the North Gate and fired the area close to it.

#### TELL ARPACHIYYAH

Private houses of very poor quality are the only architectural remains of the Ubaid period. Mud brick, as well as pisé, is now used as building material. The walls are never more than one brick in thickness; the floors are of beaten clay, and the roofs of matting and reeds. Buildings are crowded closely together with little evidence of planning.<sup>201</sup> Level 5 is said to contain larger houses, of better quality, built entirely of pisé.<sup>202</sup>

A finely built well of the Halaf period seems to have been converted into a granary, perhaps lined with wood.<sup>203</sup>

#### TELL MEFESH

No coherent ground plans of the Ubaid period have been revealed, but a unit of four small rooms grouped in a square, one flanked by a long room or court, was uncovered. The building,

198. It may be noted here that the Gaura evidence makes it obvious that the tripartite plan is by no means a diagnostic criterion of a temple, though most temples do have that plan.

199. This feature is paralleled in temples in the South; see *OIP* LVIII, Pl. 2 b, for a Protoliterate temple at Khafajah with similar feature at the rear of the cella.

200. It should also be noted that the plan is somewhat similar to that of the building of level XIV (see above p. 67).

201. *Arp.* pp. 11 f.

202. Mallowan (*ibid.* p. 13) suggests that level 5 was built by the Halaf people, because its spacious rooms resemble those of the Halaf period more than those of Ubaid levels 4-1; and he also states (*ibid.* p. 11) that both Halaf and Ubaid pottery were found in level 5. However, another of his statements (*ibid.*) calls the buildings Ubaid, with their foundations resting directly on Halaf buildings. Only two pottery vessels of 5 are shown (*ibid.* Figs. 35:5 and 41:4); one is of Ubaid type, the other uncertain. In view of these different statements it is difficult to be sure of the placing of level 5, but the writer is inclined to put it with the Ubaid levels. As we have seen (pp. 23 and 55 above) Arpachiyyah seems to lack pottery of the latest part of the Halaf period and the earliest part of the Ubaid period, and if that is true, we could hardly consider Arpachiyyah 5 as a level built by Halaf people but still occupied by people of Ubaid culture.

203. *Ibid.* pp. 15 f.

oriented northeast-southwest, is of large mud bricks of various sizes, the largest (used in grain bins in the long room) being  $63 \times 31.5 \times 9.5$  cm. Poplar beams of oval section and traces of reeds found in one room probably represent parts of the roof.<sup>204</sup>

## BURIALS

### TEPE GAURA

By far the majority of all the burials found at Gaura are those of infants; adults must usually have been buried in cemeteries on the plain below the mound. Obviously the proportions of grave types might be very much altered had we the adult burials also.

Graves contemporaneous with all the Ubaid strata except XIX have been found; since level XX has been scarcely touched, the graves of XIX, which would be sunk into the debris of XX, are not known. Distribution of graves in the other levels is as follows:

Level	No. of Graves	Remarks
XVIII	7	Four are associated with the temple.
XVII	30	Many are associated with the tholoi. This is a very large number of graves in view of the small area investigated.
XVI	7	
XV	10	
XIV	4	
XIII	9	Seven are associated with the Eastern Shrine (see p. 69).
XII	120	Graves are scattered, infant burials being mostly in private houses.

Simple inhumation is common through level XV but declines rapidly after that until in level XII there are only nine such burials. Beginning with XIII the graves are sometimes covered, most generally with matting (though bricks, stone slabs, and plaster also are used), but uncovered graves are still the most common. Urn burials show a sharp rise in popularity in level XIV and are the most used type in XII. The simplest urn burials are uncovered, but covering by an overturned bowl or a large sherd begins in XIV; basketry, stones, or bricks are occasionally used. Double-urn burial, with the joint sealed by clay plaster, is found several times in XII and is restricted to that level; this method is paralleled by Late Kassite burials at Babylon, where even the profiles of the urns are similar!<sup>205</sup> Interment on the ground beneath a vessel or sherds begins in level XVII. A few graves in XIII and XII are inclosed by low pisé walls; they have irregular outlines and rounded corners and are very seldom covered. They tend to be near important buildings, but not always temples. Tobler suggests that they may be forerunners of the well built tombs of levels XIA–VIII (see pp. 180 f.). A few unusual burials may be mentioned: (1) an infant in a “shell” of mud plaster (level XVIII), (2) a fractional inhumation with one or both of the tibiae missing (level XVII); (3) a plaster-lined grave with dividing wall, empty when found (level XIII); (4) a skull in an inclosure of brick (level XII).

Most burials are single; the few double burials, however, seem to be in important places. Matting or rushes may cover the body or lie on the grave floor. The body is almost invariably contracted; burial in a supine position occurs once each in levels XVII, XVI, and XV. Tobler states that Nos. 2 and 4 (see above) are the only certain examples of fractional, or partial, burial at Gaura; the numerous other instances in which only a portion of the skeleton was found all seem the results of later disturbances. Orientation of the bodies is by no means consistent, but it seems that in levels XVIII–XIII the head is usually toward the southeast and that through level XVI the body is laid on the right side, while in the later Ubaid levels it

204. *Iraq* VIII 126.

205. See Oscar Reuther, *Die Innenstadt von Babylon (Merkes)* (WVDOG XLVII [1926]) pp. 184 f.

may be laid on either side. The poor condition of many skeletons makes accurate observation of position impossible. No pigment was observed on any of the bodies.

Remains of grain and of animal bones left as food offerings are observed throughout the period but are never found with urn burials and seldom with any burials of infants or children. Grave furnishings are poor except in level XVII.

It may be noted that the temple of level XVIII, the tholoi of XVII, and the Eastern Shrine of XIII have numerous burials associated with them. Apparently only certain temples became the nuclei of grave groups. Tobler suggests very plausibly that these are temples of chthonic deities, who demanded sacrifice; and the fact that most of the burials are those of infants and children, which may be connected with fertility rites, strengthens the supposition. In levels XVI and XV there are numerous burials on the east edge of the mound, a fact for which there is no apparent reason.

#### TELL ARPACHIYYAH

We have remarked above that most of the Arpachiyyah Ubaid pottery comes from the Ubaid cemetery, which was dug into houses of the Halaf period. Fifty Ubaid graves in all were discovered, forty-five of them in the cemetery, the others scattered elsewhere. In addition there are a number of Ubaid deposits, all within a meter of the surface, representing in part disturbed burials, in part probably hut remains. What Mallowan calls the Late group consists of these additional deposits and G 44-48.<sup>206</sup>

All but two graves are simple inhumations, generally oriented east-west with the head at either end of the grave. The bodies are regularly contracted and perhaps lie in matting. A single extended burial (G 21) contains a unique pot with plumb-red slip and ornamented with little knobs (see p. 53). It is especially queer that one extended burial was found in Ubaid context at Arpachiyyah and one each in Ubaid levels XVII, XVI, and XV at Gaura. Two unusual burials (G 14-15) occur in a pit, both skeletons contracted in the normal fashion; they are in good condition, but no objects were found with them. Apparently the bodies had been covered with kiln debris and then with clean soil. Not far away is a similar pit with a cairn of mud bricks on pisé foundations above it, but no bodies were found in the latter pit. A platform of a single course of large bricks (47 × 25 × 11 cm.) is near by and may be associated with the pits. An urn burial has been mentioned above (see p. 56).

In some cases only part of a skeleton was found in a grave; Mallowan makes much of these so-called "fractional burials," seeing in them connections with India etc. We are not inclined to consider them important. The incomplete skeletons are usually oriented like others and are accompanied by the usual offerings, and we would attribute their "fractional" condition to partial decay or to mechanical disturbance.<sup>207</sup>

#### NUZI

An infant burial in a jar was found in a room of level XA, but it was put down from level X above.<sup>208</sup> In level X another infant burial occurs within and at the base of a wall. It is suggested that this is a sacrificial interment.<sup>209</sup>

#### NINEVEH

Four infant burials in urns of gray burnished ware occur in Ninevite 3 (see p. 56).

#### TWOFOLD DIVISION OF THE UBAID PERIOD IN THE NORTH

Before surveying the material from the South, we pause to stress an important feature in the North. This is the twofold division of the Ubaid period, which is marked by the introduc-

206. *Arp.* pp. 34-42 and 65 ff.

207. Cf. Tobler's remarks about incomplete burials (p. 71 above); he also suggests that the Arpachiyyah examples were not originally fractional.

208. *Nuzi*, p. 14.

209. *Ibid.* p. 16.

tion of numerous new cultural elements in Gaura XIII. These elements include new pottery forms and an influx of new painted designs, a new style of painting characterized by the reserved technique, great increase in the use of seals and the utilization of numerous kinds of stones not native to Mesopotamia, little stone bottles, conical stone pestles, popularity of stone objects in general, and—most striking of all—the sensational architecture.<sup>210</sup> But in spite of all these new features, level XIII belongs to the Ubaid period, as demonstrated by the continuance of most of the basic features of pottery, glyptic, and architecture into, or through, this level. Tobler suggests that level XIII represents a “Renaissance” of the Ubaid culture, perhaps caused by renewed or intensified contacts with the Iranian highlands to the east of Iraq (with which the stones and many of the pottery motifs are especially connected).<sup>211</sup> We therefore suggest a division of the Ubaid culture on the basis of the Gaura material into two phases, which we call “Northern Ubaid I” (N I) and “Northern Ubaid II” (N II); N I comprises Gaura XIX–XV, and N II comprises Gaura XIV(?)–XII. The position of level XIV is ambiguous because so little is known about it; but, since its architectural remains show little likeness to the earlier levels while the plan of its only building is somewhat similar to that of the White-Room building of level XII, we tentatively place level XIV in the N II phase.

The material from most of the other sites seems to fit into the scheme fairly well (see Table 1). Arpachiyyah’s Early phase seems to be N I, and its Late phase is quite clearly N II. The Ubaid material from Nuzi cannot be fixed chronologically. The small amount of published Ubaid material from Hassunah seems exclusively N I. Ninevite 3 probably begins in N II and continues into the succeeding period, and Grai Resh levels IX–VI seem also to belong to the N II phase. Part of Shaghir Bazar levels 8–6 may continue into the Ubaid period. The Ubaid remains from Tell al-Halaf seem exclusively N I, and those of Tell Mefesh probably belong to that phase also. Most of the pieces from Tell Brak seem to be N I, but the possibility of the existence of something like “sprig”-decorated pottery (which would be N II) has been mentioned above (p. 58).

### THE SOUTH

At all sites so far investigated in the South the Ubaid remains rest directly on virgin soil, and there seems little doubt that the people who bore this culture were the first settlers on the alluvium of whom we have any trace.<sup>212</sup> While the Halaf culture flourished in the North the southern part of the Land of the Two Rivers may still have been completely under water or, as the land was built up by alluvial deposits carried downstream by the Tigris and Euphrates, a vast marsh in which human beings could find no suitable habitation. Gradually, as the process of deposition continued, the great swamp began to dry up. Points of land emerged from the marsh and became habitable. The earliest remains at all the sites which have been excavated to virgin soil are just above water-laid sand or black organic soil composed of river silt and decayed vegetable matter; certainly in the Ubaid period the region was still very wet. The utilization of reeds as building material indicates a marshy state, but that some of the region was sufficiently dry for cultivation is proved by the numerous mortars and sickles found in settlements of the Ubaid period.

Our evidence comes from a fairly large group of sites. Its character may be briefly stated: Tell Abu Shahrain (Eridu): a series of superimposed temples (XVIII–VI), a cemetery, and surface material.

Al-Ubaid: settlement remains and a few “graves” just under the surface. The settlement remains are from a trench measuring 30 × 4 meters; the “graves” are mingled with graves of

210. Copper may come into general use at about this time, but no copper objects from XIII are cited.

211. See also *SAOC* No. 23, p. 39.

212. That a people whose mode of living was like that of the modern Marsh Arabs might have preceded them has been suggested by Professor Frankfort. Evidence from Ur further suggests this possibility (see below p. 77). For a description of this type of life see Fulanain, *Haji Rikhan, Marsh Arab* (London, 1927).

the Early Dynastic cemetery, and their nature and date are open to question. There is a considerable amount of surface material also.

Ur: three pits, most notably the "Flood pit." The remains of the Ubaid period consist of several superimposed building layers beneath the "Flood" deposit, also graves within the sand of the "Flood" layer.

Warka: a pit sunk in the precinct of Eanna, yielding superimposed building levels (XVIII-XV).

Raidau Sharqi (near Warka): surface deposits.

Hajji Muhammad (near Warka): surface deposits.

Telloh (Lagash): mainly a large pit under Entemena's esplanade. The pit has an area of 800 square meters, and water level was reached 22 meters below the top of the mound.

Tell 'Uqair: two buildings near the surface and a sounding between them which yielded approximately seven levels of Ubaid material, going down to virgin soil.

It is unfortunate that in the South we have no excavated site which can serve as a key for the region in the sense in which Tepe Gaura serves for the North. Warka, the best stratified site, has produced too little material to furnish a good ceramic outline of the Ubaid period. Al-Ubaid, which has yielded the largest amount of published pottery, is unstratified and in addition is published in a very confusing manner, materials from the trench through the settlement, from the "graves," and from the surface being mixed indiscriminately in the report. The Ur deposits show stratification and give promise of a considerable amount of material, but are as yet available only in preliminary reports. Telloh, like al-Ubaid, has a considerable amount of pottery which is, for all practical purposes, unstratified. Tell 'Uqair, a most promising site, has had only preliminary excavations into Ubaid levels, and its pottery shows no typological development from level to level. It may well be that the recent stratified finds of the Iraq Department of Antiquities at Abu Shahrain will, when fully published, allow us to consider Shahrain as a type site.

#### POTTERY

##### TELL ABU SHAHRAIN

A series of superimposed temples under the Third Dynasty ziggurat has recently been excavated, and no less than eleven (plus slight traces of two earlier ones) seem to belong to the Ubaid period.<sup>213</sup> The lowest temples contain a type of painted pottery<sup>214</sup> which Lloyd calls non-Ubaid and implies that he considers similar to that found at Hajji Muhammad, near Warka. With the latter idea we agree completely (see pp. 80 f. for description of Hajji Muhammad pottery), but we believe that this striking pottery, found also in the lowest level at Ur (see pp. 77 f.), is neither non-Ubaid nor pre-Ubaid but rather the earliest manifestation of the Ubaid culture.

From the brief and popular publication we cannot, of course, learn technical details of this earliest pottery from Shahrain. It can be seen that there are numerous shallow bowls or plates, deeper bowls which seem to have rather straight sides, at least one example of a flaring rim which may well be from a vessel of form 7 (Fig. 9), and several tall beakers somewhat resembling form 11 but with a sharp taper toward the base. Most of the motifs are paralleled in the known Ubaid repertoire (Fig. 10). They include motifs 2, 3, 13 (filled with wavy lines), 16, large pendent triangles like No. 36 but alternating with triangles based on the bottom line as well as Ur-Ubaid I motifs 1 (without hatching), 5, 18, 39, 44, 47 (similar), 51 (similar; several variants), and 62 (see Fig. 11). Irregular wavy lines (cf. Fig. 10: 20) occur as fill for motifs of various shapes and sizes. Usually the interiors of the shallow bowls or plates are covered with painted design; the whole surface may be divided into a cruciform or Maltese-

213. *ILN*, Sept. 11, 1948, pp. 303-5.

214. *Ibid.* Fig. 13.

square pattern, or there may be a rim zone or concentric rim zones with the center treated separately. The deeper forms naturally have their ornament on the exterior, with one broad zone or several narrower zones. Design elements are relatively small and closely spaced; in almost all the illustrated examples the surface seems to be considered as one large design, in which the small elements are very nicely balanced against the background. This pottery shows good designing and apparently good brushwork also. (The individual examples in the illustration are small and it is impossible to be sure of minutiae.) It is certainly found in Temples XVIII–XVI, and the grouping of Temples XVI–XIV together in the chronological chart<sup>215</sup> suggests that it may go as high as XIV.

The next level for which we have any information is Temple VIII,<sup>216</sup> in which there are bowls apparently like form 1 of the North (see Fig. 6), but possibly conical rather than bell-shaped, and fine examples of lenticular hole-mouthed vessels with long spouts such as were found in Gaura XIX–XVII (see p. 48); the latter are distinguished at Shahrain as they are at Gaura by painted decoration covering almost all the visible surface. One bears motif 22. Motif 12 also occurs; no others can be identified with any certainty, although there appear to be several based on petal or leaf elements.

Temples VII and VI<sup>217</sup> yielded examples of forms which we shall find to be typical of the Ubaid period in the South—the simple round-based bowl (form 2), the bottle (form 8), the ring-based bowl with bulging profile (form 10), and the bell-shaped beaker (form 11). A deep beaker resembling form 11 but with less flaring sides has a ring base. Two forms apparently found only here are a round-based bowl with a noticeable break in the profile near the top and a broad rim (sometimes resembling that of form 1 *b*) and a squat bottle with a very long, thin neck; the former occurs chiefly in painted pottery, while the latter is confined to plain pottery. Three painted censers from Temple VI are unusual, but the occurrence of a censer in Gaura XIII may be recalled (see p. 50). Motifs include Nos. 1, 15, 20, 31 (similar), and 36 (with alternating triangles) as well as Ur-Ubaid I motifs 18, 32 (vertical), 42, and 67 (see Fig. 11).

The cemetery contemporary with Temples VII–VI has given us numerous whole vessels,<sup>218</sup> adding considerably to our knowledge of Ubaid pottery in the South. There are shallow plates, both plain-rimmed and with broad ledge rims (forms 1 *a*, 1 *b*, and possibly 2); slightly carinate bowls (form 3) with ring bases; plain rounded bowls which may have slightly incurved rims (like form 3 or 4 of the North); squat pots with four pierced lugs on the shoulder (form 7) or with a spout and no lugs; bottles (form 8), which in some instances are provided with a tubular spout and a loop handle, either from rim to shoulder or basket-like across the mouth; and bell-shaped beakers (form 11). Especially interesting are a rounded bowl with a small lip spout and a unique vessel shaped somewhat like form 11 but with a ring base and a single loop handle on the side. Motifs include Nos. 1, 15, an interrupted design similar to 27, large crosshatched lozenges and triangles, large single chevrons, festoons, and leaf or petal designs.

The pottery from Temples VII–VI is of the same type as that from the cemetery and differs noticeably from that of the levels beneath. Motifs are larger and simpler, design is much more open, more use is made of heavy bands and less of fine brushwork, and there is a tendency to orient motifs diagonally. This later Ubaid pottery (generally considered normal, since the earlier types are so much less well known) is in many cases not unattractive; the simple, bold designs are often competently done and well adapted to the forms of the vessels, a few individual pieces being more striking than the somewhat “busy,” closely knit designs of the earlier Ubaid pottery. On the whole, however, there seems to be a coarsening and a degradation of the art of pottery-painting.

215. *Ibid.* Fig. 12.

216. *Ibid.* Fig. 10.

217. *Sumer* III 104–6 and Figs. 4–6.

218. *ILN*, Sept. 11, 1948, p. 305, Figs. 11 and 15.

In the unstratified material obtained in earlier excavations at Shahrain few forms are reconstructible; most of the sherds are rims from plates (form 1)<sup>219</sup> or outturned rims perhaps from bowls of form 4 or from jars of form 7.<sup>220</sup> The "club-headed" type of rim is found.<sup>221</sup> Fragments from "pithoi" have heavy rims and horizontal ribs in relief just below the rim.<sup>222</sup> One sherd has a piercing just below the rim, perhaps for pouring.<sup>223</sup> A fragment of a rim with an open lip spout, bridged, was seen by the writer in the personal collection of Professor W. F. Albright. Plates frequently have painted bands on the rim and interior, also flowing curved bands. Most of the motifs typical of the period are represented here (Fig. 10, motifs 1-2, 4-5, 10-13, 15, 17-18, 20 [interrupted], 24, 26 [only interrupted?], 27 [double row, vertical], 28 [pendent], 30-32, 34, 35 [part of center only]), and crosshatching of these motifs is common.<sup>224</sup> Two interesting fragments of plate floors show the surface divided into zones;<sup>225</sup> the first has a zone of simple checkers and another with a multiple-line pattern resembling motif 5. Another plate floor shows a design reminiscent of Halaf painting—an extremely attenuated "Maltese square."<sup>226</sup> These plates probably belong to the time of Temples XVIII-XVI. In general, if the motifs are reproduced accurately, the draftsmanship is not very good; a few motifs are carefully and precisely drawn, but the majority seem to be splashed on boldly and carelessly.

AL-<sup>c</sup>UBAID

The site which has produced the largest amount of published material from this period, to which it has given its name, has, unfortunately, no stratification which can help to settle the chronology. Indeed, a fair amount of pottery labeled simply "prehistoric" in the al-<sup>c</sup>Ubaid publication is of Protoliterate or even later date.<sup>227</sup> Most of the Ubaid-period material published is from the surface of the tell; some comes from the trench through the settlement, and a few pieces are supposed to come from graves.<sup>228</sup>

Both coarse and fine pottery occur. Sand, crushed pottery, and occasionally straw were used for tempering. The vessels are all hand- or tournette-made; in the better examples the surface is generally wet-smoothed and sometimes burnished, but never pattern-burnished. Painted decoration in black or brownish red is frequent; it is stated to be always mat.<sup>229</sup>

All the motifs shown in Figure 10 are found at al-<sup>c</sup>Ubaid except 6, 16, and 18-19. In addition to these there are numerous designs built on complicated interlocking leaflike motifs; unfortunately none is sufficiently well preserved to enable us to deduce the exact design scheme, but similar designs are found in the South at almost all sites which have Ubaid remains. These involve coverage of most of the surface with paint while relatively narrow spaces are left in reserve<sup>230</sup> and therefore come under the category of negative design. The use of broad bands of paint on rims of plates and vessels of similar forms as well as in sweeping lines or curves over plate surfaces is also common. The latter do not, in the fragments preserved, form recognizable designs which can be included in a catalogue of motifs, but they are an important element in the painting of Ubaid pottery at many sites. An interesting type of decoration is that in which a narrow motif is incised within a broad painted band;<sup>231</sup> the result gives the effect of a negative design, but the technique is quite different.

219. E.g. in *Shahrain*, Fig. 10.

220. See *ibid.* Figs. 10-11.

223. *Ibid.* Fig. 11, near lower left corner, sherd marked XIV, 4:4'.

224. See *ibid.* Figs. 9-11.

225. *Ibid.* Fig. 9:54, 100.

228. "Graves" 8-9 (called "prehistoric") and 64 are apparently of Ubaid date; 90 (called "pre-First Dynasty") is Protoliterate; see *ibid.* pp. 177-79.

221. E.g. *ibid.* Fig. 10:61.

222. *Ibid.* Fig. 9:50-51.

226. *Ibid.* Fig. 11, upper left corner.

227. E.g. *UE I*, Pl. LII xv A-B.

229. *Ibid.* pp. 161-65. We are not including here a discussion of the various types of incised, combed, punctate, etc. pottery; none of these types has yet been found in unequivocally Ubaid context, and the attribution of any of them to the Ubaid period is therefore dubious. Combed and fingernail-impressed wares are known to occur in the Warka and Protoliterate periods, and other types also have late occurrences.

230. *Ibid.* Pl. XVI 1849 and several others.

231. *Ibid.* Pl. XIX 1916 and p. 47. A similar technique is used in Gaura XX (see above p. 25).



Al-Ubaid has numerous plates of form 1, frequently with ledge or "club-headed" rims,<sup>232</sup> and rounded bowls (form 2), sometimes very shallow.<sup>233</sup> Thickened rims with a slight inward slope occur on ring-based bowls which in profile resemble form 2.<sup>234</sup> At least one vessel has a little perforated ledge inside the mouth, presumably to hold a lid.<sup>235</sup> Numerous separate tubular spouts were found.<sup>236</sup> Squat jars of form 7 are very common, both plain and painted, and globular bottles (form 8) also occur.<sup>237</sup> The fairly deep bowls with bulging sides and ring bases (form 10)<sup>238</sup> are common. A fragment of a "brazier" perhaps comparable with form 9 occurred in "grave" 8, which is a mere collection of objects, some certainly Ubaid in date.<sup>239</sup> It is noticeable that beakers of form 5, quite common at most of the other sites, do not appear in the published material from al-Ubaid; likewise carinate bowls of form 3 are absent.<sup>240</sup> However, the writer has seen in the University Museum at Philadelphia an al-Ubaid beaker of form 11 decorated with a broad design zone covering the greater part of the surface and containing alternately large isolated triangles, apex down (motif 36), and pairs of curving chevrons. In the same collection is a lenticular hole-mouthed vessel with a long flaring spout, like those of Abu Shahrain Temple VIII and Gaura XIX-XVII (see pp. 75 and 48). A third noteworthy vessel in the University Museum is a long-necked jar somewhat resembling form 8, but with more carinate shoulder, neck more carefully separated from body, and a vertical loop handle extending from lip to shoulder.<sup>241</sup>

## UR

The material from this well stratified site is available from preliminary reports only, but the stratigraphic basis seems to be clear. Woolley dug down to virgin soil in several pits, the largest and most revealing being the so-called "Flood pit,"<sup>242</sup> where he found a layer which he believes represents the Deluge of Babylonian cosmology. At the bottom of that pit are clay and silt layers containing decayed vegetable matter which represent the original marshland of the Mesopotamian alluvium. Above these, beginning apparently as soon as the earth was sufficiently dry to bear habitation, is the earliest settlement, represented by traces of buildings and numerous objects, principally Ubaid painted pottery. This settlement stratum represents Woolley's al-Ubaid I.<sup>243</sup> Above it comes deep sand, deposited by the "Flood," in which were found two sets of graves at two distinct levels; the lower level is Ur-Ubaid II and the upper one Ur-Ubaid III. Different types of equipment and, specifically, different types of pottery decoration separate these three phases fairly well.

The pottery of Ur-Ubaid I, whether painted or unpainted, is of a well levigated clay which is light in color, often with a greenish tinge. The vessels, often very thin-walled, are made by hand or on the tournette; the surface is usually wet-smoothed, sometimes slipped. A hematitic paint black to brown in color is used; it may be mat but is more often lustrous.<sup>244</sup> No statement is made concerning the differences, if any, in the fabric of the pottery of Ur-Ubaid II and III.

No forms of the first phase are known except possibly a "kettle," a squat jar of form 7 with-

232. *Ibid.* Pl. L ii-iii.

233. *Ibid.* Pl. L v, i.

234. *Ibid.* Pl. L iv.

235. *Ibid.* Pl. XIX 2168.

236. *Ibid.* p. 159.

237. See *ibid.* Pl. LI viii and xii respectively.

238. *Ibid.* Pl. LI vii.

239. *Ibid.* p. 190.

240. Most of the other forms in the "prehistoric" group from al-Ubaid are, to the writer's mind, of Warka or Protoliterate date, since they have clear analogies to forms of those periods from other sites. It will be recalled that when *UE I* was written the material of the Warka and Protoliterate periods was not well known.

241. This vessel is in form and in the panel design with vertically oriented interlocking triangles very similar to a vessel published by Herzfeld in *Iranische Denkmäler I B* (Lfg. 3-4, Berlin, 1933) p. 20.

242. See *AJ X* (1930) Pl. XLII and pp. 329-41.

243. *Ibid.* pp. 335-37. In order to avoid confusion between the site name and the phases of the culture period, we shall call the Ur phases "Ur-Ubaid I" etc.

244. *Ibid.* pp. 336 f.; *DSA*, p. 34. The luster is important since the use of lustrous paint has so often been considered as restricted to Halaf pottery.

out lugs but with long tubular spout and basket handle.<sup>245</sup> The painted decoration of the Ur-Ubaid I pottery tends to be profuse, frequently with very complex designs built up from simple elements; a glance at Figure 11<sup>246</sup> will show that most of the motifs are more elaborate than those of most other sites (cf. Fig. 10).

From the graves of Ur-Ubaid II several vessel forms are published. There is a ring-based beaker<sup>247</sup> which does not have the convex profile of form 5 but is more nearly vertical-sided with a slightly sinuous profile such as is seen in beakers of the North. Ring-based bowls occur here, one of form 6,<sup>248</sup> a taller carinate specimen,<sup>249</sup> and one with profile rather like form 3.<sup>250</sup> "Kettles" (form 7 without lugs and with tubular spout) are said to be common,<sup>251</sup> and there are several plates of form 1 with plain or ledge rims.<sup>252</sup> Any or all of these forms may begin in the first phase.

In design one can clearly see a difference between Ur-Ubaid I and II, comparable with that at Shahrain between the pottery of Temples XVIII-VIII and the pottery of Temples VII-VI and the cemetery (see pp. 74 f.). All published examples of Ur-Ubaid II pottery have very simple decoration with large, boldly drawn motifs and an "open" treatment of design,<sup>253</sup> in marked contrast to the closely knit designs of the first phase. Several vessels show an interrupted design zone with few motifs and large blank spaces; plain bands are more common than before. The one published piece with crowded decoration is a plate whose floor is almost covered with four groups of crescents placed in a cruciform arrangement.<sup>254</sup> Painted pottery is said to predominate over plain in the Ur-Ubaid II graves.<sup>255</sup>

On the basis of the presence of red ware we consider the Ur-Ubaid III graves and the lower part of the "kiln" stratum, from which they were dug, to be approximately contemporaneous with Warka XIV-XII (cf. p. 80) and to belong to the early part of the Warka period (see p. 104).

#### WARKA

The stratified material of Ubaid date comes from a pit about 14.50 × 10.50 meters at the top, dug to a depth of 19.60 meters below the southwestern part of the court of the Limestone Temple of Eanna level V.<sup>256</sup> Virgin soil was found about a half a meter above the bottom of the pit. The Ubaid levels yielded pottery<sup>257</sup> which is chiefly of one fabric, whether fine or rough, painted or unpainted, and shows no change from level to level. It is always light in color, varying from yellowish or greenish to reddish. The rough variety is coarse- to medium-grained, usually well fired, and made by hand or on the slow wheel; the fine-grained variant, usually fired very hard and very well, is wheelmade (apparently on the fast, or true, wheel). The paint is black or brown. The material is very fragmentary; there are almost no whole vessels or even reconstructible forms.

Level XVIII has numerous jar necks, mostly from vessels of form 7,<sup>258</sup> though some of the long necks are more likely to come from globular bottles of form 8.<sup>259</sup> Beakers of form 5 are present,<sup>260</sup> both painted and unpainted, the former more common. Some of the rim fragments

245. *AJ X*, Pl. XLIV b and p. 328. Whether this vessel should be attributed to Ur-Ubaid I is dubious, since it comes from a pit which has no "Flood" deposit.

246. Our knowledge of the decorative motifs used on the painted pottery of this phase is due solely to *DSA*, Pl. 2 b, from which our Fig. 11 is taken; since *DSA* gives drawings of motifs only, we know little of the syntax of design elements, tectonic feeling, etc.

247. *AJ X*, Pl. XLV b.

248. *Ibid.* Pl. XLV d.

249. *Ibid.* Pl. XLV c.

250. *Ibid.* Pl. XLVI a.

251. *Ibid.* Pl. XLV a and p. 338.

252. *UVB III* (1932) Pl. 10, Plan 1, and pp. 18 f. and 29-31; *UVB IV* (1932) Pl. 2 and pp. 6-8.

253. *UVB IV* 31-36.

254. E.g. *ibid.* Pl. 16 A a.

255. *Ibid.* Pls. XLV e and XLVI b-c.

256. See *ibid.* Pls. XLV-XLVI.

257. *Ibid.* Pl. XLV e.

258. *Ibid.* p. 337.

259. *Ibid.* Pl. 16 B g.

260. E.g. *ibid.* Pl. 16 C p.

assigned to vessels of this form by the excavator may as easily come from carinate bowls of form 3; one restorable example of the latter occurs in this level, and a deep pot (form 4) also appears here.<sup>261</sup> Numerous plates of form 1 occur; the bases are flat or slightly rounded, and the "club-headed" rims are usually ledged but sometimes slope inward or outward.<sup>262</sup> The unpainted pottery includes numerous flaring-rim profiles quite possibly representing form 9 or form 2.<sup>263</sup> Fragments of larger, coarse vessels of hole-mouth type (called "pithoi" by the excavator) may belong to storage jars; unfortunately we have no clues as to the complete forms. Some of these have a horizontal raised rib below the rim,<sup>264</sup> a feature which is paralleled in the unstratified material from Abu Shahrain. Ring bases occur, probably belonging to beakers.<sup>265</sup> Pierced lugs are found, probably from jars, and continue in level XVII.<sup>266</sup> The jars of form 7 bear on the shoulder a design zone such as is characteristic of vessels of that form in the North; motifs 4(?), 10, 24, and 32 (see Fig. 10) occur.<sup>267</sup> The plates have the rim and most or all of the interior covered solidly with paint.<sup>268</sup> Sherds attributed to beakers bear motifs 5(?), 7 (edged with little dots), and 31 (vertically oriented).<sup>269</sup> One of the latter is most unusual, for it has a herringbone motif in dark paint and a band of red paint above.<sup>270</sup> Red paint is very rare in Ubaid context in the South; its use with dark paint reminds one of the Ubaid polychrome ware of the North (see e.g. p. 28).

In level XVII appear numerous fragments from jars of form 7 (and again some which are possibly from form 8), plates of form 1, one fine example of a carinate bowl of form 3 and rim sherds which may well belong to such bowls, outturned-rim pots of form 4, a beaker of form 5, and a coarse "pithos" fragment with decorated ribs below the rim.<sup>271</sup> Ring bases are common, and both long, tubular and short, beak spouts occur.<sup>272</sup> There is one example of an almost hemispherical bowl, like form 2 but deeper.<sup>273</sup> Plates (form 1) continue to be decorated as in level XVIII, and their rims are like those of XVIII. Jars of form 7 also are decorated as in XVIII; motifs include 2-4, 10, 23-24, and 32.<sup>274</sup> Metope arrangement is common on such jars.<sup>275</sup> Several beaker sherds show a multiple-line truncated zigzag with filled triangle at base (motif 6);<sup>276</sup> this variant of the truncated zigzag seems characteristic of Warka. Motifs 7, 17, 21, and 31 also occur.<sup>277</sup> Designs based on the zigzag, especially on motif 2, sometimes quite roughly scribbled, are common on "pithos" rims.<sup>278</sup>

Level XVI contains Ubaid painted pottery similar to that of level XVII. There are rims from vessels of either form 4 or form 7, a pointed base which may belong to a beaker, a "pithos" rim, a rim which may come from a beaker,<sup>279</sup> and one new element—sherds of the red- and gray-slipped wares which characterize the Warka period. According to the excavators such sherds appear sporadically through all the early levels from the very bottom of the pit, but they are thought not to be *in situ*.<sup>280</sup> Whether the earliest (level XVI) published piece<sup>281</sup> is red or gray is not stated.

261. *Ibid.* Pl. 16 C m and l respectively.

262. *Ibid.* Pl. 16 A c'-n'.

263. E.g. *ibid.* Pl. 16 A k-m, p-q.

267. *Ibid.* p. 32 and Pl. 16 B q, u, o, n respectively.

268. *Ibid.* p. 32 and Pl. 16 A c', e'-n'.

269. *Ibid.* Pl. 16 C b, k and B g', i' respectively.

270. *Ibid.* Pl. 16 B i' and p. 34.

271. *Ibid.* Pls. 16 D a group; 16 D b group; 16 C t and 17 B u-v, y, a'; 17 B a, d; 16 C a'; and 16 C w respectively.

272. See *ibid.* Pl. 16 C e' group and D n, q.

273. *Ibid.* Pl. 16 C r (cf. our Fig. 6:3).

274. See *ibid.* Pls. 17 A and 16 D.

275. *Ibid.* p. 32 and Pl. 17 A c-g.

276. *Ibid.* Pl. 17 B o-p.

277. *Ibid.* Pls. 17 B u, 16 D x, 17 A l, and 17 B m respectively.

278. *Ibid.* e.g. Pl. 16 D l-m, t.

279. *Ibid.* Pl. 17 C f and i, d, k, g respectively.

264. *Ibid.* Pl. 16 A e-f, h.

265. *Ibid.* Pl. 16 A s-t.

266. See *ibid.* Pl. 16 B k and C x.

280. *Ibid.* p. 37.

281. *Ibid.* Pl. 17 C m.

Level XV has fragments of Ubaid painted pottery. On rims<sup>282</sup> and other fragments of bowls or beakers motifs 6, 10, and possibly 24 occur. A coarse unpainted vessel shows a lip spout, apparently on a "pithos" rim.<sup>283</sup> A sherd with a combination of painting and incision occurs here—an unusual find.<sup>284</sup> Its fabric is not described, but it bears bands of red paint and a zone of incised crosshatching; although classed by von Haller with the red ware because of its paint, it seems to us more likely to belong with the Ubaid painted ware. It will be remembered that one earlier piece of such ware has red paint. A rim sherd, perhaps from a beaker or a deep bowl, is painted on each side with a broad red band and a narrow black band at the edge.<sup>285</sup>

It is our belief that level XIV marks the beginning of the next period.<sup>286</sup> That point is arguable, for Ubaid painted ware survives into level XII, and Heinrich even considers the Ubaid period to carry through level XI.<sup>287</sup> In our opinion, however, the presence in noticeable quantity of new cultural elements is more significant than the continuation of old ones; and in XIV we have for the first time a proportionately large number of sherds of gray-slipped ware, one of the hallmarks of the Warka period. It is stated that red-slipped ware also is present in XIV in appreciable quantity,<sup>288</sup> but only two pieces are shown. It is unfortunate that no objects other than pottery are available by which to determine the division point.

#### RAIDAU SHARQI

This site, in the immediate neighborhood of Warka, has yielded only surface material, a considerable amount of which belongs to the Ubaid period. Unfortunately very little is illustrated, but descriptions of the fabric and the forms exist.<sup>289</sup> Both painted and unpainted sherds occur in a fabric which may be either coarse or fine. The greenish color which results from high firing is the rule, with black paint; red sherds, occurring occasionally, have bister paint. All the pottery is fired hard, sometimes almost to the verge of vitrification. Whether the pottery is wheelmade is not known; the excavator assumes that at least the fine ring-based pieces are wheelmade.

The most usual form is a plate or shallow bowl with ledge-like rim,<sup>290</sup> apparently of form 1 b. A special type of flat bowl has wavy lines combed on the interior; but, as stated above (n. 229), we cannot be sure that any combed pottery is actually of Ubaid date.<sup>291</sup> Ring-based bowls, perhaps of form 10, and various other bowl shapes occur.<sup>292</sup> Vertical-sided beakers and bottles also are said to occur; these terms suggest that forms 5 and 8 may be represented. Pierced lugs in the coarse fabric, three fragments of loop handles, and two short spouts were found. The few fragments of design pictured show a band on the rim of a bowl, oblique stripes on the rim of a plate, some kind of striping on the interior of a bowl, and two fragments of negative design, one perhaps being a zigzag.<sup>293</sup>

#### HAJJI MUHAMMAD

Few forms are known from this site near Warka;<sup>294</sup> most of the rims shown are from flaring carinate bowls or plates of a type unlike the normal plates (form 1). One sherd,<sup>295</sup> from a very

282. *Ibid.* Pl. 17 C s group.

283. *Ibid.* Pl. 17 C o and p. 34.

284. *Ibid.* Pl. 17 C x and p. 37.

285. *Ibid.* Pls. 17 C t and 21 a-b.

286. Suggested by von Haller *ibid.* p. 37.

291. *Ibid.* Pl. 35 a. The fact that combed pottery occurs frequently along with Ubaid painted pottery in surface finds at various sites suggests that it may actually be Ubaid in date, but it is noticeable that in most stratified deposits—at Warka in the Eanna sounding, at Ur, and at Uqair—combed pottery is not present. It is, however, found at Warka in bricks of level A of the Anu ziggurat—bricks which yielded Ubaid painted sherds and numerous other objects all definitely Ubaid in character (see *WVDOG* LI 66 f. and *UVB* III 19 f. and 28). Combed pottery also occurs with Ubaid painted pottery at Nuzi (see above p. 56).

292. *UVB* IX 34. The reference in note 3 *ibid.* to *UE* I 158, type P. iii, is erroneous; type P. iv is surely meant.

293. *UVB* IX, Pl. 35 a-f.

294. *Ibid.* pp. 37 f. and Pl. 40.

295. *Ibid.* Pl. 40 p.

287. *Schulz und Lehm*, pp. 21 and 51.

288. *UVB* IV 37.

289. *UVB* IX (1938) 34.

290. *Ibid.* Pl. 35 b.

squat carinate vessel, recalls the squat gray burnished bowls or urns of Ninevite 3 (see p. 57). In unpainted pottery there is the neck from a jar of form 7 and one which may be from a bottle of form 8.

The pottery usually has a yellowish or greenish surface. Whether it is made on the wheel is uncertain, since the surface is usually covered with a slip or wet-smoothed. The paint is of numerous colors: dark brown, dark purple, dark green, and light red. According to the first report, the paint, like that of Ur-Ubaid I, is usually lustrous; the second report, based on more extensive excavation, states that most of the sherds show mat paint.<sup>296</sup> The decoration<sup>297</sup> is always monochrome, occurring sometimes on both surfaces but usually on the inside of bowls or plates. The patterns are generally large and bold. Their best analogies are from Shahrain Temples XVIII-XVI (see pp. 74 f.) and Ur-Ubaid I (cf. Fig. 11:4, 18, 30, 44).<sup>298</sup> Hajji Muhammad also has a design like motif 42 of the North (see Fig. 5) but without negative design in the squares,<sup>299</sup> and in its frequent utilization and exploitation of negative design and of painting within negative areas reminds one of Northern pottery, especially some of the Gaura material. The floors of several plates have sweeping curved designs, perhaps derived from the swastika. The use of incision within painted bands is frequent; this feature we have seen at other sites (see e.g. p. 76). It is noticeable that many of the unusual motifs of Hajji Muhammad are directly paralleled in Iran, especially in Tall-i-Bakun A.<sup>300</sup> Lenzen believes that the painted pottery of Hajji Muhammad is an early variety of Ubaid ware or belongs to a stage immediately preceding it.<sup>301</sup>

#### TELLOH

A considerable amount of Ubaid pottery was found in the Telloh pit; the exact stratigraphic position of any piece in relation to other finds, however, is dubious.

Carinate bowls of form 3 are deeper than we have seen at other sites;<sup>302</sup> one such vessel could almost be classed as a beaker. A beaker of form 5 with a little lip spout occurs, also a sinuous-sided beaker (form 11) and fragments of a squat jar of form 7.<sup>303</sup> In unpainted pottery there is a flaring bowl on a ring base (form 9), also two unusual forms—an almost conical vessel or "cornet" and a markedly flaring bowl on a solid, almost cylindrical base.<sup>304</sup>

Of the motifs shown in Figure 10 Telloh has 1-7, 9-10, 14-16, 17 (hatched), 18-21, 23-25, 27-29, 31-32, and 36. Besides these it has the familiar "butterfly" or "double-ax" motif seen in the North (see Fig. 5:37), a festoon design sweeping across the shoulder of a pot reminiscent of a festoon from Arpachiyah, and several pieces showing a bird.<sup>305</sup> All of the bird designs are fragmentary, but enough remains to show that they have the outlined head with dot-eye known in Halaf or Ubaid times in the North (see pp. 24 and 27).

#### TELL 'UQAIR

Tell 'Uqair, the most recently excavated of all the southern sites, has yielded an excellent and stratified collection of Ubaid pottery, as yet known only from one preliminary report.<sup>306</sup> As far as can be told from the evidence now available, there is no particular development from one level to another, and the whole assemblage appears as a homogeneous collection of ma-

296. See *ibid.* p. 37 and UVB XI (1940) 27.

297. UVB IX, Pls. 36-40.

298. According to Lenzen (UVB XI 27 f.) the second season produced many additional sherds with motifs like those shown in UE I, Pls. XVI and XVIII.

299. UVB IX, Pl. 38 b.

300. See SAOC No. 23, Fig. 13.

301. UVB XI 28.

302. E.g. Telloh, Pls. 26:2 and 27:1.

303. *Ibid.* Pls. 26:4, 3\* TG. 5683, and 32:2 d respectively.

304. *Ibid.* Pl. II 5732, 3737 (erroneous marking for 5737; see p. 6 and Pl. 16:1), and 5736.

305. See *ibid.* Pls. 29:1 a, 32:2 d (cf. Arp. Fig. 37:2), and 34:2 a, c respectively.

306. JNES II.

terial. Almost all the forms found in the lowest levels of the sounding appear in the upper levels also, although not all forms appear in every level. We shall therefore describe the pottery as one body. It is unfortunate that this site does not provide a developmental sequence of forms and motifs which can be used to check the Ur and Warka stratigraphy.

Carinate bowls of form 3 are common at 'Uqair, both the squat type and a deeper variant.<sup>307</sup> Forms 7 and 8 also are common, the former with little pierced lugs as usual, the latter with long tubular spout. Ring-based bowls with sharp carination high up on the body also occur frequently. All these forms are found in every level. Less common are simple rounded bowls (form 2), footed beakers (form 5), flaring bowls with high ring foot (form 9), and "kettles" of form 7 with spout and basket handle (markedly resembling one from Ur; see pp. 77 f.). Bowls somewhat deeper than form 2, with slightly flaring sides and flat base, the lower part scraped by a flint, occur sporadically; more frequent are deep bowls with almost vertical sides, rounded base, and trough spout. The absence of plates, so common at all other sites, is noticeable. Certain rim sherds<sup>308</sup> suggest that the "pithos" type with rib below the rim is present here also; it is regrettable that at no site has a reconstructible example of one of these large vessels with heavy rim and strengthening rib been found.

In design<sup>309</sup> 'Uqair diverges considerably from most of the other sites, although possessing many of the common Ubaid motifs, including 1-3, 7, 10, 12, 13 (variant), 15, 21, 23-24, 30, 32 (in zone), and 36. Perhaps the most striking difference is the relative commonness of representational motifs, which appear so rarely in Ubaid context elsewhere in the South. Three different types of bird representations occur: one with a fairly long, slim, hatched body, the head a mere line; one with a thicker, crosshatched body, outlined head, and dot-eye; and a peculiar example with dotted body, the head filled in solidly. Whether these are intended to represent different species of birds we would not attempt to say. Also depicted are horned quadrupeds, usually with arched body formed of two triangles or of a single inverted U, body and head painted solidly. The horns slant backward and may be straight, wavy, fringed, or corkscrew-like. Another type of quadruped representation has a rectangular, crosshatched body, legs and neck shown by straight lines, and the outlined head and dot-eye known in the bird type.

Rather broad zones are common, especially on bowls of form 3 and similar vessels with fairly vertical sides; such broad zones are most frequently divided in metope style. The panels often contain very simple motifs: plain vertical bands, ladders, crosshatched rectangles, groups of three or four straight or wavy vertical lines. Sometimes two motifs alternate, for example groups of straight and groups of wavy lines. As to syntax, two features which prevail in most of the Ubaid pottery, multiple-zone decoration and "horizontalities," are lacking. Whether the differences between the 'Uqair pottery and the main body of Ubaid pottery are due to variations in time or space ('Uqair being much farther north than any of the other southern sites with Ubaid deposits) we cannot say, but the latter possibility certainly should not be ruled out of consideration.

#### SUMMARY

A brief survey of the Ubaid pottery from the southern sites shows that it seems to be of one fabric throughout.<sup>310</sup> It is light in color, buff to reddish, or greenish from too heavy firing. It may have painted decoration, which is usually black or dark brown. Both coarse and fine

307. For these and other 'Uqair forms see *ibid.* Pls. XVII, XIX-XXI, and XXV.

308. *Ibid.* Pl. XXIIa 3, 14. The find-spots of these pieces are not given; by analogy with Warka we class them with the Ubaid pottery.

309. For designs see *ibid.* Pls. XIX-XXI and XXV.

310. We exclude the pottery of Shahrain Temples XVIII-VIII, Ur-Ubaid I, and Hajji Muhammad from the following discussion, which is concerned with the large majority of examples of Ubaid pottery known to us. For chronological distinctions see below p. 90.

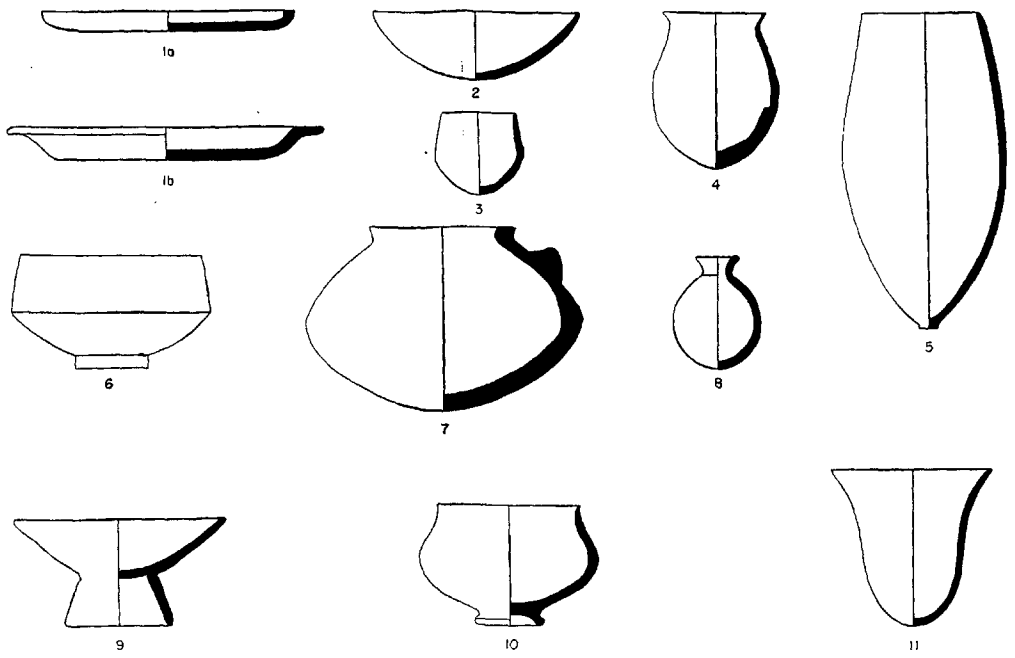


Fig. 9.—Southern Ubaid pottery forms. Scale, 1:5.83 (3-5, 9; others unknown)

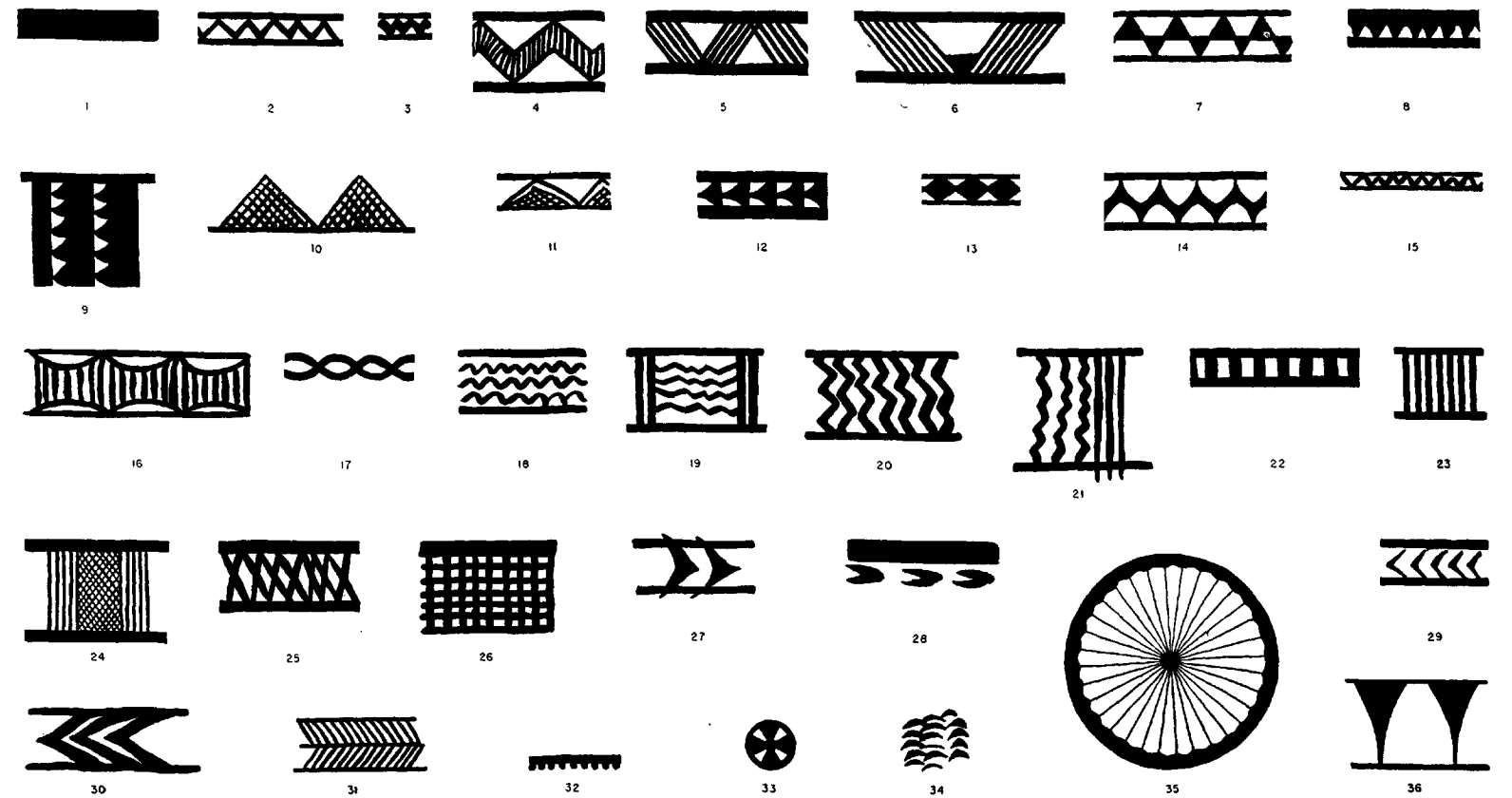


Fig. 10.—Southern Ubaid pottery motifs

Fig. 9

- |                                |                                |
|--------------------------------|--------------------------------|
| 1a. <i>UE</i> , I, Pl. L P. ii | 6. <i>AJ</i> X, Pl. XLV d      |
| 1b. <i>UE</i> I, Pl. L P. iii  | 7. <i>UE</i> I, Pl. LI P. viii |
| 2. <i>UE</i> I, Pl. L P. v     | 8. <i>UE</i> I, Pl. LI P. xii  |
| 3. <i>UVB</i> IV, Pl. 16 C t   | 9. <i>Telloh</i> , Pl. II 5736 |
| 4. <i>UVB</i> IV, Pl. 16 C l   | 10. <i>UE</i> I, Pl. LI P. vii |
| 5. <i>UVB</i> IV, Pl. 16 C p   | 11. <i>Sumer</i> III, Fig. 4:1 |

Fig. 10

- |                                 |                                  |
|---------------------------------|----------------------------------|
| 1. <i>UVB</i> IV, Pl. 16 A b'   | 20. <i>Telloh</i> , Pl. 31:1 j   |
| 2. <i>UE</i> I, Pl. XVIII 1724  | 21. <i>Telloh</i> , Pl. 31:2 o   |
| 3. <i>UE</i> I, Pl. XVIII 1555  | 22. <i>UE</i> I, Pl. XVII 1884   |
| 4. <i>UE</i> I, Pl. XVII 2027   | 23. <i>Telloh</i> , Pl. 27:1     |
| 5. <i>UE</i> I, Pl. XIX 2168    | 24. <i>UVB</i> IV, Pl. 17 A g    |
| 6. <i>UVB</i> IV, Pl. 17 B o-p  | 25. <i>UE</i> I, Pl. XVIII 1700  |
| 7. <i>UE</i> I, Pl. XVIII 1807  | 26. <i>UE</i> I, Pl. XVIII 1675  |
| 8. <i>UE</i> I, Pl. XVIII 1554  | 27. <i>DSA</i> , Pl. 4           |
| 9. <i>UE</i> I, Pl. XVIII 1852  | 28. <i>UE</i> I, Pl. XVIII 1821  |
| 10. <i>Telloh</i> , Pl. 33:1 f  | 29. <i>UE</i> I, Pl. XVIII 2311  |
| 11. <i>UE</i> I, Pl. XVII 1537  | 30. <i>Shahrain</i> , Fig. 10    |
| 12. <i>UE</i> I, Pl. XVIII 1910 | 31. <i>Telloh</i> , Pl. 31:1 h   |
| 13. <i>UE</i> I, Pl. XVII 1812  | 32. <i>UE</i> I, Pl. XVI 1756    |
| 14. <i>UE</i> I, Pl. XV 1983-85 | 33. <i>UE</i> I, Pl. XVI 1652    |
| 15. <i>Telloh</i> , Pl. 32:1 b  | 34. <i>DSA</i> , Pl. 4           |
| 16. <i>Telloh</i> , Pl. 29:1 d  | 35. Reconstructed from <i>UE</i> |
| 17. <i>UE</i> I, Pl. XVII 1631  | I, Pl. XVI 2123, 2146,           |
| 18. <i>Shahrain</i> , Fig. 10   | etc.                             |
| 19. <i>Telloh</i> , Pl. 30:2 e  | 36. <i>Telloh</i> , Pl. 32:1 g   |

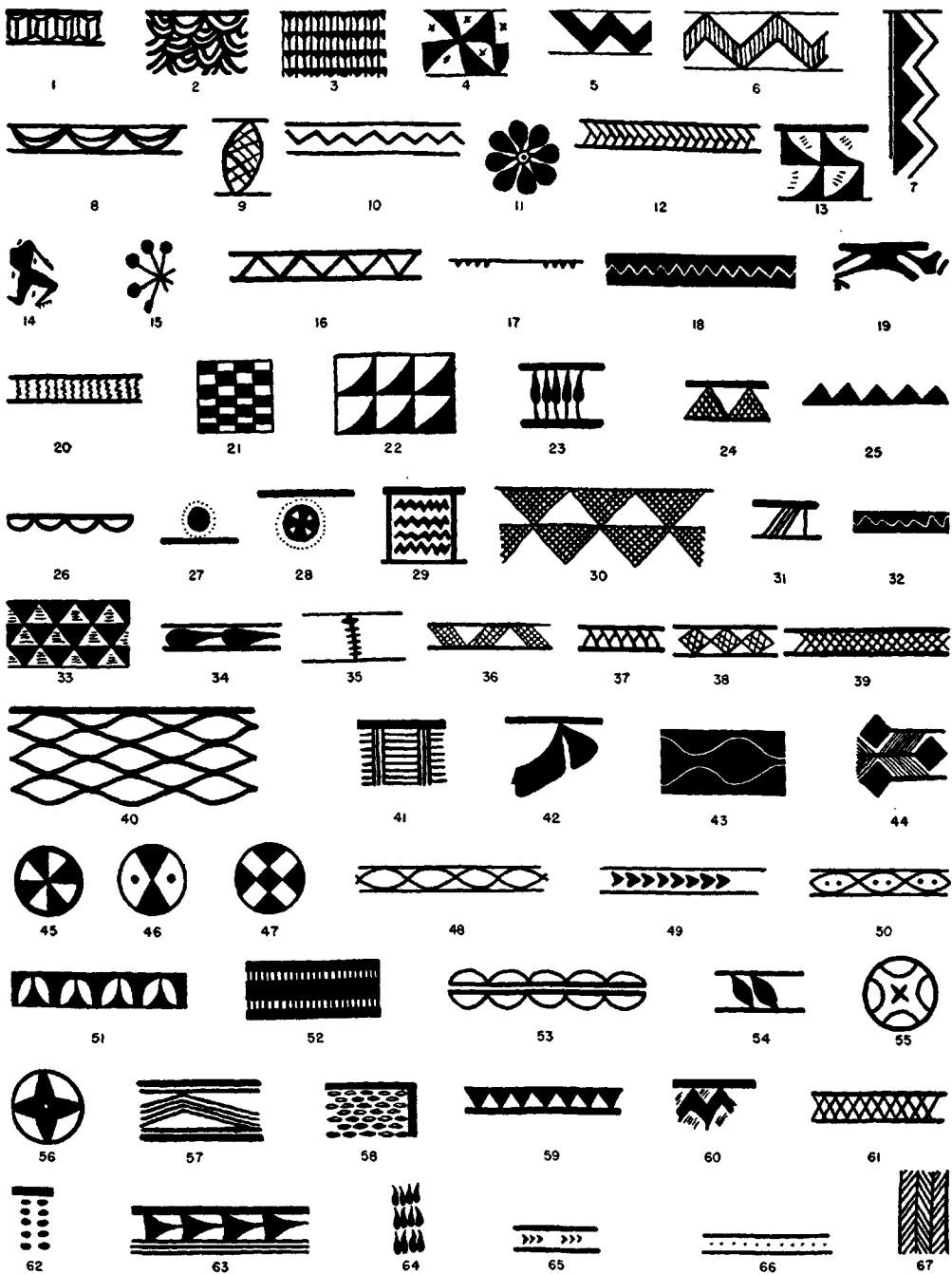


FIG. 11.—Ur-Ubaid I pottery motifs. After *DSA*, Pl. 2 b



varieties are known, deep bowls and beakers usually being fine, plates and large jars ("pithoi") coarse. Most of this pottery is made by hand or on the tournette. The fast wheel is said to be used at Warka for the fine pottery from level XVIII on, but it is not definitely claimed for any other site, though suggested for Raidau Sharqi.

The decoration is composed of simple motifs, which are sometimes combined into fairly complex designs. As in the North, we find here too that the majority are geometric, usually rectilinear. Designs built on waves and scallops, however, are quite common at all sites, likewise the cable (motif 17) with variations of fill. Blocks of wavy lines, either horizontal or vertical (motifs 19 and 21), or zones filled with wavy lines (motifs 18 and 20) also are frequent in the South, though rare in the North. Crosshatched panels, usually bordered by straight vertical lines (motif 24), are characteristic. Free elements occur commonly—X's, little V's in various orientations, dots, etc. Vertical rows of crescents (motif 34) occur on floors of plates. Another type of design which is characteristic of the South consists of compact assemblages of leaflike motifs.<sup>311</sup> Other leaf-shaped motifs occur in series or clusters, also singly in panels.<sup>312</sup> Heavy wavy or straight bands in no definite design are also common, especially on the flat ledge rims of plates. Representational motifs are extremely rare; the birds at Telloh, a scorpion at Shahrain and possibly another at al-Ubaid,<sup>313</sup> a little frog at Shahrain,<sup>314</sup> and the birds and quadrupeds at Uqair are the only ones from the whole of southern Mesopotamia.

As to syntax, most commonly vessels show zone decoration on the shoulder or upper body. Continuous horizontal design within the zones is the most common type, though less frequent here than in the North, and there is a correspondingly greater use of metope design in the South. A diagonally oriental element, such as a leaf, may occur in a panel. Free elements are often grouped within design zones.

#### FIGURINES

Clay figurines of a very peculiar type appear at several of the sites. First discovered at Ur, they occur in Ur-Ubaid I and II, that is, in the settlement below the "Flood" deposit and the lower series of graves in that deposit.<sup>315</sup> Some of these figurines are of the greenish color resulting from overfiring, which commonly occurs in the pottery, and have details painted in black. Others are much lighter in color and not so hard fired, with details apparently in black and red paint which has mostly vanished. The figures are fairly large, 14–17 cm. high. All the complete figurines found are female, with slender, well modeled human bodies; they stand, feet together, hands at the waist or holding a child to the breast. The heads are monstrous, almost reptilian in character, with definite snout, deep nostrils and mouth, and long oblique gashes to represent eyes; the skull is elongated and is frequently surmounted by a high bitumen cone, probably representing a wig or headdress. The grotesque character of the heads is obviously intentional, for they are carefully modeled. Painted bands and stripes on various parts of the body probably indicate ornaments; painted spots or applied pellets of clay on the shoulders may represent tattooing or ornamental cicatrices. The figures are nude; the pubes and the division between the legs are rendered by linear incision. Ur yielded also two heads of different aspect,<sup>316</sup> where the face is round and flat and the eyes seem to be rendered by applied pellets of clay horizontally gashed; these are definitely human in appearance and lead one to suspect that the other figurines were intended to represent demons or other supernatural beings. Numerous animal figurines, usually rather crudely modeled, were found in Ur-Ubaid I and II. They

311. The best example is in Ur-Ubaid I (*DSA*, Pl. 2 b, row 5, at right of center), and the others are from unstratified deposits; see *UE* I, Pl. XVI 1849 and others, *Shahrain*, Fig. 10:76 (row 5:1).

312. *DSA*, Pl. 2 b, row 7, toward right; *AJ* X, Pl. XLIV b; *Telloh*, Pl. 29:2 c.

313. *Shahrain*, Fig. 9:105; *UE* I, Pl. XVI 1862.

314. *Shahrain*, Fig. 9:109.

315. *AJ* X 338 and Pl. XLVIII.

316. *DSA*, Pl. 6 f, h.

frequently show painted details, apparently purely as decoration since the painting seems to bear no relation to the physical structure of the animals.<sup>317</sup>

The cemetery contemporary with Temples VII-VI at Abu Shahrain has yielded the first male counterpart to the Ur figurines—a human body and monstrous head with obliquely gashed eyes, long snout, and tall conical protuberance on top of the head.<sup>318</sup> The body is not so well modeled as those from Ur, but the posture is the same with legs together and hands at the waist. The being carries in his left hand a sticklike object with a knob on the upper end, probably a mace. Large pellets are applied to the torso, shoulders, and upper arms.

A fragment of a male figurine in drab clay was found on the surface at Shahrain.<sup>319</sup> This also has a snoutlike face and long oblique gashes for eyes, but the gashes here are made in applied strips of clay. Another strip, around the top of the head, presumably represents a headdress. The body seems to be cylindrical, flattened near the shoulders; the arms are broken off. What may be the lower torso and legs of a female figurine and some fragments of painted animal figurines also were found on the surface.<sup>320</sup> In Temple VI was found "a fragment of a mother-goddess figurine."<sup>321</sup>

In the cemetery area at al-Ubaid two fragments of human figurines were found, one a head, the other the lower half of a body,<sup>322</sup> both consistent in style with the finds from Ur. None was found in any of the "graves." A crudely modeled bird is made of greenish-drab clay.<sup>323</sup>

At Warka, in the mortar as well as the bricks of Anu ziggurat level A, which in the writer's opinion must date to the beginning of the Protoliterate period (see p. 129), numerous painted sherds and other types of objects characteristic of the Ubaid period were found. Among these objects are many clay figurines of animals and human beings, some of which are ornamented with black paint.<sup>324</sup> Both male and female figurines occur. Most of the females resemble the Ur examples in general bodily form and use of painted ornament; one has a cylindrical body, somewhat winglike arms, and a splayed base with the division between the legs and perhaps the toes marked by incision.<sup>325</sup> The few heads preserved resemble those from Ur in possessing a long snoutlike face, a pointed top, and gashes for eyes. At Warka the gashes are made in applied strips of clay, as in the case of the male figure found on the surface at Shahrain. The male figures from Warka are similar to the Shahrain surface example; where the lower body is preserved, it has a splayed base. There is no indication of division between the legs, and the arms are mostly pointed appendages hanging straight down or sloping outward and slightly backward almost like wings. One type of head appears to have a high peaked headdress, sometimes with plastic bands around the base; the eyes are gashed, and there seems to be a rather short beard. Another type of head, disproportionately small and thin, has no features except a large nose. It is pointed at both top and bottom, probably to represent cap and beard. In some cases a diagonal band is painted across the upper part of the body, running over the left shoulder and under the right arm. The torso of a unique male figure is more naturalistic, with hips, legs, and waist well modeled and the penis plastically represented. An animal figure was found in level XVIII of the Eanna sounding, and another in level XVII.<sup>326</sup>

A headless female figurine from Telloh<sup>327</sup> is comparable in modeling of the body with the Ur examples and the majority of those from Warka. A much cruder figure<sup>328</sup> has the splayed

317. *Ibid.* Pl. 6 i-n and p. 37.

318. *ILN*, Sept. 11, 1948, p. 303, Figs. 1-2.

319. *Journal of Egyptian Archaeology* IX (1923) 191 f. and Fig. 7.

320. *Shahrain*, Fig. 9, center (called "animal's leg"), and p. 124.

321. *Sumer* III 104.

322. *UE* I, Pl. XLVIII 405, 407 and p. 153.

323. *Ibid.* Pl. XLVIII 369.

324. *UVB* III 26-28 and Pl. 21; *UVB* VIII (1938) 50 and Pl. 47.

325. *UVB* VIII, Pl. 47 h.

327. *Telloh*, p. 9 and Pl. 12:1, 4 a, 6.

326. *UVB* III 30 f.

328. *Ibid.* p. 9 and Pl. 12:4 b, 5.

base and beaked head also known at Warka; it seems to be a female standing with hands under the breasts, but the modeling is so poor that no details are visible.

Uqair yielded three fragments of female figurines, two with painted ornament, and numerous figurines of animals, some ornamented with paint or appliqué.<sup>329</sup>

#### TOOLS AND WEAPONS

Characteristic of the Ubaid period are crescent-shaped clay sickles, usually baked almost to the point of vitrification. These are frequently found in great numbers and they are often broken, an indication that they were actually used; they appear at Shahrain in Temple VI and unstratified, al-Ubaid, Ur-Ubaid I, Raidau Sharqi, Telloh, and Uqair.<sup>330</sup> Flint sickle blades with serrated edges, to be set in a haft of some other material, are common at al-Ubaid, more so than the clay sickles; they occur, though rarely, at Shahrain.<sup>331</sup> Their attribution to the Ubaid period may be questioned, since they do not appear at any of the stratified sites, although they seem to have been found in the settlement area at al-Ubaid.<sup>332</sup>

Small perforated clay objects which are probably spindle whorls come from Shahrain, al-Ubaid, Warka Eanna XVII, Telloh, and Uqair.<sup>333</sup> Clay disks with a perforation near the edge may be loom weights; they are found only at Uqair.<sup>334</sup> Similar objects perforated at the center or provided with two or more perforations are commonly called "net-sinkers"; these come from Shahrain, al-Ubaid, Warka Eanna XVII, Raidau Sharqi, and Uqair.<sup>335</sup> Small polished stone celts are found at Shahrain, al-Ubaid, Hajji Muhammad, Telloh, and Uqair.<sup>336</sup> Roughly chipped flint "hoes" come from Shahrain, al-Ubaid, Ur-Ubaid I, Raidau Sharqi, Telloh, and Uqair.<sup>337</sup> Flint and obsidian flakes also occur at most of the sites.<sup>338</sup> Bone awls come from Shahrain, al-Ubaid, Warka Eanna XVII, Telloh, and Uqair;<sup>339</sup> Uqair yielded flat bone tools, some set in bitumen handles,<sup>340</sup> and an awl with a similar bitumen handle was found at Warka in Eanna XVII along with eyed needles.<sup>341</sup> A fragment of an obsidian awl was found at Raidau Sharqi.<sup>342</sup>

Ovoid or spherical objects in stone, bitumen, and clay, probably sling-missiles, appear at Shahrain, Warka, and Telloh.<sup>343</sup> Clay model tools, or possibly actual tools, are not uncommon: shaft-hole axes from Shahrain, al-Ubaid, Ur-Ubaid I, and Uqair;<sup>344</sup> an adz, an adz-ax, and a double ax from Telloh;<sup>345</sup> two knives from al-Ubaid;<sup>346</sup> from Uqair a very peculiar ax with three holes for binding it to a shaft<sup>347</sup> and hammer-axes, the latter particularly important because the same type occurs in Troy II.<sup>348</sup> Stone maceheads, more or less ovoid, occur at

329. See *JNES* II, Pl. XVIII 1, 3-4, 6, 8, 9-10, 12.

330. *Sumer* III, Fig. 6; *Shahrain*, Pl. VII A; *UE* I, Pl. XV 4-5; *AJ* X 336; *UVB* IX 34; *Telloh*, Pl. 45:2; *JNES* II, Pl. XXVIII B.

331. See *UE* I, Pl. XIII 4 and p. 51. It may be noted here that whenever "Shahrain" is mentioned without a specific provenience, it may be assumed that the unstratified material collected by Hall or Campbell-Thompson is meant.

332. See *ibid.* p. 151.

333. *Shahrain*, p. 124 and Pl. X B; *UE* I, Pl. XV 1; *UVB* III, Pl. 20 d; *Telloh*, p. 8; *JNES* II, Pl. XVI b.

334. *JNES* II, Pl. XVI b.

335. *Shahrain*, Pl. X B; *UE* I, Pl. XXXVII 385; *UVB* III, Pl. 20 d; *UVB* IX 35; *JNES* II, Pl. XVI b.

336. *Shahrain*, Pl. VIII, at top; *UE* I, Pl. XIII 2; *UVB* IX 37; *Telloh*, Pl. 8:3 a-b, e; *JNES* II, Pl. XXIX, lower left.

337. *Shahrain*, Pl. VII B; *UE* I, Pl. XLVII; *AJ* X 336; *UVB* IX, Pl. 35 h; *Telloh*, Pl. 8:2; *JNES* II, Pl. XXIX.

338. *Shahrain*, p. 119 and Pl. IX; *UE* I 50 f., Pls. XIII 5 and XIV 1-2; *UVB* IX 35; *Telloh*, p. 10; *JNES* II 149.

339. *Shahrain*, Pl. IX, row 4; *UE* I 152; *UVB* III, Pl. 20 b; *Telloh*, p. 11; *JNES* II, Pl. XXIX.

340. *JNES* II, Pl. XXIX.

341. *UVB* III, Pl. 20 b.

342. *UVB* IX 35.

343. *Shahrain*, Pl. VIII; *UVB* III 28; *Telloh*, pp. 8 and 11.

344. *Shahrain*, Pl. X B, bottom row; *UE* I 205 and Pl. XLVI 2:38; *AJ* X, Pl. XLVII a; *JNES* II, Pl. XVI b.

345. *Telloh*, Pl. 44:3.

346. *UE* I, Pls. XLVI 2:41 and XLVIII 530.

347. *JNES* II, Pl. XVIII 7.

348. *Ibid.* Pl. XVIII 2, 5; cf. Wilhelm Dörpfeld, *Troja und Ilion* (Athen, 1902) pp. 374 f. and Figs. 323-26.

Shahrain, al-<sup>c</sup>Ubaid, and <sup>c</sup>Uqair.<sup>349</sup> Roughly cubical stone objects which may be weights are found at Shahrain, where their date might be questioned, but also at <sup>c</sup>Uqair.<sup>350</sup> "Bent nails" of clay are found at Shahrain in Temples VIII and VI and unstratified, al-<sup>c</sup>Ubaid, Warka, Raidau Sharqi, Telloh, and <sup>c</sup>Uqair;<sup>351</sup> it has been suggested that such objects are mullers (see p. 61). Stone pounders and grinding-stones come from Shahrain, al-<sup>c</sup>Ubaid, Ur-<sup>c</sup>Ubaid I, Warka, and Raidau Sharqi.<sup>352</sup>

#### ORNAMENTS

Personal ornaments are not altogether lacking, although not so common or found in such variety as in the later periods. Beads, mostly of clay and shell, come from Shahrain, al-<sup>c</sup>Ubaid, Ur-<sup>c</sup>Ubaid I-II, and Telloh; some of these have engraved or punctate patterns.<sup>353</sup> A woman in one of the Shahrain tombs wore a skirt with a six-inch bead fringe.<sup>354</sup> Ur-<sup>c</sup>Ubaid I provides two beads of amazonite, a material which indicates trade to fairly distant lands, since its nearest known source is India.<sup>355</sup> Possibly the most common article of adornment is the nose or ear stud, a small peg with flat or conical head, usually made in hard stone—quartz or obsidian—but sometimes imitated in clay. Studs are common at Shahrain, al-<sup>c</sup>Ubaid, Telloh, and <sup>c</sup>Uqair.<sup>356</sup> A fragment of twisted gold wire found in a pit at Ur in association with Ubaid pottery<sup>357</sup> is probably part of an ornament. It is the only specimen of precious metal attributable to the Ubaid period in the South.

#### STONE VESSELS

"Fragments of obsidian and smoky quartz vases, beautifully ground," are said to occur at both Shahrain and al-<sup>c</sup>Ubaid, and fragments of stone vases were found in Temples VII-VI at Shahrain.<sup>358</sup> A simple hemispherical bowl<sup>359</sup> was found at al-<sup>c</sup>Ubaid in "grave" 8, which is merely a collection of objects not necessarily all of the same period. Ur-<sup>c</sup>Ubaid I yielded a fragment of a marble vase.<sup>360</sup> Possibly fragments of obsidian beakers found in the intermediate layers between levels C and D of the Anu ziggurat at Warka<sup>361</sup> may be attributed to the Ubaid period on the basis of one shape (cf. pottery form 5) and because of the use of obsidian, which is rare after the Ubaid period. A fragment of a limestone vessel with tubular spout and basket handle,<sup>362</sup> a patent imitation of Ubaid pottery "kettles" (see p. 82), comes from the same layers. Other vessels from the intermediate layers we attribute to the Warka period (see p. 134).

#### OTHER OBJECTS

The clay cones found so frequently in Ubaid context (Shahrain possibly, al-<sup>c</sup>Ubaid, Ur-<sup>c</sup>Ubaid I, Warka in the mortar and bricks of level A of the Anu ziggurat, and Telloh) are presumed to have been used for architectural adornment<sup>363</sup> like those found in Protoliterate

349. *Shahrain*, Pl. VIII; *UE I*, Pl. XIII 3; *JNES II*, Pl. XXIX, at left.

350. *Shahrain*, Fig. 11; *JNES II*, Pl. XXIX, at left, bottom row.

351. *ILN*, Sept. 11, 1948, p. 305, Fig. 10; *Sumer III*, Fig. 6; *Shahrain*, Pl. VII A; *UE I*, Pl. XV 3; *UVB III* 28; *UVB IX*, Pl. 35 k; *Telloh*, Pl. 44:1 g; *JNES II*, Pl. XVIIb.

352. *Shahrain*, pp. 119 f.; *UE I* 152; *AJ X* 336; *UVB III* 35; *UVB IX* 35.

353. *Shahrain*, Pl. IX (row 5, center, shows pattern); *UE I* 153 and Pl. XXXVII 415 (cf. *Arp.* p. 98 and Pl. VII b, bottom row); *AJ X* 336-38; *Telloh*, p. 11.

354. *ILN*, Sept. 11, 1948, p. 303 and Fig. 7.

355. *AJ X* 336.

356. *Shahrain*, Pl. IX, bottom row; *UE I*, Pl. XIII 6-7; *Telloh*, Pl. 42:4; *JNES II* 149.

357. *AJ XI* (1931) 344.

358. See H. R. Hall in *Journal of the Royal Asiatic Society, Centenary Supplement* (1924) p. 109 and *Sumer III* 104 f.

359. *UE I*, Pl. XLVI 3:14.

360. *AJ X* 336.

361. *UVB VIII* 36 f. and 51 f., Pls. 58-59; *UVB III* 28 and Pl. 20 a (source marked *ibid.* Pl. 8; cf. *UVB VIII*, Pl. 21, Schnitt A-B).

362. *UVB VIII*, Pl. 58 W 16252a.

363. *Shahrain*, Pl. X B; *UE I*, Pl. XV 2; *AJ X* 336; *UVB III* 20 and 28; *Telloh*, Pl. 44:1 a-d; see *UE I* 153 f. and *DSA*, pp. 41 f.

levels of the Eanna precinct at Warka (see e.g. pp. 122 f.); none has ever been found *in situ* in Ubaid context, however.

Stamp seals were apparently used to a limited extent. One was found at <sup>c</sup>Uqair, and four are stated to have been found at Telloh: two with suspension loop attached and two of bead type.<sup>364</sup> None of these is illustrated, so we cannot say whether their designs are comparable with the glyptic so characteristic of the Ubaid period in the North.

A clay model of a sailing boat with curved bow and stern, a socket for the mast, and holes to which stays could be attached was found in the Shahrain cemetery; a model boat with flat bottom and curved end was found at al-<sup>c</sup>Ubaid, while a clay object from <sup>c</sup>Uqair with rounded body and painted end seems to be still another boat model.<sup>365</sup> A somewhat similar object in bitumen was found at Khafajah in Protoliterate c (see p. 154).

#### ARCHITECTURE

Recent excavations at Shahrain have provided us with the first Southern examples of monumental architecture which can be definitely dated to the Ubaid period, a series of thirteen superimposed temples, the lowest resting directly on virgin soil.<sup>366</sup> All have their corners oriented to the cardinal points of the compass. Temples XVIII and XVII are represented merely by traces of walls, XVI being the earliest complete temple found. It is a small structure, essentially a nearly square room with a doorway near one corner; two short screen walls suggest a division of the room. In the center of the rear wall is a large niche containing an altar, and standing free in the center of the main room is an offering-table which shows signs of burning. Nichelike sanctuaries, altars, and tables for burnt offerings are features known in much later Mesopotamian temples, but the form of this little structure is quite different from the tripartite plan of later temple buildings. In the less well preserved level above, XV, the temple is quite different—a good deal larger, with a simple rectangular outline and traces of interior buttresses or screens; there seems to be a doorway in one of the long sides, at right angles to that of Temple XVI.

Temple XI, the next one illustrated, also shows a considerable increase in size and a new plan. All that has been excavated is one large room with a narrow room behind its end wall and two smaller rooms, one of which contains an offering-table, opening off the preserved long side of the large room. Side and end rooms project well beyond the wall of the main room, the areas between them forming deep niches. The rather thin exterior walls are strengthened by simple, regularly spaced buttresses, the earliest occurrences of a feature which is characteristic of later temple architecture in the South. Another similarity with later practice is seen in the placing of this temple on a platform, which is accessible by a ramp at one corner; the extent of the platform is not known, nor are any details of its form given. The succeeding temples also stand on platforms, and their plans seem to be based on the plan of this temple. Temple IX follows it almost exactly, with slight changes in proportions and the addition of two entrances from the platform, one leading to the room with the offering-table and the other to the main room near the preserved end wall and just in front of an altar which stands against the end wall.

A good deal more of Temple VIII has been excavated, probably over half of the original building. Now clearly we have a tripartite temple with a large central room and smaller rooms on either side, the corner rooms apparently projecting like those of the Northern Temple of Gaura XIII (see Fig. 8). A new feature is the existence at the south corner of two small rooms at right angles to the main axis of the temple, the first accessible from both the interior and

364. *JNES* II 149; *Telloh*, pp. 10 f.

365. *ILN*, Sept. 11, 1948, p. 303, Fig. 4; *UE* I 153 and Pl. XLVIII 532; *JNES* II, Pl. XVIII 13.

366. *ILN*, Sept. 11, 1948, pp. 303-5, especially Fig. 3.

the platform, the second opening only on to the platform. The central room, which can now certainly be called the cella, has an altar against the end wall and a large offering-table near the opposite end but not against the wall. The room behind the cella is gone, and in its place is a large exterior niche decorated with strange cruciform buttress-like structures. At first glance it appears that the southeast outer wall does not have the deep niches of the preceding levels, but one of the "side rooms" is open only to the platform and is therefore related in form to the niches. Temple VIII is larger than its predecessors, its maximum dimensions being approximately  $20 \times 11$  meters if the reconstruction is correct. The walls are considerably thicker than those of the earlier buildings; most of the outer face is not preserved so we cannot say whether it was decorated in any way.

Temple VII is almost completely preserved,<sup>367</sup> and is similar in size, plan, and appointments to Temple VIII, although lacking the range of rooms of the south corner. The building material is very sandy mud brick in two sizes,  $28 \times 23 \times 6$  cm. and  $27 \times 21 \times 6$  cm. (We may note here that the material of the earlier temples is not specified, but is probably also mud brick.) All exterior walls have simple niches, irregular in size and spacing. There are several doorways, but one in the middle of the southeast side which is approached by a broad flight of stairs from the ground level is apparently the main entrance. The outline of the temple platform at this period seems to follow that of the building. Two phases of occupation are indicated by two clay pavements, between which are 40 cm. of debris containing ashes and fishbones.

Temple VI is similar in plan to its immediate predecessor, but is longer, narrower, and more symmetrical with considerably less projection of the corners. In the cella the free-standing pedestal near the northeast end is preserved; it is assumed that there was once an altar against the other end, but it is not preserved. Again two clay pavements (about 20 cm. apart) testify to two occupation phases. The debris between these pavements, and also that above the upper floor, contains great numbers of bones of fish and small animals, presumably part of the offerings of the shrine. The existence of fishbones may be indicative that the deity worshiped here in this early period was Enki, the god of fresh waters, who is known to have been the city-god of Eridu in historic times. One area in Temple VI showed a deep deposit of ashes and marked traces of burning on the walls. The mud bricks of which the building was made are slightly smaller than those of Temple VII ( $23 \times 13 \times 6$  cm.,  $23 \times 17 \times 6$  cm.,  $23 \times 20 \times 6$  cm.); but the foundations show some very long narrow bricks ( $43 \times 13 \times 7$  cm.). All bricks are heavy and contain much straw temper. The inside walls of the building are white-plastered. Due to denudation we do not know whether there was a stairway entrance on the southeast side, as in Temple VII, but it is likely that this was the case.

It is suggested that at al-<sup>c</sup>Ubaid the buildings were of reed matting supported at intervals by wooden posts.<sup>368</sup> Ur-<sup>c</sup>Ubaid I yielded pieces of clay daub from reed buildings with the imprint of reed stems still visible, and similar pieces were found at Hajji Muhammad.<sup>369</sup> At Warka the earliest buildings were built apparently on platforms of reeds or marsh grass just above the marshy ground, for in Eanna level XVIII there are horizontal layers of cut reeds laid crisscross with layers of mud between.<sup>370</sup> At <sup>c</sup>Uqair the deep sounding between the two Ubaid buildings yielded a thick layer of reed matting or rushes on virgin soil.<sup>371</sup>

Mud brick was found, however, in Ur-<sup>c</sup>Ubaid I and at Warka, Hajji Muhammad (observed by the natives at low water), and <sup>c</sup>Uqair. The Ur bricks are flat and rectangular, set in mud mortar.<sup>372</sup> Mud brick occurred at Warka at least as early as Eanna level XVII; quite possibly it was used in XVIII also but is unrecognizable because of the water-soaked condition of the

367. *Sumer* III, Figs. 3 and 2 (Temples VII and VI).

368. *UE* I 150.

369. *AJ* X 335; *UVB* IX 37.

370. *UVB* IV 6 f.

371. *JNES* II 149.

372. *AJ* X 335.

Eanna sounding area.<sup>373</sup> The bricks found in levels "XVIII-VII" are flat and rectangular, their sizes ranging from  $27 \times 14 \times 7$  cm. to  $24 \times 12 \times 7$  cm., the length being approximately double the breadth in all cases. The bricks are quite well bonded, a course of headers being covered by one of stretchers, but there is not universal covering of all vertical joints in one course by the bricks of the next one.<sup>374</sup> At 'Uqair there is a small house with walls a single brick in thickness and a mud floor. A second building at the same site is much larger, some of its walls are almost a meter thick, but the rectangular bricks are roughly piled, rather than laid in courses.<sup>375</sup>

Raidau Sharqi shows traces of buildings (as yet unexcavated) presumably of mud brick. They are small houses or huts built within inclosed courtyards, one very large court with four parallel rows of square objects (reminding one of the offering-tables so placed in Early Dynastic temples<sup>376</sup>), and a notable building which may be tentatively classed as a shrine. The last named is a rectangular structure with a large pierlike projection on the inside of each of the three preserved sides, a feature which in Mesopotamia generally denotes a building dedicated to religious purposes. The arrangement of this edifice is reminiscent of the temples of Abu Shahrain, for the entrance must be on the long side that is now masked by later brickwork. There is no indication, of course, as to whether the structure was a covered room or an open court. All these buildings at Raidau Sharqi are attributed to the Ubaid period because the surface finds in this area are exclusively Ubaid, while surface remains of later periods are confined to distinctly separate areas.<sup>377</sup> This is obviously dubious evidence for dating.

Ovens belonging apparently to the Ubaid period occur at Hajji Muhammad.<sup>378</sup>

Recent investigations of the monumental Anu ziggurat at Warka have proved conclusively that it was founded at a very early date, that is, at least as far back as the early Warka period or perhaps even in the Ubaid period (see pp. 128 f.). The evidence is not sufficiently exact to allow us to date the founding of the ziggurat precisely in terms of the Eanna levels, on which the division of culture periods is based.<sup>379</sup>

#### BURIALS

The newly discovered cemetery at Abu Shahrain<sup>380</sup> may be dated by its pottery to the latter part of the Ubaid period, specifically to the time of Temples VII-VI. It is estimated that there are over 1000 graves, of which some 200 have been excavated. They are rectangular structures built and covered with mud brick; the dead were buried in an extended position, a practice radically different from the normal Ubaid burials of the North. Apparently some tombs were family tombs and might be reopened to permit the interment of other bodies; children, however, usually had their own small tombs and were provided with miniature pottery. Groups of painted pottery vessels and other objects were buried with the dead.

At al-'Ubaid only three "graves" (Nos. 8-9 and 64; see p. 76, n. 228) which seem attributable to the Ubaid period were found, and that these are actually graves is somewhat dubious. "Grave" 8 has no trace of a body and is merely a collection of objects; "grave" 9 is a small depression with "a few fragments of decayed bone" and some pots and other objects of the

373. *UVB* III 30 f. According to *ibid.* Pl. 11 individual bricks were found in level XVII, although these are not mentioned in the text.

374. *Schilf und Lehm*, pp. 38 f.

375. *JNES* II 149.

376. See *OIP* LVIII 236 f. and 300 f.

377. *UVB* IX 35 f. and Pl. 19.

378. *Ibid.* p. 37.

379. Cf. Heinrich in *UVB* X (1939) 24 and his correlation of levels and periods in *Schilf und Lehm*, p. 21. It should be mentioned that we are disagreeing not with Heinrich's deductions as to how far down in the scheme of the Eanna levels the Anu ziggurat may be pushed, but rather with his assignment of levels to culture periods. He brings the Ubaid period down through Eanna level XI, while we consider that the Warka period begins with XIV—hence the apparent discrepancy between his idea and our idea of the age of the monument.

380. *ILN*, Sept. 11, 1948, pp. 303-5 and Figs. 8 and 14.

Ubaïd period; "grave" 64 has the dust of bones but is so completely destroyed that it is not certain whether all the objects found there belonged together originally.<sup>381</sup>

At Ur the graves of the lower series (Ur-Ubaïd II) are pits dug into the "Flood" deposit and sometimes paved with potsherds.<sup>382</sup> The bodies are all supine and extended, the hands crossed over the pelvis.

#### COMPARATIVE STRATIGRAPHY

We may tabulate our conclusions as to the relationships among the various southern sites using Ur as the basis (see Table 2):

Ur-Ubaïd I: Shahrain Temples XVIII-VIII, some surface material from Shahrain, most of al-<sup>c</sup>Ubaïd, Hajji Muhammad, some Telloh.

Ur-Ubaïd II: Shahrain Temples VII-VI and cemetery, some surface material from Shahrain, some al-<sup>c</sup>Ubaïd, Warka XVIII-XV, some Telloh, <sup>c</sup>Uqair.

We therefore recognize in southern Mesopotamia two phases of the Ubaïd period, which may be called "Southern Ubaïd I" (S I) and "Southern Ubaïd II" (S II).<sup>383</sup> When the new material from Abu Shahrain is fully published, it is likely that S I can be subdivided; at present the only evidence for comparative stratigraphy is that the earliest Shahrain material belongs with Ubaïd I and that parallels to Ur-Ubaïd II do not occur until the time of Shahrain Temple VII.

#### CORRELATION OF THE NORTH AND THE SOUTH

It now remains to attempt to correlate the two areas of the Ubaïd culture, for unless we can prove a relationship between them we have no right to call them both by the same name. We first list the factors which the two regions have in common, beginning with pottery.<sup>384</sup>

*Forms.*—The Northern (N) and Southern (S) forms shown in Figures 6 and 9 respectively may be correlated as follows:

1. N 1: Gaura XIX-XVII, Arpachiyyah Early (with one possibly Late example), Shahrain Temple VIII(?).
2. N 3, which occurs in Gaura XIX-XV and XIII-XII, in Arpachiyyah Early and Late, at Brak, and at Tell al-Halaf, is more or less like forms found in the South at Shahrain (cemetery), at al-<sup>c</sup>Ubaïd (with lip spout), in Ur-Ubaïd II (with ring base), in Warka Eanna XVII, and at <sup>c</sup>Uqair (with lip spout).<sup>385</sup>
3. N 5 is more or less like S 4, but the Northern variant, with flat base, is unknown in the South; see Arpachiyyah Early (rarely Late) and Warka Eanna XVIII-XVI.
4. N 7 = S 7: Gaura XIX-XV, XIII; Arpachiyyah Early (rare) and Late; Tell al-Halaf (similar); Shahrain Temples XVIII-XVI(?) and cemetery; al-<sup>c</sup>Ubaïd; Ur-Ubaïd I-II; Warka Eanna XVIII-XVI; Telloh; <sup>c</sup>Uqair. N 7 tends to have a higher rim and is less likely to have pierced lugs than S 7.
5. N 9 = S 8: Gaura XIX-XVII; Arpachiyyah Early and Late; Nuzi X; Tell al-Halaf; Shahrain Temples VII-VI and cemetery; al-<sup>c</sup>Ubaïd; Warka Eanna XVIII-XVII; <sup>c</sup>Uqair.
6. N 10 is similar to S 11: Gaura XIII; Arpachiyyah Late; Shahrain Temples VII-VI and cemetery; al-<sup>c</sup>Ubaïd; Ur-Ubaïd II (variant); Telloh.
7. S 2: Ninevite 3;<sup>386</sup> Tell al-Halaf(?); Shahrain Temples VII-VI and possibly cemetery; al-<sup>c</sup>Ubaïd; <sup>c</sup>Uqair.
8. S 9: Gaura XIIA-XII;<sup>387</sup> al-<sup>c</sup>Ubaïd(?); Telloh; <sup>c</sup>Uqair.
9. Lenticular vessel with bell-mouthed spout: Gaura XIX-XVII; Shahrain Temple VIII; al-<sup>c</sup>Ubaïd.

381. *UE* I 190 and 198.

382. *AJ* X 337 f.

383. It will be remembered that Ur-Ubaïd III, though it contains Ubaïd-like painted pottery, falls within the cultural limits of the Warka period (see pp. 78 and 104).

384. In this section references are added only for items not already cited in this chapter.

385. *UE* I, Pl. L vi; *JNES* II, Pl. XXb 1.

386. *AAA* XX, Pl. XLIX 1.

387. *Tepe Gaura* II, pottery fig. 271.



## THE UBAID PERIOD: CORRELATION OF THE NORTH AND THE SOUTH 91

*Details of form.*—The following details also are found in both North and South:

1. Inward-sloping rim on bowl: Arpachiyyah Late; Ninevite 3; Tell al-Halaf; al-*c*-Ubad; Warka Eanna XVIII-XVII.<sup>388</sup>
2. Inner-ledge rim, usually perforated: Gaura XIX-XV; Arpachiyyah Late; Ninevite 3; Tell al-Halaf; al-*c*-Ubad.
3. "Club-headed" rim: Ninevite 3; Shahrain; al-*c*-Ubad; Warka Eanna XVIII; *c*-Uqair.
4. Rim with slight outroll: Gaura XIII; Ninevite 3; Tell al-Halaf; Warka Eanna XVIII-XVII.<sup>389</sup>
5. Ring base: Gaura XIII-XII; Arpachiyyah TT 3; Shahrain Temples VII-VI, cemetery, and possibly unstratified,<sup>390</sup> al-*c*-Ubad; Ur-Ubad II; Warka Eanna XVIII-XVII; Raidau Sharqi; Telloh; *c*-Uqair.
6. Flint-scraped bowl: Grai Resh IX-VI; *c*-Uqair.
7. Plain tubular spout: Gaura XVI-XV, XIII-XII; Arpachiyyah Late; Shahrain cemetery; al-*c*-Ubad; Warka Eanna XVII; *c*-Uqair.
8. Pierced lug: Gaura XIX-XV, XIII; Arpachiyyah Late; Shahrain;<sup>391</sup> al-*c*-Ubad; Warka Eanna XVIII-XVII; Telloh; *c*-Uqair.

*Technique.*—In technique all the pottery seems to be quite similar, with variations mainly in quality. It is light colored, fired in an oxidizing atmosphere, occasionally reddish in color but more often buff or greenish. It is usually thoroughly baked, in the South often overfired; only at Arpachiyyah is it said to be not particularly well fired. At most sites the vessels may be wet-smoothed or self-slipped. Unpainted vessels occur at every site, but painted ones seem always to be more common. The paint is usually dark brown to black, occasionally reddish brown or red; Hajji Muhammad shows green and purple also. At that site and in Ur-Ubad I the paint is often lustrous; elsewhere it is always mat. The drawing technique varies from crude scrawls to delineations of great precision and fineness; almost always fine pottery shows good drawing. Much of the pottery is handmade, but the tournette is known at every site, at least by the end of the period. The fast wheel is claimed for Warka from the beginning, also for some of the Ninevite 3 pottery. These technical similarities tend to draw into one group all the pottery we have been discussing in both North and South, separating it on the one hand from the preceding Halaf pottery, on the other from that of the succeeding periods.

*Design motifs.*—The following motifs (see Figs. 5 [N] and 10 [S]; also Fig. 11) occur in both North and South:

1. Chevrons (N 2) or inverted chevrons: Gaura XIX-XVII; Tell al-Halaf; Shahrain; Telloh.<sup>392</sup>
2. "Arrows" (N 3): Gaura XIX-XVII; Telloh.<sup>393</sup>
3. "Hearts" (N 4 and S 27): Gaura XIX-XV, XIII; Hassunah; Shahrain; al-*c*-Ubad; Ur-Ubad I-II; Telloh.<sup>394</sup>
4. Horizontal or vertical row of joined concave-sided triangles (N 5 and S 12): Gaura XIII, Shahrain Temple VIII and unstratified; al-*c*-Ubad; Ur-Ubad I; *c*-Uqair.<sup>395</sup>
5. Pendent scallops (N 8): Gaura XVI-XV, XIIA-XII; Arpachiyyah Early; Brak(?); Tell al-Halaf; Ur-Ubad I; Warka Eanna XVI; *c*-Uqair.<sup>396</sup>
6. Reversing triangles (N 10 and S 7): Gaura XIX-XV; Nuzi XA; Hassunah; Tell al-Halaf; al-*c*-Ubad; Warka Eanna XVIII-XVII; Telloh; *c*-Uqair.<sup>397</sup>

388. AAA XX, Pl. L 5; *Tell Halaf* I, Pl. XXXII 13; *UVB* IV, Pl. 16 D c (Eanna XVII).

389. *Tell Halaf* I, Fig. 113; *UVB* IV, Pls. 16 A a'' (Eanna XVIII) and 16 C u (ad) (Eanna XVII).

390. *Shahrain*, Fig. 10, bottom row near center.

391. *Ibid.* Fig. 10, bottom row toward right.

392. *Shahrain*, Fig. 10:684-85; *Telloh*, Pl. 32:1 f.

393. *Telloh*, Pl. 28:3 g.

394. *JNES* IV, Pl. XXI 1; *Shahrain*, Figs. 9:85, 91 and 10:110, 689; *UE* I, Pl. XVIII 1548; *AJ* X, Pl. XLV a (Ur-Ubad II); *Telloh*, Pl. 28:2.

395. *Shahrain*, Fig. 11; *UE* I, Pls. XVI 1562 and XVIII 1910; *JNES* II, Pls. XIXb 3 and XXIb 17.

396. *Arp.* Fig. 27:4; *UVB* IV, Pl. 17 C f; *JNES* II, Pl. XXIb 18.

397. *Nuzi*, Pl. 47 AA; *JNES* IV, Pl. XXI 1; *Telloh*, Pl. 31:1 k; *JNES* II, Pl. XIXb 18.

## 92 THE COMPARATIVE ARCHEOLOGY OF EARLY MESOPOTAMIA

7. Extended chevrons (N 11): Gaura XIX–XVII; Ur-Ubaid I; Warka (unstratified); Telloh.<sup>398</sup>
8. Sinuous zigzag (N 12 and S 14): Gaura XX, XIX–XV, XIII; al-<sup>c</sup>Ubaid; Ur-Ubaid I; Telloh; <sup>c</sup>Uqair (variant).<sup>399</sup>
9. Truncated zigzag (N 13 and S 5): Gaura XIX–XV; Tell al-Halaf; Shahrain; al-<sup>c</sup>Ubaid; Warka Eanna XVIII(?), XVI(?), XV(?); Telloh.<sup>400</sup>
10. Pendent triangles, continuous (N 14): Gaura XIX–XVII, XIII; Hassunah; Shahrain; al-<sup>c</sup>Ubaid.<sup>401</sup>
11. Pendent triangles, interrupted (N 15): Gaura XIX–XV; Arpachiyah Early;<sup>402</sup> Tell al-Halaf; Ur-Ubaid I.
12. Row of triangles (N 17 and S 10): Gaura XIX–XVII, XIIA–XII; Tell al-Halaf; Shahrain; Ur-Ubaid I; Warka Eanna XVIII–XVII, XV(?); Telloh; <sup>c</sup>Uqair.<sup>403</sup>
13. Running lozenges with various types of fill (N 18 and S 13): Gaura XIX–XVII, XIII–XII; Arpachiyah Early; Tell al-Halaf; Shahrain Temples XVIII–XVI and unstratified; al-<sup>c</sup>Ubaid; Ur-Ubaid I; <sup>c</sup>Uqair.<sup>404</sup>
14. Opposed scallops connected by vertical lines (N 19 and S 16) or with fill between: Gaura XIX–XVII; Arpachiyah Early and Late; Nuzi XI; Tell al-Halaf; Shahrain Temples XVIII–XVI; Ur-Ubaid I–II; Warka Eanna XVII; Telloh.<sup>405</sup>
15. Diagonal checkers (N 20): Gaura XIX–XV, XIII; al-<sup>c</sup>Ubaid.<sup>406</sup>
16. Diaper pattern (N 21): Gaura XVI–XV; Tell al-Halaf; Shahrain (variant); al-<sup>c</sup>Ubaid (variant);<sup>407</sup> Ur-Ubaid I.
17. Single or opposed scallops contiguous to a straight line (N 29): Gaura XIX–XVII, XIII–XII; Arpachiyah Early; al-<sup>c</sup>Ubaid;<sup>408</sup> Ur-Ubaid I.
18. Single leaf (N 30): Gaura XIX–XV, XIII; Arpachiyah Late; Ur-Ubaid I; Telloh.<sup>409</sup>
19. Barred line (N 31): Gaura XIX–XV; al-<sup>c</sup>Ubaid;<sup>410</sup> Ur-Ubaid I.
20. Dot-bordered circle (N 33): Gaura XIX–XVII; Nuzi XI (similar); al-<sup>c</sup>Ubaid;<sup>411</sup> Ur-Ubaid I.
21. Gyron pattern (N 34): Gaura XIX–XV, XIII; Nuzi XA; Ur-Ubaid I; Hajji Muhammad.<sup>412</sup>
22. Circle, lozenge, triangle, or rectangle containing geometric element (N 34, 35, or 38 and S 33): Gaura XIX–XV, XIII; Hassunah;<sup>413</sup> al-<sup>c</sup>Ubaid; Ur-Ubaid I.
23. Painting within reserved area (e.g. N 35 and 42): Gaura XIX–XV, XIII; Arpachiyah Late; al-<sup>c</sup>Ubaid;<sup>414</sup> Ur-Ubaid I; Hajji Muhammad.
24. Solid or crosshatched triangles base to base (N 36): Gaura XIX–XVII, XIII; al-<sup>c</sup>Ubaid (diagonal).<sup>415</sup>
25. “Butterfly” or “double ax” (N 37): Gaura XIX–XV, XIII–XII; Arpachiyah Late; Tell al-Halaf; Shahrain(?); Telloh; <sup>c</sup>Uqair.<sup>416</sup>
26. “Flowers” (N 39): Gaura XIII; al-<sup>c</sup>Ubaid.<sup>417</sup>
27. X’s (N 40): Gaura XIX–XVII, XIII; Shahrain(?); al-<sup>c</sup>Ubaid.<sup>418</sup>
28. “Drops” (N 41): Gaura XVI–XV; al-<sup>c</sup>Ubaid;<sup>419</sup> Ur-Ubaid I.
29. Lozenge net (N 42): Gaura XIX–XVII; Hajji Muhammad.

398. *UVB* III, Pl. 22 b; *Telloh*, Pl. 31:1 k.399. *Telloh*, Pl. 31:2 k; *JNES* II, Pl. XXIb 11.400. *UVB* IV, Pl. 17 C g, r; *Telloh*, Pl. 32:1 d.401. *JNES* IV, Pl. XXI 1; *Shahrain*, Fig. 11; *UE* I, Pl. XVIII.402. *Arp.* Fig. 29:1.403. *Shahrain*, Fig. 10:687; *Telloh*, Pl. 30:2 d; *JNES* II, Pl. XXa 6.404. *Arp.* Fig. 34:4, 7; *Shahrain*, Fig. 11; *JNES* II, Pl. XIXb 12.405. *Arp.* Figs. 35:7 (Early) and 34:6 (Late); *Nuzi*, Pl. 47 HH; *AJ* X, Pl. XLV b; *UVB* IV, Pl. 17 B z; *Telloh*, Pl. 29:1 d.406. *UE* I, Pl. XVIII 1769.407. *Shahrain*, Fig. 9:88; *UE* I, Pl. XLIX 516.408. *Arp.* Fig. 35:1; *UE* I, Pl. XVII 1632.409. *Telloh*, Pl. 29:2 c.410. *UE* I, Pl. XLIX 518.411. *Nuzi*, Pl. 48 MM; *UE* I, Pl. XVI 1641.412. *Shahrain*, Fig. 10:436; *JNES* II, Pl. XIXb 17.413. *UE* I, Pl. XVI 1533.414. *BASOR* No. 66, Fig. 7 (Gaura XIII); *Shahrain*, Fig. 9:86; *UE* I, Pl. XIX 1616 etc.415. *UE* I, Pl. XVI 1736.412. *Nuzi*, Pl. 48 NN; *UVB* IX, Pl. 38 e.413. *JNES* IV, Pl. XXI 1.414. *UE* I, Pl. XVIII 1740.415. *Ibid.* Pl. XLIX 516.

## THE UBAID PERIOD: CORRELATION OF THE NORTH AND THE SOUTH 93

30. Row of solid or crosshatched triangles with zigzag above (S 11): Gaura XIII (with heavy zigzag); Shahrain;<sup>420</sup> al-<sup>c</sup>Ubad; Ur-Ubad I (vertical).
31. Joined ovals or cable (S 17): Gaura XIX–XVII, XIII(?); Shahrain (with dot centers); al-<sup>c</sup>Ubad; Ur-Ubad I, Warka Eanna XVII.<sup>421</sup>
32. Crosshatched panel bordered by vertical lines (S 24): Gaura XII; Shahrain; Warka Eanna XVIII–XVII, XV(?); Telloh.<sup>422</sup>
33. Forked motif (S 28): Gaura XVI–XV; Shahrain; al-<sup>c</sup>Ubad; Telloh.<sup>423</sup>
34. Herringbone pattern (S 31): Gaura XX, XVIII; Tell al-Halaf; Shahrain Temples VII–VI (similar and unstratified); al-<sup>c</sup>Ubad;<sup>424</sup> Ur-Ubad I; Warka Eanna XVIII–XVII; Telloh.
35. Circular blobs of paint (S 32): Nineveh (unstratified); Shahrain; al-<sup>c</sup>Ubad; Warka Eanna XVIII–XVII; Telloh; <sup>c</sup>Uqair.<sup>425</sup>
36. Solid cable: Gaura XIX; Arpachiyah Late; Shahrain; al-<sup>c</sup>Ubad;<sup>426</sup> Ur-Ubad I.
37. Motif oriented diagonally: Gaura XIII; Arpachiyah Late; Shahrain cemetery; al-<sup>c</sup>Ubad; Telloh.<sup>427</sup>
38. Festoon: Arpachiyah Early; Tell al-Halaf (similar); Shahrain cemetery; Ur-Ubad II;<sup>428</sup> Telloh.
39. Incision within a painted band: Gaura XX; al-<sup>c</sup>Ubad; Hajji Muhammad.
40. "Maltese square": Gaura XVII, XIIA or XII; Hassunah; Shahrain Temples XVIII–XVI and unstratified.
41. Fish scales: Gaura XIX–XVII, XVI; Ur-Ubad I.
42. Leaflike motifs: Nuzi XI–XA;<sup>429</sup> Shahrain cemetery and unstratified; al-<sup>c</sup>Ubad; Ur-Ubad I.

Features other than pottery show fewer correspondences between North and South:

1. Clay sickles: Ninevite 3; Shahrain Temple VI and unstratified; al-<sup>c</sup>Ubad; Ur-Ubad I; Raidau Sharqi; Telloh; <sup>c</sup>Uqair.
2. "Bent nails" of clay: Gaura XIX–XV, XIII–XII; Arpachiyah; Shahrain Temples VIII, VI and unstratified; al-<sup>c</sup>Ubad; Warka (unstratified); Raidau Sharqi; Telloh; <sup>c</sup>Uqair.
3. Clay cones: Arpachiyah; Shahrain(?); al-<sup>c</sup>Ubad; Ur-Ubad I; Warka (unstratified); Telloh.
4. Model shaft-hole hammer-axes in clay: Gaura XV; <sup>c</sup>Uqair.
5. Stylized clay figurines with splayed base: Gaura XVI (considered anthropomorphous game pieces by Tobler); Warka (unstratified).
6. Clay spindle whorls: Gaura XIX–XV, XIII–XII; Arpachiyah; Nuzi XI–XA; Ninevite 3; Shahrain; al-<sup>c</sup>Ubad; Warka Eanna XVII; Telloh; <sup>c</sup>Uqair.
7. Clay sling-pellets: Gaura XVI, XIII, XII; Shahrain; Warka (unstratified); Telloh.
8. Clay beads with incised decoration: Arpachiyah; Shahrain; al-<sup>c</sup>Ubad; Telloh. Compare stone beads with rough incisions from Gaura XV, XIII, XII.
9. Flint and obsidian flakes: Gaura XIX–XV, XIII–XII; Arpachiyah; Nuzi XII–XA; Ninevite 3; Shahrain; al-<sup>c</sup>Ubad; Raidau Sharqi; Telloh; <sup>c</sup>Uqair.
10. Nail-shaped studs in stone: Gaura XVI, XIII, XII; Shahrain; al-<sup>c</sup>Ubad; Telloh; <sup>c</sup>Uqair.
11. Stone celts: Gaura XIX–XV, XIII–XII; Shahrain; al-<sup>c</sup>Ubad; Hajji Muhammad; Telloh; <sup>c</sup>Uqair.
12. Stone maceheads: Gaura XIX–XV, XIII–XII; Shahrain; al-<sup>c</sup>Ubad; <sup>c</sup>Uqair.
13. Hammerstones and grinding-stones: Gaura XVI and later; Shahrain; al-<sup>c</sup>Ubad; Ur-Ubad I; Warka (unstratified); Raidau Sharqi.
14. Stamp seals and impressions: Gaura XIX–XV, XIII–XII; Arpachiyah; Nineveh, between strata 2 and 3; Telloh; <sup>c</sup>Uqair.
15. Bone awls: Gaura XIX–XV, XIII–XII; Ninevite 3; Shahrain; al-<sup>c</sup>Ubad; Warka Eanna XVII; Telloh; <sup>c</sup>Uqair.

420. *BASOR* No. 66, Fig. 7; *Shahrain*, Fig. 10:664.

421. *Tepe Gaura* II, pottery fig. 214 (Gaura XIII; perhaps intrusive); *Shahrain*, Figs. 10:79 and 11:78; *UVB* IV, Pl. 16 D z.

422. *Shahrain*, Fig. 10:666–67 etc.; *Telloh*, Pl. 30:2 a.

423. *Tepe Gawra* II, pottery fig. 458; *Shahrain*, Fig. 10:52; *Telloh*, Pl. 28:3 l.

424. *Tell Halaf* I, Pl. CII 5; *Shahrain*, Fig. 10:82; *UE* I, Pl. XVII 2024.

425. *AAA* XX, Pl. XLV 17; *Shahrain*, Fig. 10:113; *Telloh*, Pl. 31:1 i; *JNES* II, Pl. XXIa 5.

426. *Shahrain*, Fig. 10:102; *UE* I, Pl. XIX 1882.

428. *AJ* X, Pl. XLVI b.

427. *BASOR* No. 66, Fig. 7; *UE* I, Pl. XLIX 516; *Telloh*, Pl. 29:2 c.

429. *Nuzi*, Pl. 48 E, I.

16. Bone tools with bitumen handles: Gaura; Warka Eanna XVII; 'Uqair.
17. Building with entrance on long side: Gaura XIII; Shahrain Temples XV, IX-VI; Raidau Sharqi (date dubious).
18. Tripartite temple plan: Gaura XIX-XVIII; Shahrain Temples VIII-VI and probably as early as XI.

We have so far emphasized the points of likeness between North and South because that very likeness has been questioned. But the differences also must be taken into account. Deep bowls (form N 1) with vertical panel design are very common in the North but unknown in the South, except for the possible occurrence in Shahrain Temple VIII (see p. 75). Bowls with inturned rims (form N 4) and jars of forms N 6 and N 8 either do not occur or are very rare in the South; inturned-rim bowls with ring bases occur at 'Uqair, but there is a sharp break in profile, which is not found in the North. On the other hand, plates with ledge rims (form S 1 b) and beakers of form S 5 are unknown in the North. Halaf and Halaf-inspired motifs and interrupted designs, common in N I, are absent or rare in the South. The designs which we have called "interlocking" (see p. 76), consisting of pointed leaflike elements arranged to fit together almost in jigsaw fashion, occur in the South but not in the North. In the North glyptic art flourished, beginning probably in Halaf times and verified from Gaura XIX on—an art which shows an amazing mastery of the technique of stonecutting and a high degree of skill in delineation and composition of designs. In the South we cannot even be sure of the existence of glyptic art during the Ubaid period; the few seals from this period might be imports or strays out of context. On the other hand, the clay figurines, sickles, and cones which are so common in the South appear in the North, if at all, as curiosities.

Some of these differences are easily explicable. When the Ubaid culture first entered northern Mesopotamia, that region possessed a rich and probably still flourishing, though slightly decadent, culture. Naturally the two amalgamated; we have seen that pottery, figurines, seal pendants, and stone vessels of Halaf types continue all through N I, although by the time of Gaura XIX Ubaid elements are dominant. The bearers of the Ubaid culture were, however, the first settlers in the South, as far as our evidence goes.<sup>430</sup> If there were primitive dwellers in the region before that time, no traces of their existence have been recognized either in material objects or in influence on the Ubaid people.<sup>431</sup> Therefore we need expect no elements in the South other than those inherent in the Ubaid culture. This factor would explain considerable differences between North and South, for, in addition to the actual elements transmitted, the Halaf culture almost certainly provided a stimulus to the development of the Ubaid culture in the North. The North was also much more open to outside influences because of its location, so that there may have been other factors contributing to the Ubaid culture there.

That connections exist between North and South is indisputable. There are numerous common features which are sufficiently individual in character to preclude chance coexistence in the two areas. In trying to establish the chronological relations between the two regions, however, we are confronted with considerable difficulties. We have seen that there seem to be two Ubaid phases in the North and two in the South. Northern Ubaid I (N I) comprises Gaura XIX-XV, probably Arpachiyah Early, Hassunah XI-XIII, and the Ubaid material

430. The paradox of this statement in connection with Lloyd's remarks about a pre-Ubaid culture at Shahrain (*JLN*, Sept. 11, 1948, p. 303) is explicable, since we consider his "pre-Ubaid" to be the first stage of the Ubaid culture.

431. Reed architecture is sometimes considered to be a remnant of pre-Ubaid times. It may be, but there is not a shred of proof. It seems likely that a people possessed of a material culture as highly developed as the Ubaid would have sufficient intelligence when faced with the problem of building on marshy ground to utilize the available material—in this case reeds—for erecting platforms to keep its dwellings above water as well as for building the dwellings themselves. Again, since the Ubaid people themselves seem to have lived partially in the marshes, if we judge by the findings in the pits at Ur and Warka, the argument for a pre-Ubaid origin of reed architecture seems to be vitiated.

## THE UBAID PERIOD: CORRELATION OF THE NORTH AND THE SOUTH 95

from Tell al-Halaf and Tell Mefesh; Northern Ubaid II (N II) covers Gaura XIV(?)–XII, Arpachiyah Late, part of Ninevite 3, and probably Grai Resh IX–VI. Southern Ubaid I (S I) comprises Shahrain Temples XVIII–VIII, Ur-Ubaid I, Hajji Muhammad, and probably the unstratified Ubaid finds from Shahrain and al-‘Ubaid, though they do include some S II material; Southern Ubaid II (S II) includes Shahrain Temples VII–VI and the cemetery, Ur-Ubaid II, Warka Eanna XVIII to approximately XV, and probably the Ubaid remains from ‘Uqair. Telloh exhibits material appropriate to both phases.

Obviously our problem is to determine whether on the basis of the similarities listed above (pp. 90–94) we can make a chronological correlation of North and South. As the lists show, many of the elements common to North and South are spread over the whole range of the Ubaid period in both areas and therefore are useless for comparative dating of the phases. The problem is further complicated by the existence of so much unstratified material in the South. We can only work through such material to see whether there are clear correlations between any of it and finds made at stratified sites in the two areas. The dating of the Ubaid material from al-‘Ubaid depends largely on Woolley’s equation of it with his Ur-Ubaid I,<sup>432</sup> but Lenzén’s statement<sup>433</sup> that the Hajji Muhammad pottery resembles that from al-‘Ubaid strengthens this equation, since Hajji Muhammad has much in common with Ur-Ubaid I (see p. 81). Al-‘Ubaid has, however, some later material also. ‘Uqair, none too closely tied to any other site, has much more in common with S II than with S I.

Most of the pottery forms shared by the two regions are found throughout the period in both areas or in indeterminate contexts. However, sinuous-sided beakers (forms N 10 and S 11) seem to be restricted to the late phase in each area. Lenticular vessels with bell-mouthed spouts tentatively link the early phases, since they occur in Gaura XIX–XVII, in Shahrain Temple VIII, and at al-‘Ubaid, but it is noticeable that the Shahrain occurrence is at the very end of the S I phase. As to details of form, “club-headed” rims seem to be characteristic of the late phases, although their presence at Shahrain and al-‘Ubaid may indicate that they occur in the early phases also; rims with slight outroll are found in N II and S II only. Flint-scraped bowls occur in the late phases only, but are known to us from only two sites, Grai Resh and ‘Uqair. Of the design motifs listed on pages 91–93, N I and S I have in common Nos. 7, 11, 16, 19–20, 28–29, 39, and 41; N II and S II have in common Nos. 32, 35, and 37, but all these motifs appear also in indeterminate context. Motifs which occur in both phases in the North but seem restricted to S I are Nos. 15, 17, 21–24, and probably 10, 18, 27, 36, and 40. No. 34 occurs in both S I and S II but is restricted to N I; the same may be true of No. 9. N I and S II are connected tentatively by No. 38. N II and S I have in common No. 30 and possibly Nos. 26 and 37. No. 4 occurs in N II and in S I and II. Other objects add nothing to the evidence provided by the ceramics, since almost all in both areas come from equivocal contexts.

The best evidence for correlating North and South is provided by the lenticular hole-mouthed pottery vessels with long bell-mouthed spouts; there are two well dated occurrences—in Gaura levels XIX–XVII and in Shahrain Temple VIII. It is dangerous to base a general conclusion on a single feature, but in this case the form is so peculiar and the examples so similar that the conclusion seems inescapable—the two occurrences must be approximately contemporaneous. That would, of course, mean that the long series of Shahrain temples under VIII is at least partially contemporaneous with the Halaf culture in the North; and since the pottery of the lowermost of these temples is closely connected with that of Ur-Ubaid I and Hajji Muhammad, it follows that these deposits must also date that early. As remarked above (p. 90), complete publication of the Shahrain material will undoubtedly allow us to be more

432. E.g. *DSA*, Pl. 2 a, reproduces as “al Ubaid I” some pottery previously published in *UE* I, Pl. XLIX.

433. *UVB* XI 28.

precise about the phases of the Ubaid culture in the South. As it stands now, most of the material of our S I phase (Ur-Ubaid I, Hajji Muhammad, Shahrain Temples XVIII–XVI) must be a good deal earlier than the onset of the Ubaid culture in the North; then there is Shahrain Temple VIII, which is equated with Gaura XIX–XVII (the first part of the N I phase) but cannot yet be connected with any other Southern deposits; and finally there is the S II phase, which on the basis of pottery seems approximately contemporaneous with N II. The picture is quite fragmentary, but we venture to predict that the chronological framework is substantially correct. The mechanism of contact was doubtless trade, although occasional immigration or some other type of casual communication may also have played its part.

Apparently the bearers of the culture which we know as Ubaid moved out of Iran into southern Mesopotamia sometime during the period of Iranian prehistory represented by what McCown has called the “Chashmah Ali” culture.<sup>434</sup> At this time the Halaf culture was probably flourishing in the North (we cannot, of course, be precise about the moments when these periods begin), and the Ubaid intrusion seems not yet to have touched that area. However, a certain amount of intercommunication between North and South during the age represented by Shahrain Temples XVIII–IX seems likely. The pottery of Temples XVIII–XVI has certain suggestions of the Halaf style, particularly in the interior design of the plates. It is clearly not Halaf pottery, nor are there numerous instances of borrowed motifs; but a glance at the illustrated Shahrain pottery leaves one with the distinct notion that these people were somewhat familiar with the Halaf style. And, on the other hand, it will be recalled that before the end of the Halaf period at Tepe Gaura strongly Ubaid-like elements begin to appear (see pp. 24 f.). As the Halaf culture became decadent the Ubaid cultural influence grew stronger, and by the time of Gaura XIX the culture of the North became Ubaid.

#### EXTENT OF THE UBAID CULTURE

The Ubaid culture, characterized by its monochrome-painted pottery, extends over a wide area. Coming westward from the Iranian highlands, we find it at all sites excavated or tested in the Mosul area with the exception of Nineveh, and we have seen that Ninevite 3 has material connectible with other features of the Ubaid period. This painted pottery is found in the Sinjar, the Khabur, and the Balikh regions, indicating an apparently unbroken spread of the Ubaid culture through Mesopotamia westward to Syria. That a variant is common through much of Syria has been observed by Braidwood.<sup>435</sup> In southern Mesopotamia Ubaid monochrome-painted pottery occurs at every site so far tested which has any material earlier than the Protoliterate period, and we may assume that the Ubaid culture extended without a break over the whole area. The total area covered by the culture, therefore, is appreciably larger than that over which the Halaf culture spread.

The Ubaid mat-painted polychrome pottery, which was first identified in the ‘Amuq plain in Syria (see p. 28), occurs in the Mosul region, seemingly at Shaghir Bazar, and at Tell al-Halaf, but none has been noted from the Sinjar region. In view of its occurrence in regions immediately east and west of that area, its absence from the Sinjar collections may be accidental.

After the Ubaid period there began an era of regional specialization in which Mesopotamia was much less closely connected with Iran and Syria than during the Ubaid dominance and in which northern and southern Mesopotamia began to develop separate cultures. Not until the spread of the Assyrian Empire was there again a cultural continuum of so great an extent in the Near East.

434. *JNES* I (1942) 426 ff.

435. This Syrian variant seems based on a combination of Iranian elements filtered through northern Mesopotamia and a native painting tradition. There is apparently no reciprocal influence from west to east. See Braidwood's study of the comparative stratigraphy of Syria in *OIP* LXI.

## IV

## THE WARKA AND PROTOLITERATE PERIODS

SO FAR we have dealt with fairly well defined culture periods, each characterized by painted pottery relatively easy to locate and identify. With the end of the Ubaid period the situation changes in both North and South; from that time on the developments in material cultures are difficult to discern and evaluate. We shall from now on speak chiefly of the South, which at this point begins to play the leading part culturally.

The old division of the late prehistoric age into the "Uruk" and "Jamdat Nasr" periods is no longer valid in view of our increased knowledge of the remains from Warka, Khafajah, and other sites. In order to clarify the situation new terms have been devised, reflecting our present convictions as to the nature and duration of the cultures. Our knowledge of the earlier part of this span of time is gained almost wholly from Warka, and the divisions between periods and phases are based mainly on the stratigraphy of the sounding in the Eanna precinct. The new terminology was worked out and agreed upon by the members of Professor Frankfort's seminar in comparative archeology and will presumably be used in future publications by all members of this seminar.

The Warka period comprises the following material:

Warka: Eanna levels XIV-IX and probably all levels of the Anu ziggurat up to level A.

Ur: Ur-Ubaid III graves and part of the kiln stratum.

Possibly isolated material from other sites.

The Protoliterate period<sup>1</sup> is much better known, with remains from the following sites:

Warka: Eanna levels VIII-III, level A of the Anu ziggurat, Mosaic Temple.

Al-Ubaid: probably a little grave material.

Ur: part of the "Jamdat Nasr" cemetery (some of which is certainly Early Dynastic) and material from various shafts and pits, "Archaic III and IV" in the ziggurat area. Most of the material is incompletely published.

Telloh: a good deal of unstratified material.

Farah: Schmidt's Farah I and certain unstratified items from Heinrich and Andrae's earlier publication, which we have utilized on the basis of analogies from other sites.

Jamdat Nasr: a good deal of unstratified material.

Tell Uqair: "Jamdat Nasr" chapel and a cache of Jamdat Nasr type pottery.

Khafajah: Sin Temple I-V, plus some private houses and graves.<sup>2</sup>

Tell Asmar: Earliest Shrine of the Abu Temple.<sup>2</sup>

Abu Shahrain has material of both the Warka and the Protoliterate periods.

In the following account finds of both periods are presented. Chronological arrangement is maintained as far as each site permits.

1. See *OIP* LVIII 8. A full discussion of the Protoliterate period is in preparation by Delougaz. We have (on pp. 159 f. below) stated as much concerning its stratigraphy and characteristics as seems necessary to clarify our use of the term. A minor point of difference is that we begin the Protoliterate period with Warka Eanna VIII, whereas Delougaz begins it with Eanna VII.

2. Access to unpublished material was kindly granted me by Professor Frankfort, director of the Iraq Expedition of the Oriental Institute.

## POTTERY

## WARKA

A light-colored ware, which is probably domestic pottery, characteristically unpainted, hand- or wheelmade, coarse or fine, plays the leading part. It begins in level XIII and continues into IV. It is much coarser and rougher than the light ware of the Ubaid levels. Ubaid monochrome-painted pottery continues for a time, but the overfired greenish fabric which is so prominent in Ubaid levels seems no longer to occur. Both red and gray wares, usually slipped, also appear. Although often assumed to be the most distinctive feature of the "Uruk" period, they are quantitatively a minor constituent of the ceramic achievement. Their importance rests mainly on the fact that they represent a different technique of manufacture from that used for the light ware. The use of a smother-kiln to produce dark fabrics and of slip as the sole decoration are innovations in Mesopotamia at this time, as far as we know. It will be remembered that in the Hassunah period dark slip-decorated pottery occurs in northern Mesopotamia; but so little has been found there that it may be doubted whether the technique was actually known to the people of that region. The same sort of argument must be used for the gray- and red-slipped pottery found in Eanna XVIII-XV (see p. 79). We know that dark-faced slipped pottery is at home in North Syria and Anatolia, and it is to be strongly suspected that the early fragments of such pottery found in Mesopotamia came from those western lands. But beginning in Eanna XIV gray- and red-slipped wares occur in sufficient quantities so that we may believe them to be by then a part of the Mesopotamian potters' repertoire. New forms also appear in level XIV, especially a series of carinate bowls. Rims of the heavy, "club-headed" variety, which occur in the Ubaid period but are not common in the South, suddenly become prominent in level XIII. Because of these various new elements in XIV-XIII, we believe that a new culture period has begun and we consider Warka XIV to mark its opening.

The red ware is described as follows: "This red ware consists of a medium- to quite fine-grained, reddish or brick-red, very well fired clay. In part it is only wet-smoothed on the outside or coated with a fine red wash, wet-smoothed, and fired, while some sherds were first painted red after firing, . . . and finally a part is red-slipped and burnished."<sup>3</sup> No complete vessels of red ware were found in level XIV, and only two sherds are illustrated. One, a jar neck, is red-slipped.<sup>4</sup> The other has in addition to a brownish-red slip a horizontal band consisting of light ground with black borders and dots.<sup>5</sup> The combination of colors reminds one of the much later Jamdat Nasr type polychrome painting which combines black with dark red. Gray ware also occurs in Warka XIV. The fabric is of medium grain and not so well fired as the red; it is apparently always wheelmade, covered with a thin slip, and wet-smoothed. We find a series of rim sherds from sharply carinate bowls,<sup>6</sup> the break quite close to the top so that the rim is bent markedly inward (Fig. 12, form 1). A little Ubaid monochrome-painted ware survives, and there is an unusual base of unpainted light ware with three tiny knob feet.<sup>7</sup>

In level XIII red ware becomes more common.<sup>8</sup> There is a rim sherd of form 1, and another red sherd shows a small overturned rim, a feature which is characteristic of later pottery.<sup>9</sup> In gray ware there is a rim sherd with a heavy outside ledge as in some of the Ninevite 3 unpainted light ware.<sup>10</sup> In level XIII begins the light ware mentioned above, a new class of pottery, the so-called "unpainted Uruk ware," which continues into level IV. In level XIII it is characterized by coarseness of fabric and crudeness of manufacture and is always handmade.<sup>11</sup> The form

3. Translated from *UVB* IV 37.

4. *Ibid.* Pl. 17 D m.

5. *Ibid.* Pls. 17 D l and 21 c.

6. *Ibid.* Pl. 17 D a-f.

7. *Ibid.* Pl. 17 D i-k and g.

8. *Ibid.* p. 38.

9. *Ibid.* Pl. 17 D x-y.

10. *Ibid.* Pl. 17 D d' and p. 38; cf. *AAA* XX, Pl. XLIX 13.

11. *UVB* IV 41.



most common in this level is said to be a spouted jar of rather swelling profile with ring or rounded base (form 2); but small beakers with tapering button base (form 3), somewhat resembling the Ubaid beakers except for more elegantly curved profile, are common, as are bowl forms, often carinate, but not so sharply so as form 1.<sup>12</sup> Numerous heavy rim fragments, many from short-necked jars, were found; they are often "club-headed" and their types include an inward-sloping rim, a grooved rim, and rims which roll or slope to the outside, sometimes almost sharply enough to be called beveled.<sup>13</sup> One rim sherd appears to be from a "Glockentopf" (see below). Although this pottery is said to be quite coarse, some of the bowl rims illustrated are from fairly thin-walled vessels.<sup>14</sup> Only three painted sherds were found in level XIII,<sup>15</sup> one with red and black paint combined.

In level XII, however, painted pottery was found in larger quantity. Although the excavators label it "Ubaid II" because it is distinguished from the painted ware of the preceding levels (which they call "Ubaid I") by the careful execution and profuseness of the painting,<sup>16</sup> the fabric appears to be the same and the designs are similar to those which occur in the Ubaid levels—plain bands, zigzags, chevrons, ladders, running lozenges. Designs in red paint also occur, for the first time in any quantity. The most common form is a sinuous-sided pot, and wide-mouthed jars seem indicated; but, as usual, we have only rim sherds, and it is difficult to reconstruct the original forms.<sup>17</sup> The unpainted light ware is easily the most common in level XII, the vessels now being even rougher than before. "Index fossil" of the pottery from levels XII-IV is the "Glockentopf" (form 4), a crude bowl with flaring sides and beveled rim.<sup>18</sup> Other forms occurring in this ware<sup>19</sup> are simple flat-based bowls with flaring, slightly rounded sides and slightly inturned rims (form 5), taller bowls of similar profile with ring bases, and probably heavy jars or large bowls, evidenced by fragments of "club-headed" rims. Tubular spouts, ring bases, and what seems to be a fragment of a tall hollow foot or stand occur.<sup>20</sup> Some of the red ware now has a plum-red slip; the vessels are well made and all turned on the wheel. The gray ware also is of finer quality, but it is rather rare.<sup>21</sup>

Levels XI-X (not separated in the report) are poor in pottery. In unpainted light ware there is a pointed base which may be from a beaker of form 3, also a shallow, straight-sided bowl of form 6.<sup>22</sup> Gray-ware sherds are mostly from bowls with in- or outrolled rims, resembling some of Ninevite 3.<sup>23</sup> One vase has an almost black slip, and other gray sherds have combed decoration, a type which carries on into later levels.<sup>24</sup> This is the earliest appearance of combed decoration in stratified context at Warka. In red ware there is a sherd from the side wall of a sharp-shouldered jar.<sup>25</sup> A little painted ware occurs.<sup>26</sup>

Level IX yielded practically nothing—a fragment of a spout, a crude beaker, a sherd with incised design, and a bowl sherd with a false spout—all in the coarse unpainted ware and all handmade.<sup>27</sup>

In level VIII new forms, more developed than the old, appear. Unpainted light ware is the

12. See *ibid.* Pl. 17 D p, r, and n (s).

13. See *ibid.* Pl. 17 D n group.

14. *Ibid.* Pl. 17 D o (p-q).

15. *Ibid.* p. 35 and Pl. 17 D s-u (last in colors, Pl. 21 d).

16. *Ibid.* pp. 31 f.

17. *Ibid.* Pl. 18 A m' group, i', n'.

18. *Ibid.* p. 41 and Pl. 18 A c. A rim sherd which appears to be from a vessel of this type was found in level XIII (*ibid.* Pl. 17 D n [ag]).

19. See *ibid.* Pl. 18 A b, d, l, n-f'.

20. *Ibid.* Pl. 18 A f, i, m.

21. *Ibid.* Pl. 18 B d'-f'; cf. e.g. AAA XX, Pl. XLIX 26.

22. UVB IV 38.

23. *Ibid.* Pl. 18 C e.

24. *Ibid.* pp. 31 and 36 and Pl. 18 B a'-c', i'-k'.

21. *Ibid.* p. 38.

22. *Ibid.* Pl. 18 B z and y respectively.

27. *Ibid.* p. 42 and Pl. 18 C l, k, i, and m respectively.

most common, and in this ware we now have besides rough handmade vessels some of much finer quality and more careful manufacture. The latter are mostly wheelmade and not infrequently wet-smoothed. Two peculiar vessels of this group,<sup>28</sup> with spouts located quite low down, somewhat resemble lamps in appearance; there is also a sinuous-sided bowl (form 7).<sup>29</sup> In the rough fabric there is a vessel similar to form 6 but with slightly inturned rim, also a long tubular spout with split end and a model ovoid pot or jar with false spout.<sup>30</sup> The *floruit* of the red ware begins in this level; the fabric is usually fairly fine-grained and brick-red. The slip is thin and usually on the outside only except for the rim; sometimes it is pattern-burnished. Rim sherds which may belong to bowls of forms 5 and 7 and a pointed base which is probably from a beaker of form 3 were found; and we here get the first specimen of the type of shouldered jar with offset neck and flat ledge or beveled rim which is common later in the Protoliterate period.<sup>31</sup> Gray ware also is common, and in addition to the gray-slipped and burnished variety which resembles that of the earlier levels there is a gray-washed fabric with comb or fingernail impressions.<sup>32</sup> In this fabric handled cups (form 8)<sup>33</sup> are common, which are similar to cups known at al-Ubaid (considered by Woolley contemporaneous with the Ubaid monochrome-painted pottery), Telloh, and Khafajah. This is the first occurrence of the form at Warka, where it continues in levels VII and VI. One such cup from level VIII has a twisted handle<sup>34</sup> of a type seen at Jamdat Nasr also.

Level VII also yielded a good deal of pottery. There is an ample amount of the light unpainted ware, but very little of the coarse handmade variety.<sup>35</sup> We have a bowl of form 6, other flat-based bowls with heavier rims, and a bowl similar to form 4 but with slightly modeled rim.<sup>36</sup> Of the finer vessels, usually wheelmade, most noticeable is the great number of spouted jars of various shapes (e.g. forms 9–10<sup>37</sup>). The very fine and graceful form 10 is worthy of comment; not only does it occur at Telloh (see p. 105) but also, quite inexplicably, at Tepe Siyalk (level III 6) in Iran.<sup>38</sup> Spouts, which may be either short or long and slender, usually point diagonally upward from the shoulder, but some are almost horizontal, and one example of a bent spout was found separately; false spouts also are known.<sup>39</sup> A handled cup (form 8) appears, also a bowl perhaps of form 7.<sup>40</sup> Many fragments of bulging jars with slightly flaring necks and unformed, ledge, or beveled rims are found; two shoulder fragments have pierced lug handles similar to those which are common in the Ubaid period.<sup>41</sup> A crudely shaped cylindrical jar with a slightly modeled base<sup>42</sup> is interesting chiefly as a possible precursor of a more elegant jar form with slightly offset foot found in levels VI–III. A knobbed base<sup>43</sup> may come from a beaker of form 3. Some of the red-slipped ware is fired very hard, but most of it is fairly soft. A pot with pierced lugs (apparently similar in profile to Ubaid form 7 [see Fig. 10] or possibly a less sharply angled variant of form 18 or 19 in Fig. 12) occurs in this ware.<sup>44</sup> Gray ware, either slipped or washed as in level VIII, continues; some sherds with black slip are highly polished. Incision and wedge impressions are used as ornament. The most common gray-ware form, known only from rim and neck pieces, is a pot with bulging body and short neck with flaring rim.<sup>45</sup> The handled cup (form 8) also is found; and a spouted fragment and a fragment of a sharply carinate hole-mouth pot occur.<sup>46</sup>

28. *Ibid.* Pl. 18 C *u-w*.

29. *Ibid.* Pl. 18 C *y*.

30. *Ibid.* Pl. 18 C *c'*, *b'*, and *z* respectively.

31. See *ibid.* Pl. 18 C *f'*, *f'*, *o'*, *g'*.

32. *Ibid.* p. 39.

33. *Ibid.* Pl. 18 C *u*.

34. *Ibid.* Pl. 18 C *p*.

35. *Ibid.* pp. 42 f.

36. See *ibid.* Pl. 18 D *a-c*, *e*.

37. *Ibid.* Pl. 18 D *g* and *n* respectively.

38. *Sialk*, Pl. LXIX S.135.

39. See *UVB* IV Pl. 18 D.

40. *Ibid.* Pl. 18 D *v'* and *d'* respectively.

41. See *ibid.* Pl. 18 D *o-z*, *m'*.

42. *Ibid.* Pl. 18 D *c'*.

43. *Ibid.* Pl. 18 D *h'*.

44. *Ibid.* Pl. 19 A *u*.

45. *Ibid.* Pl. 19 A *a-i*.

46. *Ibid.* Pl. 19 A *k*, *p*, and *q* respectively.

Level VI yielded more pottery than any other level. The unpainted light ware is divided into several classes, but for our purposes the distinction between coarse and fine is sufficient. In the rough fabric, extremely common in this level, there are fragments of forms 6, 7, and 9, including variants of form 9 with rounded or even pointed bases.<sup>47</sup> In the fine fabric also there are spouted jars of form 9 and a similar type with more bulging sides.<sup>48</sup> Another common type is a pear-shaped, unspouted jar (form 11)<sup>49</sup> which appears here for the first time, and, like form 9, continues in popularity well into the Early Dynastic period. Handled cups also continue.<sup>50</sup> Bowls of a new shape (form 12),<sup>51</sup> with nearly straight, flaring sides and slightly offset bases, are the first of a series which continues into the Early Dynastic period. Ledge rims become common, and sloping and overhanging rims, with or without a horizontal crease, also are frequent. Pierced lugs continue, along with rough incision and raised bands with thumbnail impressions, the latter most commonly found, as usual all through these levels, on fairly large crudely shaped vessels.<sup>52</sup> Two broken ladles are shown.<sup>53</sup> There are no less than four varieties of red ware: (1) with very thin light red slip; found most notably in form 13, a squat pot with bulging profile, short flaring rim, flat base, four pierced lugs, and a band of incised crosshatching around the shoulder;<sup>54</sup> (2) with darker-colored slip, better smoothed; used for a squat ring-based carinate jar with short neck, beveled rim, and spout,<sup>55</sup> for a shallow flat plate with rounded floor and trough spout,<sup>56</sup> and for a few other forms; (3) with plum-red slip; (4) with red wash. Of red ware, variety unstated, is a beautifully shaped jar of form 11 whose entire body seems to be covered with horizontal bands of zigzag scratching, combing, or possibly pattern-burnishing.<sup>57</sup> In spite of the numerous varieties, the total amount of red ware illustrated is not large. The beginning of plum-red slip is significant, for that is one of the characteristic features of the Jamdat Nasr polychrome pottery. Gray ware still flourishes in its two varieties: (1) slipped and burnished, (2) washed and combed. Only rimmed neck sherds are known from this level. They are mostly ledge rims from jars, with a few sloping rims, also pieces from bowls apparently of form 5.<sup>58</sup>

Level V is as poor in pottery as level VI is rich. There is very little of either red or gray ware. In the unpainted light ware of the coarse variety there is a large spouted vessel similar to form 9.<sup>59</sup> A spouted vessel with more globular body occurs in the fine fabric, and there are bowls of forms 7 and 12.<sup>60</sup>

In level IV the red and gray wares are not so common, and unpainted light ware of the coarse handmade variety is rare. The "Glockentopf" makes its last appearance, and bowls of somewhat similar shape (cf. form 12), but wheelmade in a finer ware, come in.<sup>61</sup> Such bowls continue as a distinctive feature of levels III-II. There are also two bowls with turned-over rims.<sup>62</sup> Three new forms occur: a solid-foot chalice, a hemispherical strainer bowl (form 14), and a bulging hole-mouth jar with pierced lug handles and a complicated pattern incised on the shoulder.<sup>63</sup> Solid-foot chalices (see p. 159, n. 543) and the hole-mouth form are supposed to be diagnostic of an Early Dynastic I date, the latter resembling most particularly vessels found in Archaic Shrine II and III at Tell Asmar.<sup>64</sup> We suspect that the Warka examples are out of place.

47. See *ibid.* Pl. 19 A c'-i', w', k''-l'' and B a, t.

48. *Ibid.* Pl. 19 B w-z. Note that w has a slightly down-curved spout.

49. *Ibid.* Pl. 19 C t-y.

50. *Ibid.* Pl. 19 B k''.

51. *Ibid.* Pl. 19 B g-h.

52. *Ibid.* Pl. 19 C k-n.

53. *Ibid.* Pl. 19 C a, d.

54. *Ibid.* Pl. 19 D b.

55. *Ibid.* Pl. 19 D c.

56. *Ibid.* Pl. 19 D f.

57. *Ibid.* Pl. 19 D a.

58. See *ibid.* Pl. 19 C r'-z', a''.

59. *Ibid.* Pl. 19 D a'.

60. *Ibid.* Pl. 19 D c', p, and y respectively.

61. See *ibid.* Pl. 20 A b and w-y respectively.

62. *Ibid.* Pl. 20 A b'-c'.

63. *Ibid.* Pl. 20 A s, k', and l' respectively.

64. OIP LXIII, shape D.504.353.

The pottery of levels III and II is not separated in the report; hence the transition to the Early Dynastic period is obscure. We know from its semipictographic tablets (see p. 155) that level IIIb is still within the Protoliterate period, while level II, in which plano-convex bricks begin to be used, is Early Dynastic. If any distinction could be made between pottery types of levels III and II, it would be most helpful for purposes of comparative stratigraphy. However, we are forced to deal with them here as one body of material. Unpainted light ware of the hand-made variety persists in a bowl of form 6,<sup>65</sup> a knob foot of a beaker of form 3,<sup>66</sup> and two tall ring bases similar to one found in level XII and to specimens of the Ubaid period from elsewhere.<sup>67</sup> Various heavy bowl rims and ring bases are found in a coarse wheelmade fabric.<sup>68</sup> The pottery typical of levels III–II is of a relatively fine light-colored wheelmade fabric, probably like that which begins in level VIII.<sup>69</sup> Bowls of form 12, with or without offset base, and solid-foot chalices (see p. 159, n. 543) are the most common.<sup>70</sup> Sherds of jars with turned-over or sloping rims occur.<sup>71</sup> The mouth of one nicely shaped jar with high sharp shoulder and straight sides is unfortunately broken away.<sup>72</sup> Little strainers of form 14 continue from level IV, and jar lids of forms 15–16 are now used.<sup>73</sup> Only a few fragments of the red and gray wares were found in levels III and II.

Two unusual fragments,<sup>74</sup> so hard fired that they are almost like stone, were found in the "Kleinfunde" hoard (see p. 127); they bear representations of flowering(?) branches in relief and are the only prehistoric pieces so decorated.

An unillustrated sherd from a shouldered vase, painted red and with a dark-colored design, found in level A of the Anu ziggurat, is attributed to the "Jamdat Nasr period."<sup>75</sup>

#### TELL ABU SHAHRAIN

Recent excavations at Shahrain have given us stratified material, of which only the pottery has been published,<sup>76</sup> of the old "Uruk" period. Two buildings (see p. 130) constructed early in this period were soon abandoned, and as drifting sand gradually filled them various deposits of pottery, believed by the excavators to be votive offerings, were made; later the area was leveled for rebuilding and covered with a layer of rubble which is said to be "debris from buildings demonstrably later in date than that buried beneath the sand." The pottery is divided into two groups; Group I, deriving from the original structures and the deposits in the sand above and from a contemporary building, is considered to be "early Uruk," while Group II, deriving from the rubble layer and from fallen debris adjoining the late Uruk temple platform, is "late Uruk."

The earlier phase contains both red- and gray-slipped wares. The latter is represented only by a few inturned rim sherds from bowls similar to form 1 (Fig. 12) but without the sharp carination. The red ware is said to be plentiful, and four different shapes are illustrated: the upper part of a sharp-shouldered jar with fairly narrow neck and plain flaring rim; a round-bodied jar shaped rather like form 9 but unspouted and with four small lug handles around the belly; a deep flat-based bowl with curving sides and a distinctly outturned rim; and a more shallow round-based bowl whose sides curve out gently and then in at the rim. The "plain pottery" (not further described) shows still other forms. Spouted jars are common, especially a type of large

65. UVB IV, Pl. 20 B a.

66. *Ibid.* Pl. 20 B c'.

67. *Ibid.* Pl. 20 B b-c; cf. JNES II, Pl. XXIIa 10-11.

68. UVB IV, Pl. 20 B d, f, p.

69. *Ibid.* p. 46. We are unable to distinguish among the various fabrics; such distinctions as even the excavator makes seem to be purely qualitative.

70. See *ibid.* Pl. 20 B f'-p', w'-e'.

73. See *ibid.* Pl. 20 B d''-e'', d'-e'.

71. *Ibid.* Pl. 20 B i, r-s.

74. *Kleinfunde*, Pl. 30 f-g.

72. *Ibid.* Pl. 20 B g.

75. UVB VIII 51.

76. Seton Lloyd, "Uruk pottery," *Sumer* IV (1948) 39-51 with several charts of drawings.

ovoid jar with a small neck and a straight spout pointing diagonally upward from the shoulder; as many as twenty specimens were found in a single one of the "votive deposits." The upper part of another spouted jar rather resembles our form 9, but it has an overhanging rim. Vessels with false spouts placed just below the rim occur. Strangely enough, the beveled-rim bowl (form 4) is not known in this early group, but form 12 occurs. Rim sherds of various other bowls, some with little ledge or lug handles just below the rim, are also present, and an interesting piece has a small tubular spout just below the rim. The upper parts of four-lugged jars (forms 13, 18, or 19) are common and are frequently ornamented with incised bands. Numerous sherds are covered with small crescent-shaped incisions, apparently made by impressing a reed stem obliquely in the clay.

The later group contains numerous beveled-rim bowls, jars with down-curved spouts as well as those with the more usual straight spouts, and folded-over rims, presumably from bottles or narrow-necked jars. The bent spouts, beveled-rim bowls, and an almost neckless unspouted jar are said to be the characteristic features of this group, which Lloyd equates with Warka VI-III. When we try to date the Shahrain pottery in terms of the sequence at Warka (still the best stratified site covering this period), we find that the evidence from the two sites is somewhat contradictory. It may be tabulated as follows:

Shahrain "early Uruk" (correlated provisionally by Lloyd with Warka XIV-VII)

1. Red- and gray-slipped wares. At Warka these wares appear in relatively good quantity as late as level IV with isolated pieces even in level I, and they are especially well represented in level VI (see pp. 101 f.), the level which is supposed to begin Lloyd's "later Uruk" phase.
2. Ovoid spouted jar. Strangely enough, there are no very close analogues to this form among the many varieties of spouted jars known in the South in the late prehistoric age. Spouted jars not too dissimilar (form 2) occur at Warka in level XIII (see p. 99), but the great majority of spouted jars at Warka are in levels VII-VI.
3. Jar with false spout just below the rim. A similar piece is found in Warka VII; somewhat different false spouts occur in Warka IX and VIII (see pp. 99 f.).
4. Bowl form 12. This begins in Warka level VI, continuing without break into Early Dynastic times (see p. 101).
5. Four-lugged jars. Form 13 is found in Warka VI, although shoulder fragments with pierced lugs occur in VII (see pp. 100 f.).
6. Incised crescents. Warka IX has a sherd with incised design (see p. 99), including "Rohrstengel-eindrücken," but the latter are impressed circles rather than crescents.

Shahrain "later Uruk" (correlated provisionally by Lloyd with Warka VI-III)

1. Beveled-rim bowl (form 4). This occurs in Warka XII-IV, with apparently an isolated example in XIII (see p. 99). Here we question Lloyd's statement: "... at Warka, isolated examples occur as early as Level XII but an immensely larger number were found associated with the building-levels both in the late-Uruk and Jamdat Nasr periods."<sup>77</sup> No such statement is made in the publication of the Warka pottery; in fact Von Haller in discussing the rough pottery of level XII says: "Unter der zum grossen Teil recht roh freihändig geformten Gefässen sind die sogenannten Glockentöpfe die typischsten, denn diese Form, die herauf bis Schicht IV immer wiederkehrt, gibt der Uruk-Keramik ihren Stempel."<sup>78</sup> Unless Lloyd has access to unpublished information which contradicts Von Haller's remarks, it is difficult to see how he arrived at his conclusion. Also we are at a loss to understand his assertion that the beveled-rim bowl occurs in Gaura VII, for to the best of our knowledge no example of this form has ever been found at the site of Tepe Gaura.
2. Down-curved (bent) spout. Warka VII-VI have the only illustrated examples (see pp. 100 f.), but "gekrümmter Tülle" are mentioned from levels V-IV also.<sup>79</sup>
3. Overhanging or folded-over rims. These occur in Warka VI-II/III (see pp. 101 f.).

77. *Ibid.* p. 49.

78. *UVB* IV 41.

79. *Ibid.* p. 43.

Obviously the Shahrain "early" and "late" groups cannot be exactly correlated with the Warka stratification. We accept Lloyd's groups for Shahrain itself, but pending fuller publication of the material from that site, we shall continue to give more weight to evidence from Warka. That we do not agree with Lloyd's theory of a new culture period beginning with Warka VI will be apparent (see pp. 159 f.).

#### AL-<sup>c</sup>UBAID

The so-called "Later Cemetery" at al-<sup>c</sup>Ubaid belongs in the main to the latter part of the Early Dynastic period but yielded some pottery of Protoliterate types. Distinction of periods is difficult in the absence of stratification, for many Protoliterate forms carry on into the Early Dynastic period. Handled cups (form 8) and spouted jars of form 9 were found, likewise bowls of form 12 and vessels on tall ring bases.<sup>80</sup> Grave 90,<sup>81</sup> called "prehistoric," may well belong to the Protoliterate period on the basis of a spouted pot with two bands of red paint below the shoulder, a pot with incised hatching around the shoulder, and the contracted position of the body. Various fragments of incised and red-slipped or -washed pottery, found on the surface,<sup>82</sup> may belong to the Protoliterate period.

#### UR

As revealed by the "Flood" pit (see p. 77) the lower half of the kiln stratum, from which the Ur-Ubaid III graves were dug, contains a great deal of Ubaid painted pottery. Except at the very bottom of the stratum, this pottery is mingled with unpainted red ware, nearly always burnished, which becomes increasingly popular as the painted ware decreases in quantity.<sup>83</sup> The graves also contain red ware (see below). It is because of these circumstances that we consider the lower part of the kiln stratum and the Ur-Ubaid III graves to belong to the beginning of the Warka period. The graves themselves contain mostly unpainted pottery; no grave has more than one painted vessel, that always being a cup decorated with plain bands.<sup>84</sup> The most common form in the unpainted pottery is stated to be a chalice with splayed foot, in either drab or red clay.<sup>85</sup> The existence of beveled-rim bowls (form 4)<sup>86</sup> in the kiln stratum is a link with either the Warka or the Protoliterate period.

Above the remains of the Ubaid period and below those of the Early Dynastic period in various other pits there are remains (mostly grave material) which contain not only red-slipped and gray wares but also reserved-slip ware (cf. p. 109) and Jamdat Nasr polychrome vessels; what plain pottery there may be we do not know. The relationships of the various types of pottery one to another and their relative quantities are left quite uncertain.<sup>87</sup> Little can be said about any of the forms, except that carinate pots with suspension lugs are common in red-slipped ware, sometimes burnished, and that a grave photograph shows some large spouted vessels suggestive of form 9.<sup>88</sup>

80. *UE I*, Pls. LII xvi (considered by Woolley contemporaneous with the Ubaid monochrome-painted ware; see *ibid.* pp. 155-61); LII xv b and LIX:LXXVI-LXXVIII; LV:I-IV; LX:XCv, XCVII-XCVIII respectively.

81. *Ibid.* p. 203.

82. *Ibid.* pp. 164 f. The excavator calls the red ware "painted red all over."

83. *AJ X* 332 f.

84. *Ibid.* p. 337 and *DSA*, p. 37; the only illustrated specimen (*DSA*, Pl. 5 a) is a ring-based bowl of form 6, but it is published in *AJ X*, Pl. XLv d, as belonging to Ur-Ubaid II and has been accepted as such on p. 78 (see n. 248) above.

85. *AJ X* 337.

86. *Ibid.* Pl. XLIII b.

87. Woolley in discussing the kinds and sequence of pottery and other objects found in the "Jamdat Nasr" graves in Pit X has given us in *AJ XIV* (1934) 365, 366 f., and 371 f. no less than three statements, each more or less contradicting the others. Particularly unclear is the position of the polychrome ware in the sequence.

88. *AJ X*, Pl. XL b.

## RAIDAU SHARQI

Surface finds from this site include red-slipped sherds, a bent spout, spouted jars, and "Glockentöpfe,"<sup>89</sup> all of which bespeak a settlement of the Warka or of the early Protoliterate period.

## TELLOH

Telloh has yielded a considerable amount of pottery which is, for all practical purposes, unstratified. De Genouillac's designation of certain depths of deposit at Telloh as "Warka V" and "Warka IV"<sup>90</sup> is inexplicable, because the contents of the Telloh "levels" are in no way comparable with those of the Warka levels. We therefore deal with the Telloh material as a unit, "dating" forms only by analogy with those of other sites.

There is a beaker similar to form 3, but with neck more clearly differentiated from body.<sup>91</sup> The "Glockentopf" (form 4) is present, also a bowl of form 6.<sup>92</sup> A sinuous-sided bowl of form 7 occurs, as do the more definitely flaring bowls (form 12), in shapes ranging from quite shallow to deep and almost beaker-like.<sup>93</sup> A bowl rather like form 23a occurs.<sup>94</sup> Handled cups (form 8) are found, with either flat base as at Warka (see p. 100) or rounded base as at Jamdat Nasr (see p. 107);<sup>95</sup> one example is covered with fingernail impressions. Spouted jars are numerous, sometimes approximating form 9 but frequently more like form 11.<sup>96</sup> A virtual duplicate of an elegant carinate ring-based spouted jar (form 10) found in Warka VII (see p. 100) occurs.<sup>97</sup> The down-bent spout is known,<sup>98</sup> though as at other sites straight spouts pointing diagonally upward are most common. Most spouts are fairly short, but the long tubular variety exists.<sup>99</sup> Unspouted jars too are common,<sup>100</sup> both form 11 and other forms. Most of the jars have angled profiles with definite constriction at the neck and either single or double carination of the body. Bases of both spouted and plain jars are mostly flat, but low ring bases are occasionally used. Several jars have the greatest diameter well toward the bottom; this feature is not found at most of the other sites, though a fragment of such a spouted jar almost identical with one from Telloh occurs in Warka VII.<sup>101</sup> Squat hole-mouth jars with four little suspension lugs are not infrequent; they are usually like form 19 but not as carinate, and one example of form 13 occurs.<sup>102</sup> Telloh also has a new variant with doubly carinate body and longer neck.<sup>103</sup> A wide-mouthed jar with multiple spouts is akin to a seven-spouted vessel found in Sin Temple IV at Khafajah.<sup>104</sup> A saucer-like lid similar to those found on jars at 'Uqair and separately at Jamdat Nasr (see p. 107) occurs at Telloh.<sup>105</sup>

In fabric the pottery is generally light grayish, reddish, or greenish; it may be fine or coarse, handmade or wheelmade.<sup>106</sup> Incision is used fairly often; we have mentioned above a fingernail-impressed cup. A suspension-type vessel (like form 18) has two registers of incised design on the shoulder between the lugs: diagonal lines with short strokes perpendicular to them filling the spaces between them.<sup>107</sup> Red-slipped ware exists, apparently not in large quantity, but four-lugged suspension vessels are relatively common in it. Of black-slipped and gray-

89. *UVB* IX 35.

90. *Telloh*, pp. 21 ff.

91. *Ibid.* Pl. III 4693.

92. *Ibid.* Pls. VIII 4241 and VII 4955 respectively.

93. See *ibid.* Pl. VIII 4243, 4182, 4242.

94. *Ibid.* Pl. II 5501.

95. *Ibid.* Pls. VI 4304, III 5389 and 5538, 22:2.

100. E.g. *ibid.* Pls. IV 5430; V 4513, 4707, 4923; VI 5609.

101. E.g. *ibid.* Pls. IV 5270 and V 5696; cf. *UVB* IV, Pl. 18 D m.

102. See *Telloh*, Pls. V 4865 and VI 4625.

103. *Ibid.* Pl. VI 4936, 5180, 5272.

104. *Ibid.* Pl. III 5481 and p. 30; cf. *OIP* LXIII, Pl. 24 e.

105. *Telloh*, Pl. V 4729.

106. For matters of technique see *ibid.* pp. 24-36.

96. *Ibid.* Pl. VII 4981, 4430.

97. *Ibid.* Pl. IV 5425.

98. *Ibid.* Pl. IV 5434, 5497.

99. *Ibid.* Pl. III 5322.

107. *Ibid.* Pl. 21:2.

slipped ware only sherds were found.<sup>108</sup> A design in black paint, a row of crosshatched triangles around the shoulder, occurs on a spouted jar.<sup>109</sup> A few other painted sherds exist, one being an indubitable specimen of Jamdat Nasr polychromy.<sup>110</sup> Apparently this type of painting was not universal in the period just preceding the Early Dynastic culture.

#### FARAH

The Farah I level<sup>111</sup> belongs to the Protoliterate period. Although it is known only from a small test pit and only a preliminary account has been published, significant parallels to pottery of other southern sites are clear. There are four-lugged jars of form 19 in both red and gray ware.<sup>112</sup> A carinate beveled-rim jar (much more squat than form 17) is found; and a doubly carinate vessel with sharply offset neck and maximum diameter well below the center resembles one from Telloh.<sup>113</sup> Bowls of form 12 occur,<sup>114</sup> also numerous spouted jars.<sup>115</sup> Some Jamdat Nasr polychrome ware was found, and a typical jar is illustrated.<sup>116</sup> Apparently this site has none of the forms and fabrics associated with the Warka period; its material seems to begin in the Protoliterate period.

#### JAMDAT NASR

The pottery from Jamdat Nasr is practically all wheelmade.<sup>117</sup> The firing was not well controlled, and both overfired and soft pieces are relatively common; the vessels are usually thick-walled, and the clay is relatively coarse. Angular-shouldered jars seem to be made in two pieces which were fitted together before baking; the joint is usually good, but sometimes the parts have separated. The upper parts of vessels are invariably better finished than the lower except in the case of polychrome ware. Bases are usually flat, often string-cut on small cups or bowls, and in some painted specimens are covered with slip; ring bases are relatively rare. No complete specimen of a double-spouted vessel was found, but a sherd with double spout survives. Handles are most commonly pierced lugs; but simple loops also occur, as do twisted handles like one found in Warka VIII.

Several different types of clay were used. One which burned light red served for polychrome pottery; usually it contains a high percentage of lime, sometimes also sand for tempering. Drab-colored fabric is found, usually in badly baked vessels of rough workmanship; a soft light gray fabric occurs occasionally; and there are two examples of burnished black pottery, one incised. The use of a burnished slip, either cream or red in color, is almost confined to polychrome pottery; a light unburnished slip occurs occasionally on undecorated or monochrome-painted vessels. In a few instances the lower portion of a jar has a red slip while the upper bears a cream-colored slip which forms the ground for a monochrome design. Wet-smoothing is sometimes employed instead of a slip.

Spouted jars are the most popular vessels. The usual form approximates form 9, but there are many variations from this, some examples being much stockier and some having ledge or turned-over rims.<sup>118</sup> The fairly short spouts are placed high on the shoulder and point diagonally upward. More graceful pear-shaped jars (cf. form 11) also are spouted; these usually have

108. The inadequacy of our knowledge of prehistoric pottery and the lack of good museum collections of such material are probably explicable by an attitude such as that expressed by M. de Genouillac, speaking (*ibid.* p. 35) of the sherds of black-slipped ware which he found: "Je n'en ai malheureusement conservé aucun; les échantillons de céramique semblent si pauvres dans un musée comme le Louvre!"

109. *Ibid.* Pl. 34:1.

110. *Ibid.* Pl. 34:2 b and p. 36.

111. *Ibid.* Pls. XXIV 3 and XXV 1; cf. Telloh, Pl. V 4513.

112. Cf. *MJ* XXII, Pl. XIV 4-5 (Farah II) and p. 214.

113. *Ibid.* Pls. XXIV 1-2 and XXV 3.

114. *Ibid.* Pl. XXII.

115. *Ibid.* Pl. XXII.

116. The following description is based on *Jemdet Nasr*, pp. 229 ff.

117. See *MJ* XXII 200-202 and 211-14.

118. *Ibid.* Pl. XXV 2 and p. 214.

119. See *ibid.* Pl. LXIII.



very short necks and beveled rims.<sup>119</sup> A few spouted jars are almost globular. A bent spout, pointing downward as in some specimens from Warka VII–VI, occurs,<sup>120</sup> and a few vessels have basket handles.<sup>121</sup>

Jars without spouts also are common. Pear-shaped jars (form 11) with plain or beveled rims and squat carinate jars (form 17) with similar rims are frequent<sup>122</sup> and often bear polychrome painting. Jars of form 9, but unspouted, and similar forms with loop handle at the rim are found.<sup>123</sup> Squat carinate hole-mouth jars with four little pierced lugs placed high on the shoulder (forms 18–19) also are characteristic;<sup>124</sup> they often bear polychrome painting. Small jars with more rounded profiles also may have suspension lugs.<sup>125</sup> Little spherical bottles with narrow necks frequently have one pierced lug on the shoulder,<sup>126</sup> a mode of suspension not found elsewhere. Handled cups (form 8, but with rounded or pointed base)<sup>127</sup> are fairly frequent. There is a large series of fairly deep flaring bowls (form 12),<sup>128</sup> frequently with slightly offset bases. The “Glockentopf” (form 4), strainers (form 14), and lids with inside knob (form 15) likewise occur.<sup>129</sup> Jamdat Nasr also has a group of solid disk-shaped pieces<sup>130</sup> which may be pot-stands or lids. Saucer-like pieces called “dishes” (see n. 137) may also be lids. Narrow beaker-like forms<sup>131</sup> are rare; an almost cylindrical vessel has a tall ring base reminiscent of two bases found in Warka III–II.<sup>132</sup>

Incised decoration is rare and is usually confined to simple bands between the lugs of jars; notched beading between the handles of jars made in two pieces also occurs, and two examples have raised vertical ribs.<sup>133</sup> Paint is the most common medium of decoration. The simplest style uses plain bands or other geometric designs in red or black, applied directly to the surface of the pot; the red paint is either bright or purplish, the black dull or purplish. Polychrome decoration seems to be confined to vessels of a certain few forms (11 and 17–19). Red and black are used together, with yellow sometimes employed as background; otherwise the pot surface itself or a neutral slip serves as ground. Only the shoulder bears a design, the rest of the body being left bare or painted solid red. The design repertoire is scant, and the motifs are simple (Fig. 13).<sup>134</sup> Checkers (motifs 18–20), lozenges (motifs 33–34), and crosshatched triangles (motifs 22–23, 26) are the most frequent motifs. Blocks of crosshatching (motifs 15–16), zigzags (motifs 2–4), and hourglass and “butterfly” patterns (motifs 37–39, 41) also occur. Representational motifs are extremely rare: a scorpion (motif 59), a goat suckling a kid (motif 58), birds (motifs 61, 67–69), and fish (motif 60). Motifs reminiscent of earlier designs include a small block of diaper pattern (motif 32), a vertical panel in which “butterflies” and hourglasses alternate (motif 41), and a truncated zigzag (motif 3). The composition is almost universally in metopes, which are commonly separated by plain bands of paint. The execution is usually rather coarse and often quite crude. The aesthetic sense was obviously not very highly developed, for overcrowded and unbalanced designs are quite common.

119. *Ibid.* Pl. LXIII 20–21; cf. 13 with ledge rim. Vessels of approximately this shape, but with pointed bases, are frequently represented on both Uruk and Jamdat Nasr style cylinder seals; see *Cyl. Seals*, Pl. V c and p. 36, Fig. 13.

120. *Jemdet Nasr*, Pl. LXIII 26; cf. *UVB* IV, Pls. 18 D u' and 19 B w.

121. *Jemdet Nasr*, Pls. LXIII 30 and LXIV 32.

122. See *ibid.* Pl. LXV.

123. *Ibid.* Pls. LXIV 28–31 and LXV 2, 4.

124. E.g. *ibid.* Pl. LXIV 8, 13.

125. *Ibid.* Pl. LXIV 4–6, 11–12.

126. See *ibid.* Pls. LXVI 16–19 and LXVII 22–27.

127. *Ibid.* Pl. LXVII 28–33.

128. *Ibid.* Pl. LXVI 9–14.

129. *Ibid.* Pl. LXVI 31; cf. *UVB* IV, Pl. 20 B b–c.

130. See *Jemdet Nasr*, Pls. LXIV 1, 8–10, 13, 15; LXXVI 5, 10.

131. *Ibid.* Pl. LXVI 9–14.

132. *Ibid.* Pl. LXVI 31; cf. *UVB* IV, Pl. 20 B b–c.

133. See *Jemdet Nasr*, Pls. LXIV 1, 8–10, 13, 15; LXXVI 5, 10.

134. Fig. 13 shows the entire design repertoire of the Jamdat Nasr type painted pottery from Jamdat Nasr, 'Uqair, Khafajah, and Tell Asmar. The relatively small number of motifs employed allows us to show them all instead of merely a selection of significant motifs, the most that is feasible for the Halaf and Ubaid painted pottery.

126. *Ibid.* Pl. LXIV 16–20.

127. *Ibid.* Pl. LXIV 21–27.

128. *Ibid.* Pl. LXVII 1–13.

## TELL 'UQAIR

The Painted Temple (see pp. 131 f.) and the filling above it yielded very little pottery. Most notable are bent spouts and a sherd each of red and gray burnished wares, the rest of the pottery consisting mostly of fragments of beveled-rim bowls. At a level presumed to be contemporaneous with the second filling a gray-brown burnished vessel of form 17 was found.<sup>135</sup>

The pottery found in and below the "Jamdat Nasr" chapel (see p. 132) includes some very interesting pieces, mainly carinate hole-mouth jars with four suspension lugs (forms 18-19, but with more rounded profiles than these forms show at most of the other sites) and carinate jars with beveled rims (form 17); not infrequently the latter have on the shoulder four tiny knobs which are probably degenerate handles.<sup>136</sup> These two types of jars are almost the only forms that bear polychrome decoration. Several jars were found with lids still on them, each lid being a saucer-like piece whose overhanging edge fits down over the rim of its jar.<sup>137</sup> A pear-shaped jar of form 11, but with a spout as occasionally found at Jamdat Nasr, occurs here, as do a rounder-bodied spouted jar with small neck and beveled rim and a tall, rather crudely shaped jar with loop handle.<sup>138</sup> There is one bowl of form 12, also one example of a peculiar type of vessel, found in Warka VIII also (see p. 100), whose spout, low on the side, suggests use as a lamp.<sup>139</sup>

Most of the vessels associated with the chapel are apparently of a light buff to red fabric. They may have greenish or creamy slip or be wet-smoothed and bear designs in bright brown paint, or they may have plum-red burnished slip and polychrome designs. In addition there are greenish overfired vessels, with designs in black to dark brown paint, reminiscent of some Ubaid pottery.

In painted decoration the 'Uqair pottery associated with the chapel is very similar to that from Jamdat Nasr; almost the entire repertoire of 'Uqair is found at Jamdat Nasr also. Simplicity of motif, metope-style designs on the high shoulders of vessels, use of different motifs in the various panels instead of regular alternation of two motifs such as is most frequent in other styles of pottery-painting, fondness for polychromy—these features characterize the painted pottery of both sites. At 'Uqair the draftsmanship seems, on the whole, to be more competent than at Jamdat Nasr; brushwork is cleaner, and spacing is better.

## KHAFAJAH AND TELL ASMAR

The pottery of Protoliterate c at Khafajah includes many of the forms common at other sites—beveled-rim bowls (form 4); spouted jars of various shapes, usually rounded, with fairly well marked shoulders; pear-shaped jars of form 11; a flaring bowl of form 12; squat four-lugged jars (approximating forms 18-19); and squat, rather sharply carinate jars (form 17).<sup>140</sup> There is also a deep vessel with a strap handle as in form 8, but with a longer body and a deeply pointed base.<sup>141</sup> Numerous little saucer-shaped lids exist,<sup>142</sup> like those of 'Uqair. There are various little jars or deep pots with rather bulging body, rounded base, and flaring rim (approximating form 20); these differ in extent of carination, in type of rim, which is either plain or formed (usually beveled), and in proportion of height to maximum diameter.<sup>143</sup> There is also a sharply carinate bowl (form 23a).<sup>144</sup> An unusual type is the multiple vessel, either double or triple,

135. *JNES* II 147 f. Lloyd calls the red piece "polished."

136. *Ibid.* Pls. XXIII-XXIV and XXVI.

137. *Ibid.* Pls. XXVI 4 and XXVII 1, p. 151. Similar pieces found at Jamdat Nasr and called "dishes" (*Jemdet Nasr*, p. 248 and Pl. LXVI 20-21, 26, 30) are probably likewise lids.

138. *JNES* II, Pl. XXIIb 10, 14, and 4 respectively.

139. *Ibid.* Pl. XXIIb 3 and 9 respectively.

140. See *OIP* LXIII, Pls. 18 a-e, 19 a and g-h, 20 d, 21, 22 d-e, 23 e, and 28 c.

141. *Ibid.* Pl. 20 a-a'.

143. E.g. *ibid.* shapes B.634.220, C.544.520, C.544.540, C.654.520.

142. E.g. *ibid.* Pl. 23 i-j.

144. *Ibid.* Pl. 23 d.

1. *UVB IV*, Pl. 17 D b d
2. *UVB IV*, Pl. 17 D p
3. *UVB IV*, Pl. 17 D r
4. *Telloh*, Pl. VIII 4241
5. *UVB IV*, Pl. 18 A a
6. *UVB IV*, Pl. 18 B y
7. *UVB IV*, Pl. 18 C y
8. *UVB IV*, Pl. 18 C u
9. *UVB IV*, Pl. 18 D g
10. *UVB IV*, Pl. 18 D i
11. *UVB IV*, Pl. 19 C i
12. *Jemdet Nasr*, Pl. LXVII 5
13. *UVB IV*, Pl. 19 D b

14. *UVB IV*, Pl. 20 B d''
15. *Jemdet Nasr*, Pl. LXVII 25
16. *UVB IV*, Pl. 20 B b'
17. *AJA XXXIX*, Pl. XXX 3
18. *Jemdet Nasr*, Pl. LXIV 1
19. *OIP LXIII*, shape C.413.253b
20. *OIP LXIII*, shape C.654.520
21. *AAA XX*, Pl. XLIX 35
22. *Tepe Gawra I*, Pl. LXV 52
- 23a. *AAA XIX*, Pl. LXI 3
- 23b. *AAA XIX*, Pl. LVIII 11
24. *AAA XIX*, Pl. LIV 5
25. *AAA XIX*, Pl. LV 8

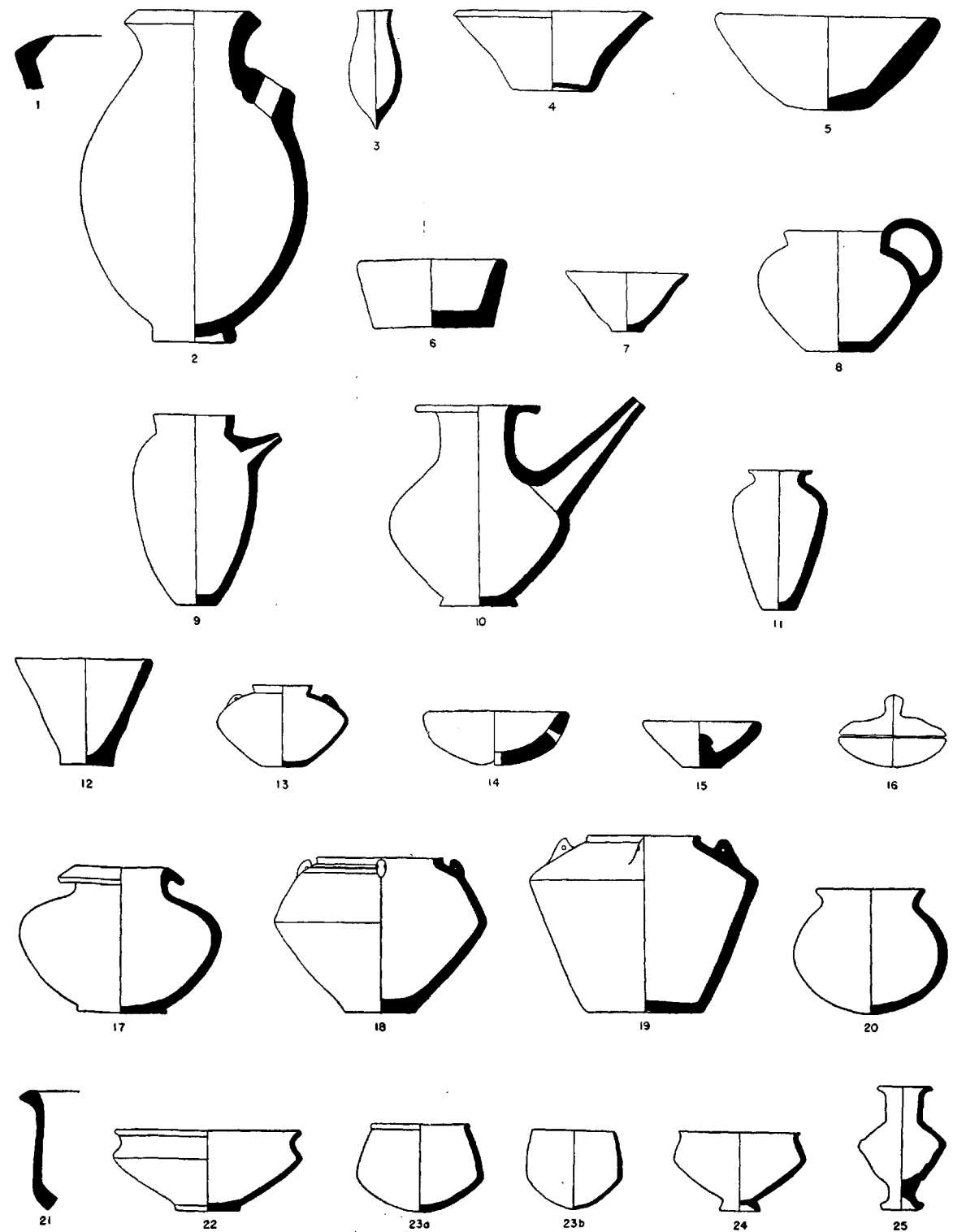


FIG. 12.—Late prehistoric pottery forms. Scales, 1:2.91 (1) and 1:5.83 (2-25)

1. *JNES* II, Pl. XXVII 1
2. *AJA* XXXIX, Pl. XXXV 7
3. *Jemdet Nasr*, Pl. LXVIII 7
4. *Jemdet Nasr*, Pl. LXVIII 13
5. *Jemdet Nasr*, Pl. LXVIII 8
6. *OIP* LXIII, Pl. 134 b
7. *Jemdet Nasr*, Pl. LXVIII 9
8. *JNES* II, Pl. XXIII
9. *Jemdet Nasr*, Pl. LXVIII 10
10. *AJA* XXXIX, Pl. XXXV 5
11. *Jemdet Nasr*, Pl. LXVIII 1
12. *JNES* II, Pl. XXIII
13. *AJA* XXXIX, Pl. XXXIV 10
14. *AJA* XXXIX, Pl. XXXIII 2
15. *Jemdet Nasr*, Pl. LXVIII 14
16. *Jemdet Nasr*, Pl. LXVIII 11
17. *JNES* II, Pl. XXIII
18. *Jemdet Nasr*, Pl. LXIX 20
19. *Jemdet Nasr*, Pl. LXIX 19
20. *AJA* XXXIX, Pl. XXXV 6
21. *Jemdet Nasr*, Pl. LXIX 6
22. *Jemdet Nasr*, Pl. LXVIII 5
23. *Jemdet Nasr*, Pl. LXIX 7
24. *OIP* LXIII, Pl. 28 c
25. *JNES* II, Pl. XXIV
26. *JNES* II, Pl. XXVII 2
27. *JNES* II, Pl. XXIII
28. *AJA* XXXIX, Pl. XXXV 1
29. *JNES* II, Pl. XXVII 2
30. *OIP* LXIII, Pl. 133 j
31. *AJA* XXXIX, Pl. XXXIV 4
32. *Jemdet Nasr*, Pl. LXVIII 1
33. *Jemdet Nasr*, Pl. LXIX 12
34. *Jemdet Nasr*, Pl. LXVIII 12
35. *OIP* LXIII, Pl. 134 a

36. *OIP* LXIII, Pl. 133 d
37. *Jemdet Nasr*, Pl. LXVIII 13
38. *AJA* XXXIX, Pl. XXXIV 5
39. *AJA* XXXIX, Pl. XXX 5
40. *OIP* LXIII, Pl. 133 d
41. *Jemdet Nasr*, Pl. LXVIII 11
42. *Jemdet Nasr*, Pl. LXVIII 6
43. *Jemdet Nasr*, Pl. LXVIII 15
44. *AJA* XXXIX, Pl. XXXI
45. *OIP* LXIII, Pl. 36 e
46. *OIP* LXIII, Pl. 133 d
47. *OIP* LXIII, Pl. 133 f
48. *JNES* II, Pl. XXVII 1
49. *OIP* LXIII, Pl. 28 b
50. *OIP* LXIII, Pl. 3
51. *AJA* XXXIX, Pl. XXXIII 4
52. *OIP* LXIII, Pl. 35 b
53. *AJA* XXXIX, Pl. XXXI
54. *AJA* XXXIX, Pl. XXXI
55. *OIP* LXIII, Pl. 134 d
56. *Jemdet Nasr*, Pl. LXVIII 11
57. *OIP* LXIII, Pl. 3
58. *AJA* XXXIX, Pl. XXXI
59. *AJA* XXXIX, Pl. XXXI
60. *AJA* XXXIX, Pl. XXXI
61. *AJA* XXXIX, Pl. XXXI
62. *OIP* LXIII, Pl. 29 a
63. *JNES* II, Pl. XXIV
64. *JNES* II, Pl. XXIV
65. *JNES* II, Pl. XXIV
66. *JNES* II, Pl. XXVII 3
67. *AJA* XXXIX, Pl. XXXIII 5
68. *AJA* XXXIX, Pl. XXXI
69. *AJA* XXXIX, Pl. XXXIV 3

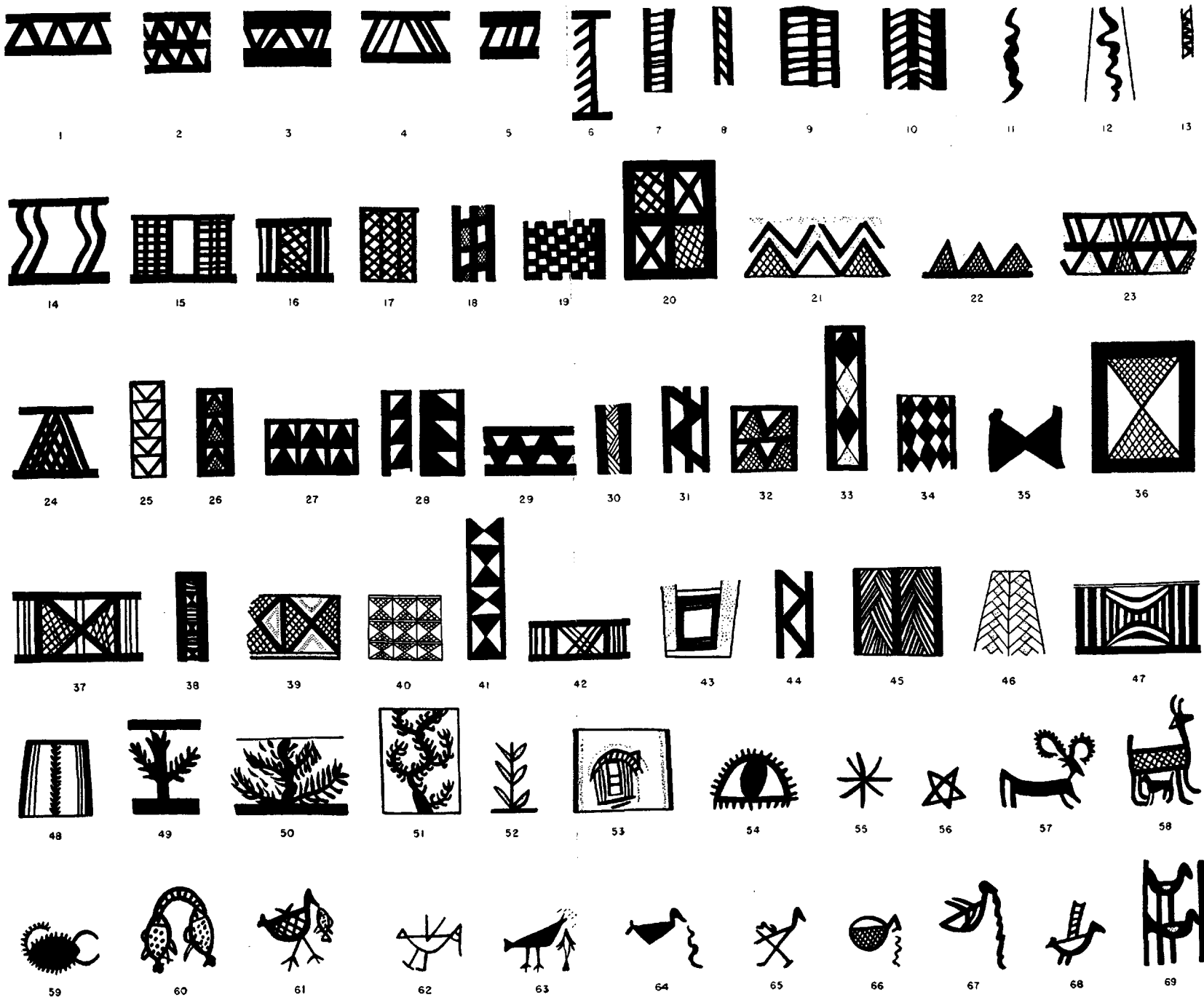


FIG. 13.—“Jamdat Nasr” pottery motifs

made of separate jars joined by a sort of bridge; here the jars are little four-lugged vases.<sup>145</sup> A bird-shaped vase was found in Sin Temple III, likewise an object with rectangular and triangular "windows" which may be a brazier.<sup>146</sup> A solid disk-shaped piece, similar to objects found at Jamdat Nasr, may be a stand or a lid.<sup>147</sup>

In Protoliterate *d* at Khafajah some of the same forms are found: pear-shaped jars of form 11; carinate jars similar to form 17, with or without spout; spouted jars of various other shapes; four-lugged jars similar to form 18; and a deep pot of form 20.<sup>148</sup> Beveled-rim bowls (form 4) and flaring bowls of form 12 do not occur. There is a shallow bowl of form 6, and perhaps a strainer of form 14.<sup>149</sup> New forms include rather tall, high-shouldered jars, which may have one lug handle, and squat beveled-rim jars with low carination.<sup>150</sup> An unusual form is a more or less cylindrical jar with basket handle.<sup>151</sup> Ring bases are somewhat more common than in Protoliterate *c* but cannot be said to be very popular. A unique vase in the form of a bull was found in Sin Temple IV, also a seven-spouted pot reminiscent of a multiple-spouted vessel from Tel-loh.<sup>152</sup> A theriomorphic vessel with elaborate painted decoration was found in Sin Temple V.<sup>153</sup>

Another unusual vessel from Khafajah is a second bird-shaped vase,<sup>154</sup> found in an Early Dynastic II level (Small Temple VI) but attributed to the Protoliterate period.

Tell Asmar yielded a little pottery which is attributed to Protoliterate *d*. It includes a pear-shaped jar of form 11, flaring bowls of form 12, a four-lugged jar of form 19, a pot somewhat similar to form 20, and a squat beveled-rim jar with low carination.<sup>155</sup>

Like the pottery from other sites, that of Khafajah may be plain, incised, or painted. Incision may take the form of combed bands or of rather rough linear designs;<sup>156</sup> it is not very common. We find now reserved-slip decoration; that is, the body (or part of the body) of a vessel is covered with a thin slip which is then partially wiped off so that the body clay shows in a pattern against the darker color of the slip.<sup>157</sup> This technique is characteristic of the early part of the Early Dynastic period but begins before the end of the Protoliterate; it occurs in Protoliterate *c*, and Delougaz believes that its nonappearance in phase *d* is accidental. It occurs on vessels found at Ur in the "Jamdat Nasr" cemetery (in Pit X); whether the Ur vessels are Protoliterate or Early Dynastic we cannot say. At Khafajah painted decoration is sometimes applied over the reserved slip.<sup>158</sup>

At Khafajah painting may be monochrome or polychrome in good Jamdat Nasr style. Many of the motifs (7, 9-11, 16, 22-23, 26, 33-34, 38, 41, 48) are paralleled at Jamdat Nasr or 'Uqair, "butterflies" and hourglasses (motifs 38 and 41) being especially noticeable. Motifs 30 and 46, which are common at Khafajah, are not found elsewhere (except 30 at Tell Asmar). There is considerable use of a spriglike motif, which may be stylized or quite "naturalistic" (motif 49). Animal designs are not common, but there are a quadruped with large curling horns (motif 57), a scrawled bird (motif 62) analogous to birds from Jamdat Nasr and 'Uqair (motifs 61, 63), and possibly a scorpion (motif 59).

At Tell Asmar motifs 4 (vertical), 16 (variant), 30, and 50 are found.

145. *Ibid.* shapes C.634.253, C.634.373, and C.634.453.

146. *Ibid.* Pls. 25 *a* and 24 *a* respectively.

147. *Ibid.* Pl. 20 *e*.

148. E.g. *ibid.* shapes B.516.273, B.545.240, C.514.262, C.524.262, C.533.313 (possibly ED I), C.534.222, C.534.240, C.537.270, C.603.253, C.603.340, C.604.370, C.654.540.

149. *Ibid.* shapes C.802.200 and B.042.500.

150. *Ibid.* shapes C.515.370, C.516.273, and C.516.370, Pls. 32 *b* and 36 *a*.

151. *Ibid.* Pl. 24 *b*.

152. *Ibid.* Pls. 25 *b*-26 and 24 *e* respectively.

153. *Ibid.* Pl. 133 *c*.

154. *Ibid.* Pl. 27.

155. *Ibid.* shapes C.536.540, C.084.200, B.455.253, B.643.520, and C.745.270 respectively.

156. E.g. *ibid.* Pls. 20 *a* and 22 *b*-*c*.

157. E.g. *ibid.* Pl. 19 *b*.

158. *Ibid.* Pl. 31 *b*, *d*.

## ARCHITECTURE

## WARKA

## ANU ZIGGURAT

The earliest known monumental architecture of Warka is the mound in square K XVII which the excavators have called the "Anu ziggurat."<sup>159</sup> For convenience we shall continue to use that name, but two qualifications should be noted. First, the structure is not a ziggurat as we know that architectural form in later times—that is, a step tower—but through most of its history was merely a high platform on which a temple was placed. During one building period, the first phase of level A, there was a stepped structure consisting of a smaller platform on top of a larger one, but this form was apparently given up in the succeeding phase in favor of one simple platform. Secondly, there is no evidence that this prehistoric structure was dedicated to the god Anu. The platform of the latest building phase (A 1) extends so far that it underlies most of the site of a much later Anu-Antum temple, and because of that fact the excavators once concluded that even in prehistoric times the area belonged to Anu. That may well be so, but it is wise to recognize, as Heinrich did later, that there is no evidence specifically attributing the ziggurat to any deity.<sup>160</sup>

Abandoning our procedure of working from the earliest to the latest material, we shall here describe first level B, the latest level in which a temple is preserved.<sup>161</sup> The reason for this change in method is the nature of the evidence published. A great deal more information about the form of the ziggurat is available for level B than for any other level, and most of the earlier strata are discussed in terms of how closely they resemble, or how widely they diverge from, the B stage. Likewise the temple of B, the famous "White Temple," is described in more detail than any of its predecessors. We shall therefore discuss B, then work down from that stage to the earliest level, and finally deal with A, the latest level.

LEVEL B<sup>162</sup>

The ziggurat is built of mud bricks, small in size and rectangular in cross section.<sup>163</sup> The walls slope at varying angles. They are covered with clay plaster, which exhibits many layers probably representing the yearly—or at least periodic—replasterings common on mud-brick buildings in Mesopotamia. The plaster is up to 10 cm. thick, and in it were cut shallow niches 70–80 cm. wide, very narrow and closely set in proportion to the height of the ziggurat. They seem to have covered the entire surface of the walls, extending even into the corners, where their tops were cut off by the slanting junctions between contiguous faces. Only the walls by the ascent were treated differently. The niches are completely preserved at one spot in the northeast wall, where their horizontal tops are about 1.50 meters below the top of the level B platform, which is 13 meters above the ground.<sup>164</sup>

Above the niches appears a noteworthy constructional feature—a band of jars whose bodies penetrate the core of the ziggurat and whose lips project slightly from the surface. These jars were laid as closely together as possible all around the ziggurat, in a band of two to four rows. The deeply penetrating bodies, 30–35 cm. long, served well to strengthen the tops of the ziggurat walls<sup>165</sup> and to hinder the scaling-off of their outer surfaces by erosion. Some jars were smashed by pressure of the overlying material, but in most cases they remain undamaged.<sup>166</sup>

159. UVB III 20 etc.

160. UVB VIII 47.

161. See UVB IX 19 for latest schematic plan of all levels.

162. The discussion of this level is based on UVB VIII 28–35 except where specific citations are given to other reports.

163. UVB VIII 28 corrects an earlier statement by Jordan in UVB III 21.

164. Lenzen, *Zikurra*, p. 7.

165. UVB IX 23.

166. UVB III 22.

Since the jar rows were left visible,<sup>167</sup> they may have some genetic relationship to cone mosaic (see p. 120) as found on later buildings in the Eanna precinct. The jars are handmade and vary from almost conical to more rounded shapes, many have an opening at the bottom. We might hazard a guess that they had a subsidiary function of draining the core of the ziggurat.

We know that the form of the ziggurat is quite irregular, although it is so eroded in places that its exact outline is not discernible. The corners are oriented to the cardinal points of the compass.<sup>168</sup> The platform does not have a rampart, but there is a slightly raised rounded edge which served to direct rain water into specific outflow channels. The platform is divided into two main parts: (1) the northeast section, which bears no buildings but provided a site for making burnt offerings,<sup>169</sup> and (2) the southwest section, on which the temple is placed.

The temple of *B* stands upon a socle of four courses of brick which projects 60–100 cm. on all sides. This socle is covered with a layer of bitumen, in which the lowest brick course of the building itself is laid. The walls are built of small rectangular-sectioned mud bricks laid mostly as headers in what the excavators call "Riemchenverband."<sup>170</sup> Varying in size, the bricks are not truly bondable in the modern sense of the word. In successive courses the lateral joints are usually directly above one another; but lengthwise each course overlaps the course beneath by half a brick, frequently necessitating a row or two of stretchers along the wall face. Walls, socle, and floors alike are covered with a thick clay coating and a whitewash which gives the temple its name; this wash was apparently formed by repeated applications of a thin solution of gypsum. The exterior is decorated with shallow double-stepped niches,<sup>171</sup> fairly large areas at the corners and near the doorways being left plain. Each narrow intervening wall area has a shallow vertical groove down the center, apparently purely for ornament. Thin wooden poles, spaced at regular intervals, were set horizontally into the niches; their impressions are clearly visible in the plaster, and one pole is actually preserved.

A noteworthy feature is the existence of a foundation sacrifice. At the east corner a free space 43 × 53 cm. was left in the lowest course, and in it were laid the skeletons of two carnivores—a leopard and probably a young lion.<sup>172</sup>

The White Temple (Fig. 14) measures 17.50 × 22.30 meters<sup>173</sup> and exhibits a tripartite division, with long central room or court and two rows of smaller rooms, similar to that of the Ubaid temples of Abu Shahrain (see pp. 87 f.). The more regular plan of the White Temple becomes characteristic of southern Mesopotamian prehistoric temples. The stairway rooms at the south and west corners are an important feature in this temple type; the structure in the north corner which resembles a stairway cannot have served as such, since it begins 1.10 meters above the floor and does not reach the level of the roof or even of a possible higher story. Save for this structure and the stairways, the small rooms contain nothing which would indicate their functions.

The central room or court is clearly the cella, and it contains two structures which must have

167. Later reports (UVB VIII 30 and IX 23) correct Jordan's view (UVB III 22) that the jar mouths were plastered over originally. Each new level would plaster the whole ziggurat, covering the jars of the preceding level, but leaving exposed its own band.

168. Lenzen, *Zikurrat*, p. 7.

169. UVB IX 20. The offering-place was replastered with clay after each sacrifice (Lenzen, *Zikurrat*, p. 8), a feature paralleled in the court of offering-places in Eanna III (see p. 125 below).

170. The name was apparently given because this style of bonding was first observed in connection with "Riemchen" bricks of later archaic levels in the Eanna precinct. "Riemchen" bricks are approximately square in cross section instead of rectangular. On bricks and bricklaying see *Schülf und Lehm*, pp. 38 ff. Heinrich's terminology apparently continues to be used in the later reports.

171. UVB III 21 states that the niches are 70 cm. wide and 25 cm. deep.

172. Perhaps this deposit is to be connected with the representation on a cylinder seal of the Uruk style; cf. *Cyl. Seals*, p. 19 and Fig. 2.

173. UVB III 21.

played roles in the cult. Directly in the long axis of the building stands a rectangular pedestal with a low projecting semicircular step which shows considerable traces of burning, presumably indicative of burnt offerings or incense-burning. Against the northwest wall of the cella is a larger rectangular pedestal 2.70 meters long, 1.60 meters wide, and 1.27 meters high. The side facing the cella has simple niched decoration. A stairway with well worn treads gives access to the top of the pedestal. By analogy with later temples we might suspect that the deity's statue stood here, but that would presuppose the existence of monumental sculpture in the round, for which at this period we have no evidence. However, some important part of the ritual must have been connected with this pedestal, since it was so heavily used. Apparently it was not part of the original plan; it blocks one of the two doorways in the northwest end and covers parts of the cella walls, which are niched and plastered just like the rest. The late addition of this pedestal is inexplicable, since levels *D* and *E* prove that similar earlier temples include such a pedestal in their original plans.

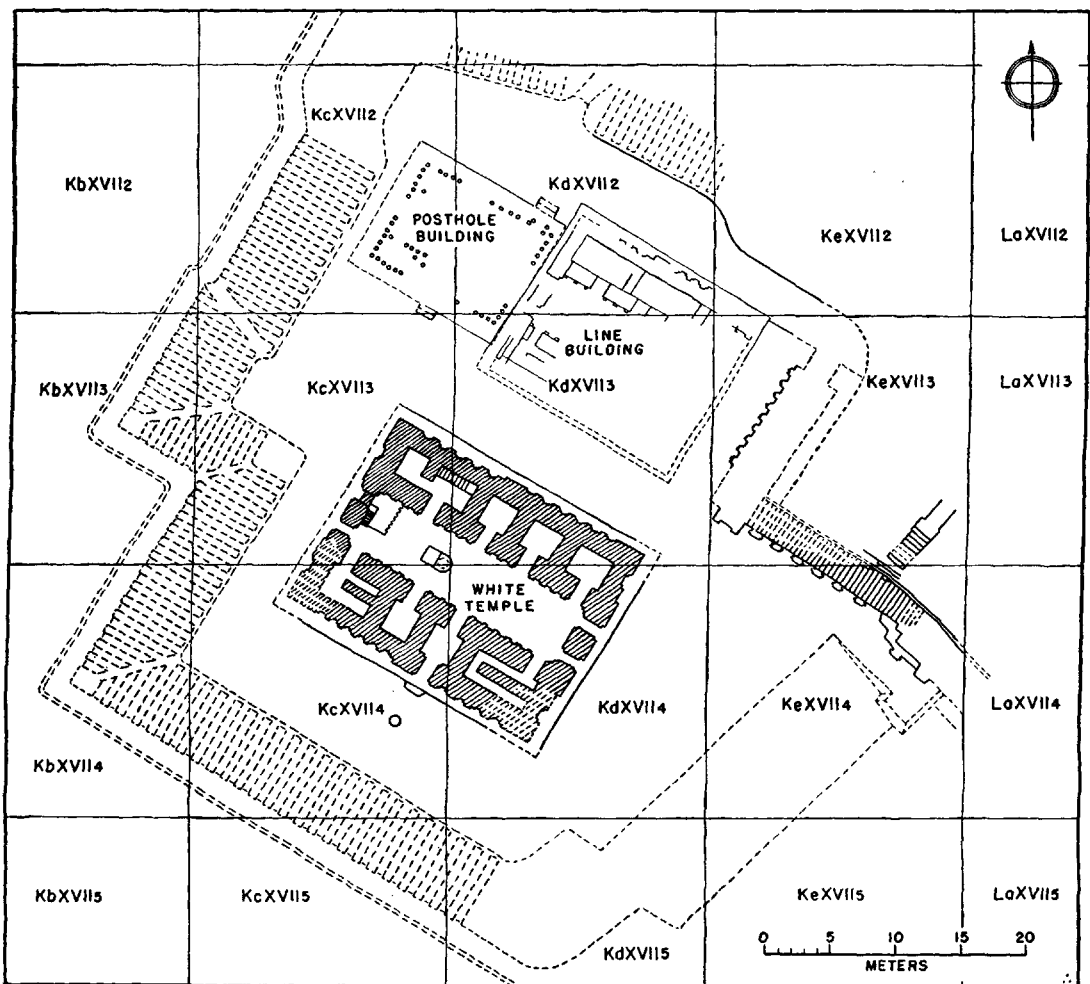


FIG. 14.—Plan of Anu ziggurat at Warka, levels *B*–*C*. After *UVB* VIII, Pl. 19 *b*, *UVB* IX, Pl. 15 *a*, and *UVB* X, Pl. 16



Besides the doorways at the ends of the building there is one near the center of the southwest side. A step leads from the platform to the socle in front of this doorway, and in the axis of the doorway on the platform outside there is a low round pedestal. These features suggest that it is the main entrance, but its position on the side of the temple farthest from the ascent to the platform renders that suggestion dubious.

The ascent from the plain to the platform is a monumental structure; but its exact course is not clear, since important parts of it have been lost through erosion or later building activity. It begins with a clay ramp of very slight grade, of which only the upper 6 meters are preserved. Then comes a staircase, somewhat steeper than the ramp and 2.50 meters wide.<sup>174</sup> Twenty-five steps are preserved at least partially; the topmost preserved step lies some 3.50 meters<sup>175</sup> below the top of the platform. The steps too are merely of clay, not brickwork, and are much worn. The left (southwest) side of this staircase is against the northeast wall of the ziggurat, which is here almost perpendicular and ornamented at regular intervals with niches of an unusual cruciform plan used once in the same wall where the ramp abuts it. The outside of the stairway consists of a very low notchboard of clay; there is no balustrade or side-rail. At the upper end of the stairway there appears to be a landing abutting the northeast wall of the ziggurat, which here has two shallow niches with the horizontal-pole treatment seen on the exterior of the White Temple. Starting at the landing and extending at right angles to the stairway is a ramplike continuation of the ascent which runs to the east end of the jog in the northeast side of the ziggurat (see Fig. 14) and then, turning left, continues along the northeast side, rising at such a slight grade that it reaches the platform only at the north corner. The wall of the ziggurat along the lowest part of this ramplike structure is niched in a peculiar fashion, with three triangular indentations in the back of each niche.<sup>176</sup>

#### LEVEL C <sup>177</sup>

At this time there was apparently no temple on the southwestern part of the ziggurat. Two building phases are recognizable on the northeast part of the platform, the area which stood empty during the time of the White Temple. The earlier phase (C 2) is represented by a terrace close to the north corner of the ziggurat; this terrace is a low socle (*ca.* 40 cm. high) built of four brick courses. The ziggurat platform around it was covered with reed matting, traces of which are still preserved. The socle measures 10.60 × 12.80 meters, being noticeably smaller than the White Temple. It bears no masonry structure but contains numerous postholes in an arrangement so orderly that we may assume they formed the basis of a structure of some kind. The holes expand slightly at the top and are lined with bitumen which bears the imprints of crisscross cords. Because of their form and of the fact that no traces of wood have been found in any of the holes, Heinrich believes that they were intended to receive, not permanent posts, but rather staffs which were inserted temporarily for specific purposes.<sup>178</sup> Enough postholes remain so that we may be sure that the structure, whatever its exact form and character, had the tripartite division which we have seen in the White Temple. We cannot say whether the side aisles were subdivided into smaller rooms, although postholes are so grouped near the west corner as to suggest a transverse partition at that point. On both long sides wide gaps exist in

174. Lenzen, *Zikurrat*, p. 7.

175. *UVB VIII 34*; but Lenzen, *loc. cit.* says 2.70 m.

176. Actually niches in this place are first mentioned in the discussion of level C (*UVB VIII 36*); as far as the section (*ibid.* Pl. 21, section G-H) shows, the latest remains of this wall might well belong to C. There is, however, considerable difficulty in equating levels on the ascent with those on the platform; this the excavator acknowledges (*ibid.* p. 34), stating that the above described stairway complex is equated with the White Temple only because both are immediately overlaid with the large bricks of level A. In view of these difficulties we tentatively assume the niches to have existed still in level B.

177. Description based chiefly on *UVB X 32 f.* and Pl. 16 (not 17) and *UVB IX 20-22*.

178. *UVB VIII 36*.

the rows of holes, but the socle is so much destroyed at these points that Heinrich believes that continuous rows may be postulated for the original structure.<sup>179</sup> Smaller gaps in the ends are probably original. In the northeast side, toward the east corner, there is a doorway, before which are two more postholes (perhaps for doorposts; cf. p. 115); and two steps lead from the socle to the platform at this point. On the southwest side, nearer the center, remains of similar steps suggest another doorway. This peculiar layout (called the "Posthole Building") represents the only structure on the ziggurat during the *C* 2 phase, although the pavement on which its socle stands covers all of the platform, as far as we know.<sup>180</sup>

The second phase (*C* 1) is marked by a raising of the whole ziggurat platform to the level of the socle of the Posthole Building. The new platform, covered with clay plaster, has a markedly convex surface, presumably to aid in shedding rain water. On the new surface directly southeast of the Posthole Building the plan of a new edifice is marked in red, with details such as niches, doorways, etc. clearly indicated. The painted lines, 3–4 mm. broad, apparently were made by snapping a stretched cord dipped in paint against the pavement. Small parts of the northeast wall of this "Line Building" were found (see Fig. 14), and it seems reasonable to assume that it had been completed. This also is a tripartite temple, whose exterior had double-stepped niches and whose central room had niched walls similar to those observed in the White Temple; there are even traces of the supporting wall of a stairway in the west corner. The exact size of the building is not known, for the whole southern part of its plan is destroyed; but the length of the portion of the platform on which it was built is a little over 17 meters, and from the surviving traces one may deduce that its width was about 15 meters. The Line Building was therefore somewhat larger than the Posthole Building but considerably smaller than the White Temple.

The White Temple socle stood on the same platform as the Line Building, and Heinrich has suggested that the latter was merely a temporary substitute while the more pretentious White Temple was under construction.<sup>181</sup> Location on the northeast part of the ziggurat platform breaks with the apparent tradition of the placing of the temple, and in view of this observation the Posthole Building might be similarly explained.<sup>182</sup> The Line Building was torn down after the completion of the White Temple; then an offering-place roughly rectangular in shape was dug in that area, and a new pavement was added.

The ascent from the plain is similar to that of level *B*, with both staircase and ramplike structure; again the connection between these two parts is not preserved (see n. 176). An interesting feature is a large stone ring set into the floor of the ramp northeast of the Line Building, presumably to tether animals led up for sacrifice.<sup>183</sup>

#### INTERMEDIATE LAYERS

Between the ziggurat platforms of levels *C* and *D* there are traces of two other main floor levels, separated by about 50 cm. At the lower level are remains of drains; the upper level shows a posthole. The fill between these two levels contained large numbers of small objects which are discussed later in this chapter under the various categories of objects.<sup>184</sup>

179. So *UVB* X 32, based on fuller data than *UVB* IX 20 f.

180. It may be mentioned that Jordan in *UVB* III 23 considered this posthole layout to be part of level *B*.

181. See *UVB* VIII 35 and IX 22.

182. *UVB* X 23.

183. *UVB* VIII 35 f.

184. It may be worth mentioning that, though the schematic sections of the ziggurat (*UVB* VIII 28 and IX 19) show layers of "Kleinfunde" between the White Temple and the *D-E* temples and though some "Kleinfunde" were found in the fill between *C* and *D* inside the temple area (see *UVB* VIII 51), the intermediate floor levels occurred only in the northeast part of the ziggurat (cf. *UVB* VIII 36 and Pl. 21 a and *UVB* IX, Pl. 16 c).

LEVELS D-E<sup>185</sup>

Since the temple of *D* was immediately superimposed on that of *E* and virtually identical in plan (Fig. 15), we may discuss the two as a unit, considering *D* as merely a rebuilding of the much better preserved *E*. These temples were reached only in small pits dug down from the rooms of the White Temple, and their walls were traced by tunneling; much, the excavator says, was not accessible, but enough walls were located to enable their plan to be reconstructed with confidence.

The temple itself is almost a duplicate of the White Temple, but slightly narrower. Its overall dimensions are 16.60 × 22.60 meters. The cult arrangements, like the plan, are very similar to those already seen in level *B*. The stepped pedestal in the center of the cella, however, shows no traces of fire; and the larger pedestal at one end of the cella does not seem to have niched

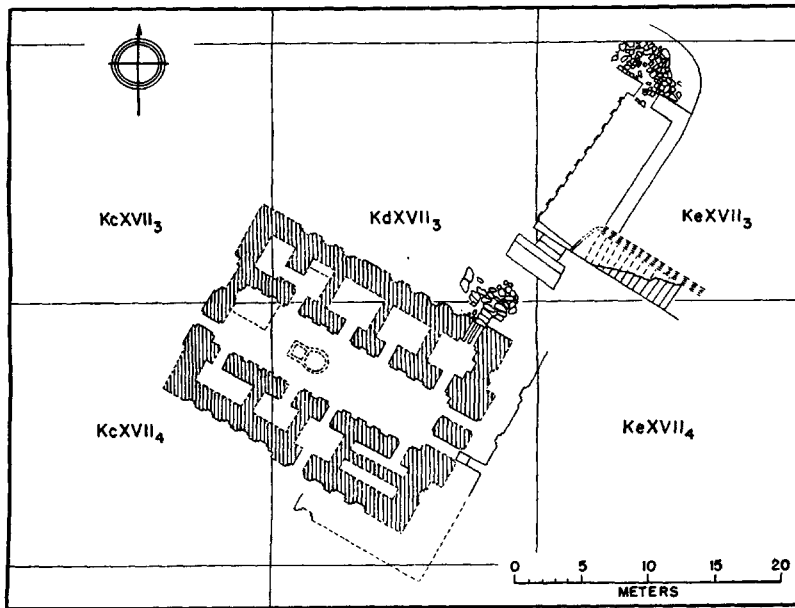


FIG. 15.—Plan of Anu ziggurat at Warka, levels D-E. After UVB VIII, Pl. 20 b

decoration as does the corresponding pedestal of level *B*, although the small amount preserved (only two brick courses) makes it hazardous to speculate on its original form and ornamentation. In *D-E* it does not block a doorway, as does that in the White Temple, but stands in front of a “false door” in the form of a double niche.

The main deviation from the plan of the White Temple is a doorway in the northeast side near the east corner, which seems to be the chief entrance. In level *E* the doorsill stood some centimeters above floor level and was covered with bitumen, across which three broad copper bands were fastened with three rows of copper nails; at both ends the bands were bent over the edges of the sill. On the platform in front of the doorway is a pavement of large limestone slabs bedded in bitumen; close to the wall on either side of the doorway is a bitumen-covered place which bears traces of a post, probably a “Bügel-schaft,” on the analogy of a temple model<sup>186</sup> found in the intermediate layers (see p. 154). Set into the floor just beside the traces of the north doorpost is a large stone ring similar to the “hitching-post” set in the ramp of level *C*. In

185. Unless otherwise specified, see UVB VIII 37-39.

186. *Ibid.* Pl. 48 k.

level *D* both the copper bands and the limestone pavement were covered with bitumen, one of the few changes discernible in this level. That this was the main entrance of the temple in both levels is suggested by the fact that just opposite the ramplike structure of the ascent from the plain a special small flight of steps turns to the left from the main stairway and leads straight toward this doorway.<sup>187</sup>

The *D-E* temples do not stand on a full socle as does the White Temple, but a socle-like structure adjoins their southeast and southwest walls. The length of time during which these temples were in use is perhaps intimated by the fact that the pseudo-socle was enlarged four times. In the two latest stages it shows doorways and niches corresponding to those of the temple walls behind it. The platform in front of the pseudo-socle is covered with bitumen, and the angle between them is smeared with clay mortar. One peculiarity of the *D-E* temples is that the exterior niches are not uniform but have varying numbers of steps.

We have spoken of the left branch leading from the stairway to the main entrance. Aside from that feature the ascent is similar to that of level *B*, but it was not completely cleared in order to preserve the *B* ascent. In the eroded substructure of the *B* stairway is visible a thick layer of red clay which marks the main stairway of *D-E*, and this layer can be followed up to the place where the left branch begins. In level *E* the steps of this left branch were of clay covered with bitumen, and in *D* that covering was so thick that they became more like a ramp in which a few irregular steps were cut. Two wall projections at the point where the branch stairway begins form a narrowed gateway, beyond which the stairway broadens again. As in level *B*, the connection between the main staircase and the ramplike structure branching to the right is destroyed. At the east end of the jog in the northeast side of the ziggurat (see Fig. 14), 70-80 cm. under the ramp of level *C* and approximately at the same height as the limestone pavement before the main entrance of the *E* temple, there is a similar limestone pavement; the ramp to which it belongs is therefore assumed to be that of level *E*. After passing through a gateway this pavement slopes down toward the southwest, where it is covered by a thin layer of bitumen. The ziggurat wall at this point has peculiar niches like those at level *B* or *C* (see n. 176). The floor of the *D* ramp is destroyed, but its position is marked by a break in the wall plaster; at this level the wall of the ziggurat is not niched but is simply plastered and strengthened by the insertion of three rows of jars.

Near the north corner of the ziggurat a cut was made to determine the stratification.<sup>188</sup> Bitumen pavements of *D* and *E* lie about a meter below the second intermediate layer; though they are not well preserved, they show the slightly raised rounded edge of the platform (resembling that of *B*), just under which is a band of three rows of jars. Along the northwest side there are remains of narrow mud-brick walls on the bitumen pavement of *D* and also traces of posts suggesting the presence of a structure similar to the Posthole Building of level *C*. On this same side brickwork of *E* which encased and enlarged the platform of *F* has an especially gentle slope.<sup>189</sup>

#### LEVEL *F*<sup>190</sup>

The walls of the *E* temple stand on a pavement which is plastered with clay and painted with red and black stripes. Since the painting is largely covered by these walls, the pavement no doubt represents an earlier building stage and possibly once bore a temple of different plan from that of *E*. No traces of any such building remain, however.

187. This is the only instance in the whole history of the ziggurat where there is an unequivocal stratigraphic connection between the ascent and the platform.

188. *UVB IX 23*.

189. The fact that the customary band of jars near the top of the ziggurat is lacking here (cf. *UVB VIII 30*, where the brickwork is erroneously attributed to level *B*) probably does not reflect a change in building methods, for the upper part of the wall, where the jars would have been inserted, is eroded away (*UVB IX*, Pl. 16, section P-Q).

190. See *UVB VIII 39* and *IX 23*.

A bitumen-coated stairway underneath the left branch of the *E* stairway probably belongs to *F*; a jar-strengthened wall face just under the pavement on which *E* stands may be a side wall of this stairway. A ramp similar to those of later levels is also preserved; it has a niched wall face and two floor levels. The *F* ascent is therefore assumed to be similar to that of levels *D-E*.<sup>191</sup>

In the cut near the north corner of the ziggurat, already mentioned, was found a platform surface covered with bitumen below the level of *E*. This platform, with low rounded edge and a jar band below it, clearly belongs to level *F*. From *E* on up the ziggurat apparently did not change in extent, but in *F* and earlier levels it is smaller.

LEVEL *G*<sup>192</sup>

This level is assumed chiefly from the existence of a level below *F* in the northern cut and a fourth niched wall face and corresponding bitumen pavement along the ramp. In the northern cut the ziggurat massif of *G* was found 7 meters inside that of *F*; its outer surface is not preserved. There were clearly three building stages, the earliest floor being some 9.50 meters above the ziggurat's base and about 2.50 meters below the White Temple.

LEVEL *X*<sup>193</sup>

This level is so named because it stands in as yet undetermined relationship to the upper levels of the ziggurat. Its remains consist chiefly of a ramp which extends southeastward from the ziggurat alongside and beyond the main stairway of the ascent from the plain. Sixteen meters of this ramp were cleared; the upper end disappears under the later structures, and the lower end was not located. The ramp is 6.30 meters wide and has a well preserved surface with a clay pavement. Both sides are flanked by walls built of small bricks and decorated with cruciform niches like those found alongside the ramp and stairway of level *B* (see p. 113).

An element presumed to belong to this level is a piece of gypsum pavement on the southeast slope of the ziggurat at a height of 18.47 meters above datum. Since it lies on a clay layer of a peculiar gray-green color, the color of the clay used to plaster the flanking walls of the *X* ramp, the excavator believes it "not improbable" that the gypsum pavement is part of the ziggurat platform of level *X*.

The exact relationship of *X* to the other levels is not known; there may be levels between *G* and *X* which have not yet been found. The fact that the gypsum pavement is less than 90 cm. below the lowest floor of *G* at the northern cut suggests that *X* may well be the level immediately under *G*; but, because of the distance between the two spots, this cannot be regarded as conclusive.

LEVEL *A*<sup>194</sup>

Having gone down to the lowest level so far discovered in the Anu ziggurat, we return to the topmost level (*A*). Before the White Temple showed any sign of decay or disrepair, it was apparently decided to build a new type of structure in its place. All rooms of the temple were completely filled in with very large rectangular mud bricks to form part of a new platform. On three sides the walls of the new platform are those of the White Temple itself, but on the southwest the new platform extends far beyond the temple wall. The platform of level *B*, somewhat extended, continues in use as a lower step. With this phase the Anu ziggurat for the first and only time in its history becomes a step tower like the later Babylonian ziggurats. The excavator mentions the further fact that the axis of the new platform, and therefore probably of the tem-

191. It is perhaps well to repeat here that the attribution of any one of the ascent levels to a level on top of the ziggurat is uncertain except in *D-E*, where there is a clear stratigraphic connection between the two places.

192. See *UVB* IX 23 and VIII 39.

193. See *UVB* VIII 39 f.

194. See especially *ibid.* pp. 40-42.

ple which it is assumed to have borne,<sup>195</sup> was changed 90 degrees to run northeast-southwest—the orientation usual for temples of historic times and that used for most of the prehistoric temples of the Eanna precinct. A ramp which runs parallel to the older ascent and gives access to the new terrace is provisionally attributed to this phase.<sup>196</sup>

The step tower (A 2) was later overlaid by a covering which masks the entire ziggurat; this new platform (A 1) extends far beyond any of the older ones, underlying almost the whole area of the Seleucid temple “Bit Resh.” Its edges have not all been found, but it must measure at least 300 × 200 meters, with a height of at least 10.50 meters.<sup>197</sup> Since it has not been completely uncovered and its remains have suffered much both from erosion and from later building operations, nothing definite can be said about its form. It is assumed that this mighty platform also bore a temple—perhaps a group of temples; but not a single trace of any such building has been found.

#### MOSAIC TEMPLE<sup>198</sup>

Another early temple outside the Eanna precinct is situated close to the east corner of the Seleucid Bit Resh and was discovered in the course of cutting the “Datierungsschnitt” discussed on pages 128 f. Unlike the ziggurat temples, the Mosaic Temple was built directly on the ground<sup>199</sup> without even a small artificial terrace. Separation of the holy place from the surrounding area was achieved apparently in the upper of the two levels (Mosaic Temple II) by an inclosure wall; but an inclosure wall for the lower level (Mosaic Temple I) has not been discovered. An important deviation from the building practices seen in the ziggurat temples is the construction of both exterior and interior walls of limestone instead of mud bricks. Of the walls of Mosaic Temple I virtually nothing is preserved, for almost all the stone was removed before the building of Mosaic Temple II;<sup>200</sup> but the debris-filled trenches in which these blocks had stood indicate at least the general plan. The axis is southwest-northeast, at a 90-degree angle from that of the ziggurat temples but corresponding to the usual cult axis in the Eanna precinct. Again, as in the ziggurat temples, there is a long central room with a row of smaller rooms on either side; the corner room at the south perhaps contained a staircase. A room may have extended across the northeast end, a feature not found in the ziggurat temples. The floors appear to have been paved with gypsum, of which small pieces still remain, laid over a course of limestone slabs set in bitumen. The central room is narrowed at its northeast end by projection of the wall at either side, another new feature.

Of Mosaic Temple II, whose plan duplicates that of the lower level, were found a few pieces of white flooring and small sections of wall mosaic of a type characteristic of levels IV and III of the Eanna precinct (see below). In this type of wall decoration thousands of small cones are inserted into the plaster which covers the wall so that their ends are almost flush with the surface; these ends are of various colors and form geometric patterns. In Mosaic Temple II the cones are of red or black limestone or white alabaster and are laid in gypsum plaster.<sup>201</sup> Pieces

195. The schematic sections in UVB VIII 28 and IX 19 show a block above the filling of the White Temple. This at first glance looks like a remnant of a third platform, but possibly it represents the temple which we assume stood on the second platform, since there seems to be no evidence which would presuppose a third step. For our purposes, however, the number of steps is unimportant, since the step-tower form is established.

196. UVB IX 24 and 26.

197. *Kurzbericht Warka X, 1937/38*, p. 22 and Fig. 11; see also later UVB X 21 and 30. As found under Bit Resh this platform is called the “old terrace” in *WVDOG* LI 20 f. and in UVB.

198. Unless otherwise specified see UVB X 27-29 and Pls. 13-14. We use the name “Mosaic Temple” for both phases of the building’s existence, although mosaics were preserved only in the upper level.

199. UVB IX 28.

200. This may have been due either to activity by stone-robbers or to deliberate reuse of the stone for the walls of Mosaic Temple II. Since all stone had to be imported from some distance, re-employment is quite understandable. However, the stones have also disappeared from the walls of Mosaic Temple II and were perhaps taken away to be used in another building.

201. UVB IX 28.

of such mosaic were found near the south and west corners of the building and on the jambs of a doorway near the center; the latter occurrence is significant, since it shows that the technique was used on both inner and outer walls. Drains formed of plaster occur, one having been found inside the building and another (probably part of the same system) outside it and leading under the girdle wall; in the tunnel through the wall the drain is built of clay troughs.

The girdle wall, apparently contemporaneous with Mosaic Temple II, seemingly surrounded the temple completely but had not quite the same axis; most of the southwest end has been located, together with connecting pieces of the southeast and northwest courses. Like the temple it was constructed of limestone blocks, almost all of which have been ravaged. At one spot in the southwest end and also along the southeast side some of the stones remain in place, and at the former point the thickness of the wall could be determined as about 2.35 meters. It is said to stand on a limestone pavement, which is also seen as a plinthlike step projecting from the northwest wall of the temple.<sup>202</sup> The inside of the wall had niched decoration on a larger scale than that of the ziggurat temples. Here the niches are deep and narrow, spaced at 2.30-meter intervals, and down the center of each panel between them is a shallow vertical groove. The entire inner face of the wall was perhaps originally covered with cone mosaic, and the mosaic "shell" of the wall is the means by which it can now be traced. Here the cones, unusually large, are of clay, colored by firing at different temperatures; only two colors were used, a light greenish yellow and a deep blue-black.<sup>203</sup> The outside face of the wall apparently had niches but no mosaics. On the southeast side mosaics are lacking on both faces, and one wonders whether the wall was ever completed; perhaps the exterior also was meant to have cone mosaic. No gateway has been found; perhaps an entrance is to be postulated near the west corner, where the course of the wall is not clear.

The Mosaic Temple had both forerunners and successors. The "Datierungsschnitt," which cut into the walls of large buildings of rectangular-sectioned "Flachziegel," revealed at least four levels lower than the Mosaic Temple.<sup>204</sup> And the north corner of the latter was completely cut away by a later building whose floor lies even deeper than the foundation level of the Mosaic Temple. The ground plan of the later building has not yet been determined, but walls built of unusually large "Riemchen" are preserved to a height of 2 meters. One room partially excavated has a bitumen pavement and contained remains of a burned roof and pieces of wrought gold and silver.

#### EANNA PRECINCT

In the neighborhood of the ziggurat built by Urnammu, temple remains of periods preceding the 3d dynasty of Ur were found. The levels were numbered beginning with the uppermost; levels XIV-III fall within the Warka and Protoliterate periods, but only VII-III are yet known to contain remains of monumental architecture. In our description we begin with the earliest of these, VII. The remains of some of these levels are so extensive and complex that we do not attempt to give detailed descriptions of the individual structures. Plans of the various important buildings of levels IV and III may be seen in Figures 16-17,<sup>205</sup> with these in mind we restrict our discussion to brief general descriptions, with special mention of decorative and structural features which the plans do not reveal and of relationships between buildings and levels and between this area and the other temples.

202. *Ibid.* The second report does not mention this plinth, and the plan (UVB X, Pl. 13) shows only scraps of stone paving northwest of the temple.

203. UVB IX 28.

204. *Kurzbericht Warka X*, p. 22; cf. UVB X 31 f. and Pl. 15.

205. For complete plans the reader is referred to UVB V (1934) Pl. 5, UVB VI (1935) Pl. 3, and UVB VII (1936) Pl. 2 for level IV; to UVB VI, Pl. 4, and UVB VIII, Pl. 15, for level III; and to UVB IV, Pl. 4, for relative positions of buildings of levels V, IV, and III.

LEVEL VII<sup>206</sup>

In this level appear mud-brick walls running from northwest to southeast but no connected parts of buildings. The bricks range in size from  $26-27 \times 12.5 \times 7-10$  cm. to  $30 \times 14.5 \times 11-12$  cm. Among the finds is a series of baked clay objects consisting of jars like those placed in bands along the edges of the Anu ziggurat and solid cones such as were used for mosaic decoration in later Eanna levels, as well as partially hollowed cones, simple cylindrical and conical tubes, and conical tubes with formed lips. None of these apparently was found *in situ*, but we may presume that they were originally used in the architecture of their level.

On the boundary between VII and VI there are small remnants of a pavement of the same sort of limestone as that used for the wall-bed of the Limestone Temple of level V (see below).

LEVEL VI<sup>207</sup>

One end of a monumental building was cut into and revealed three rooms, the central one being much wider than that on either side. It may be a tripartite temple like those we have already seen; but too little has been excavated to allow certainty on that point. It seems to have the northwest-southeast axis, which is usual in succeeding Eanna temples. The building material consists of mud bricks of the "Flachziegel" type similar to that used in the Anu ziggurat temples. In the lower part of the level their average dimensions are  $28 \times 14 \times 8-9$  cm., but in the upper part the breadth and height are nearer to each other ( $25 \times 11.5 \times 8-9$  cm.). The latter therefore approach the "Riemchen" in form and are laid in "Riemchenverband" (see p. 111), as are the bricks of the later archaic Eanna levels. In level VI quantities of clay cones were scattered in the debris; though no pieces of connected cone mosaic nor walls decorated with mosaic were found, it is scarcely to be doubted that such decoration was used in this level.

## LEVEL V

The earliest reconstructible temple in the Eanna precinct occurs here, the "Limestone Temple," so named because it is known only from the wall-bed on which it stood,<sup>208</sup> consisting of irregular flat slabs of limestone over a layer of pisé. The sides are very straight, and the stones are so carefully laid that there are only small gaps between them. The axis of the building runs southwest-northeast in contrast to the usual orientation. The ground plan was originally reconstructed as shown in *UVB* III 16, but after the discovery of Temple C in level IV (see our Fig. 16) Lenzen believed that the plan of the latter offered a better basis for the reconstruction of the Limestone Temple;<sup>209</sup> the new reconstruction affects chiefly the head end. Which plan is the more probable is difficult to say; the scanty remains would allow either. Whichever is correct, the building must have been of great size; the preserved fragments indicate dimensions of at least  $76 \times 30$  meters. It was clearly a tripartite temple with the central room or court considerably larger than the row of rooms on either side—a temple whose exterior walls and central court walls were niched and which was characterized by numerous entrances.<sup>210</sup> The use of limestone slabs for wall-beds was something entirely new in Mesopotamia (with the possible exception of the remains of a limestone pavement between levels VII and VI, which may have served a similar purpose), although the occurrence of limestone pavement in level E of the Anu ziggurat will be remembered. This unusual building technique may have been the result of outside influence, as Jordan has argued, though the only other element of material culture known from these early levels, the pottery, shows no significant change at this point

206. See *UVB* IV 8 f.

207. See *ibid.* pp. 9 f. and *Schilf und Lehm*, p. 26 (where Abb. 9 is mislabeled "Schicht V").

208. See *UVB* III 16 f. and II (1931) 48-51.

209. *UVB* VII 8 f.

210. It will be noted that most of the Eanna temples have a far greater number of doorways than do those of the Anu ziggurat.



(see p. 101). Probably the superstructure of the Limestone Temple was of mud brick, but not a trace of it has been found. Apparently the construction of level IV involved the demolition of the Limestone Temple, including even a considerable part of its stone wall-bed.

About 45 meters southwest of this temple an exploratory trench<sup>211</sup> brought to light another course of limestone blocks, running parallel to the long axis of the Limestone Temple. One would suspect that this too provided foundation for a temple, but there is no discernible relationship between it and the wall-bed of the Limestone Temple.

It was apparently during the time of level V that the three-terrace layout which formed the basis for the great temenos of level IV was built southwest of the Limestone Temple. The ground on which the terraces were built was very uneven, but their bases all lie below that of the Limestone Temple. Over the original terrace layout stretch the "Riemchen" walls of IV, and the walls beneath it are said to have the characteristics of VI walls; so on this basis it seems reasonable to assume that the original terraces are from the time of V.

The northernmost part of the layout comprises the great mud-brick platform known as the "Pillar Terrace," since the mosaic-incrusted "Pillar Temple" of level IV was built upon it. This terrace is 1.70 meters high and is built of very large mud bricks, which the excavators call "Patzen." Its original southeast face is well preserved, for later plastering protected it; part of this face is decorated with V-shaped grooves so spaced that they and the areas between them give the effect of contiguous half-hexagons. Most of the northwest edge was not excavated; but it was found in two places, which prove the breadth of the Pillar Terrace to be about 15 meters. The northeast edge has been washed away, but traces of the terrace were found east of the mosaic-incrusted northeast wall of the Pillar Temple.<sup>212</sup> Later the whole southeast face of the terrace was covered with plaster 15 cm. thick, which hides the decorative grooves. Still later a stairway leading up to the top of the terrace was built near its east corner; this stairway was reused in level IV, when the northeast wall of the Pillar Temple slightly overlapped it.<sup>213</sup>

The southwest edge of the Pillar Terrace adjoins the larger "North-South Terrace." The latter is not exactly rectangular, for south of the Pillar Terrace it is offset toward the northeast about 5.50 meters; its preserved length is about 46 meters, but its full extent toward the northwest is not known. Its breadth is 22.25 meters.<sup>214</sup> Along its northeast edge, where it is best preserved, the "Patzen" are laid in "Riemchenverband," as are the bricks of the White Temple (see p. 111).

In the angle between the two terraces just described were found remains of the southeast wall of a building of "Patzen," with three deep niches at one point. This building was leveled later to help form the "Court Terrace." The fill consists chiefly of "Riemchen," some still in connected pieces of wall brickwork; these are the earliest "Riemchen" yet found in Eanna. The Court Terrace was built after the Pillar Terrace, for it abuts against the plaster layer which covers the decorated southeast face of the Pillar Terrace. Its exact relationship to the North-South Terrace, either architecturally or chronologically, is not known.

#### LEVEL IV

This level (Fig. 16) has three building phases, the earliest of which (IVc) yielded only a few walls underlying IVb walls in the area north of the Pillar Terrace.<sup>215</sup>

The IVb phase was perhaps the most important of all the prehistoric levels in the Eanna precinct; it certainly contains the most monumental architectural layout which has been found in

211. The "Sägegraben" in Od XVII 2 and Oe XVII 1-2; see UVB IV 8-10 and Pl. 3.

212. UVB VI, Pl. 3, shows the east corner and part of the northeast edge, but they are not mentioned in the text. The length of the terrace, according to this later plan, would be about 28.80 meters.

213. UVB IV 13.

214. UVB V 6.

215. UVB IV 12 and Pl. 4.

prehistoric Mesopotamia. It must be remembered, however, that the three-terrace layout of level V originally probably included buildings which may have made it as impressive as IVb now appears. The three-terrace layout was apparently taken over completely in IVb. On the weathered surface of the North-South Terrace appear remains of a tripartite temple, Temple A,<sup>216</sup> of which only one to three courses are preserved. They show two rows of small rooms separated by a central room or court 8 meters wide; the building has the customary northwest-southeast orientation. Entrances from the terrace to the side rooms are directly opposite doorways leading from those rooms to the central area; two of the rooms show bases for stairways. The walls of the central court had simple niches; the exterior walls show traces of an elaborately stepped variety as well as the simple type.

Southeast of the North-South Terrace and extending beyond it on both sides are rooms of the same phase connected with the "Loftus façade," a stretch of wall excavated by Loftus in 1854.<sup>217</sup> Just what kind of building they comprise is not known, but it does not resemble the temple type seen heretofore. The doorways were staggered, so that direct view of the interior from the terraces was impossible, and there is a large room or court south of the Loftus façade whose interior walls were decorated with both simple and double-stepped niches.

Another building, Temple B,<sup>218</sup> stands northwest of the North-South Terrace; due to a marked slope in the area its upper edge as preserved rises higher than either the North-South Terrace or the Pillar Terrace; but, since it is overlaid by IVa material, it belongs presumably to IVb. This building shows the usual tripartite plan, but the preserved part indicates a smaller number of entrances than we have seen in the other temples. Clearly there is a transverse room across the northeast end; what may have lain beyond that room or at the opposite end or at the southeast side of the building we do not know. The virtual absence of niches in the walls is probably due to the fact that few wall faces are preserved; one niche occurs at the west corner in a wall which may be part of the building (see Fig. 16).

The most important IVb building seems to be the Pillar Temple,<sup>219</sup> which stands on the Pillar Terrace, facing the Court Terrace. Little except the façade of this building is known, and almost everything about it is unusual. Two rows of great columns, 2.62 meters in diameter, the earliest free-standing columns known in Mesopotamia, form the façade. In each row there are four, with an engaged column of like diameter against the northeast wall, in which there is an imposing gateway in the axis of the colonnade; probably similar engaged columns stood against the southwest wall. The level V stairway leading from the north corner of the Court Terrace to the Pillar Terrace was reused but is encroached upon by the northeast wall of the Pillar Temple, which is ornamented with small contiguous engaged columns. Two stairways along the southeast face of the Pillar Terrace lead up from right and left to a landing projecting from the Pillar Terrace. The face of this landing is decorated with elaborate niches. The backs of the niches, the great columns on the Pillar Terrace, the northeast wall of the Pillar Temple with its engaged columns, and the walls all around the Court Terrace were completely covered (as far as their preserved portions indicate) with cone mosaic, showing use of this mode of decoration on a scale still unparalleled.<sup>220</sup>

Walls and columns alike were built of "Riemchen"; in the columns the bricks were laid radially to form an approximation of the desired contour. The surfaces were then thickly plastered with clay, and clay cones were stuck into this plaster while it was still wet, to be held

216. *UVB* VI 5 f.

217. *UVB* V 6 f. and Pl. 5; see also William Kennett Loftus, *Travels and Researches in Chaldaea and Susiana* (New York, 1857) pp. 154 and 187 f.

218. *UVB* VI 6 f. and VII 6.

219. See *UVB* IV 12-17, V 6 f., VI 5. It is also frequently called the "Mosaic Building," but we have avoided that term for fear of confusion with the newly discovered Mosaic Temple near the east corner of Bit Resh (see above).

220. For mosaic on the northeast face of the North-South Terrace see *UVB* V 6, which corrects *UVB* IV 13.



FIG. 16.—Plan of Eanna precinct at Warka, level IV. After *UVB VII*, Pl. 2, and *UVB VI*, Pl. 3



firmly in place when it dried. The cones vary in size; apparently especially small ones were used for small surfaces such as the backs of the niches in the landing,<sup>221</sup> while quite large ones with hollowed heads were used for a special band of four rows along the top of the landing wall and of the Pillar Terrace wall on either side of it.<sup>222</sup> The cones are colored red, white, and black; usually all three colors appear in each mosaic field, but the great free-standing columns have a black-and-white pattern and the large cones at the top of the Pillar Terrace wall are all black. The various colors are arranged in geometric patterns of zigzags, lozenges, triangles, and diagonal bands. Most of the patterns are easily derivable from basketry or reed matting, and connection between the latter and the mosaic is made the more probable by the presence in one room, probably a part of this same building, of a fairly well preserved mat still *in situ* on a wall.<sup>223</sup>

Two long parallel walls with portions of cross walls extended northwestward from the rows of columns and must belong to the main portion of the building. This area is considered by Heinrich to be another great court,<sup>224</sup> but the scanty remains seem equally to permit the possibility of a series of rooms. Since there are traces of rooms to the northeast (in Pa XVI 4), Heinrich suggests that the colonnade might be a passage leading to the gate mentioned above, while the major part of the building lay in the area to the northeast.<sup>225</sup> In view of the layout of the rest of level IVb, however, it seems more plausible to the writer that the focal point was the Court Terrace, surrounded by its decorated walls, with the colonnade of the Pillar Temple, facing that court, forming the façade of the building.

After the Pillar Temple had been in use for some time, a considerable alteration took place in the Court Terrace. The floor of the court was raised, and the two little stairways which led to the landing in front of the Pillar Terrace were completely destroyed and replaced by two ramps which were perpendicular to the terrace face. This rebuilding covered the northeast face of the North-South Terrace. Before the IVa phase the Court Terrace was further altered by the construction of four thick walls perpendicular to the northeast face of the North-South Terrace. Since only short pieces of these are preserved, the size of the rooms they inclosed is unknown; the southernmost must at least partially have hidden the Loftus façade from view. These additions therefore destroyed the magnificent layout of the earlier part of IVb, when the Pillar Terrace surmounted by the great columns of the Pillar Temple overlooked the whole mosaic-ornamented court to the Loftus façade.

After a certain period of use Temple B was demolished down to its lowest courses to help make way for a new and very large temple, C,<sup>226</sup> which was built immediately to the north at the beginning of the IVa phase. Temple C, measuring 54.20 × 22.20 m., is oriented northwest-southeast, like the majority of the temples, but at right angles to the axis of Temple B; it is built of small "Riemchen" (16 × 6 × 6 cm.). In ground plan it looks like two of our familiar tripartite temples put together, the second, much smaller than the first and at right angles to it, presumably forming the sanctuary end. The numerous entrances, which give access to almost every room in the building directly from the outside, make it difficult to determine the position of the cella. The existence of niches on the interior walls of all but one room in the head end of the temple recalls the fact that cella walls in other archaic temples are niched; however, its central position suggests the room without niches as the sanctuary.<sup>227</sup> Apparently the back walls of the Temple C niches were decorated with cone mosaic, although none was

221. UVB IV 14 says that these tiny cones were used on the sides of the projections between the niches, but *ibid.* Pls. 7-8 and 9 b show no cones at the sides and very small ones at the backs of the niches.

222. The band of hollow-headed cones along the tops of the walls is strongly reminiscent of the jar bands used to strengthen the tops of the walls in the various stages of the Anu zigkurat.

223. UVB IV 14.

224. *Ibid.* pp. 15 f.

225. UVB III 14.

226. UVB VII 6-8.

227. See Lenzen, *Zikurat*, p. 10.

found *in situ*. Temple C is clearly related to the other temples we know, but the plan seems to be an elaboration of that of the older type. It may be noted that here for the first time we know definitely that there are no niches on the outside. How Temple C was related to the other important buildings of IVa is unknown.

In phase IVa the Pillar Temple was torn down to within 20 cm. of the floor of its colonnade and filled in with "Riemchen"; the low-lying Court Terrace also was filled in with "Riemchen." On the North-South Terrace, Temple A still stood after this rebuilding and must have been re-used in phase IVa.

The great new terrace made by filling in the Court Terrace and covering the Pillar Terrace slopes rather sharply from northwest to southeast and forms the substructure for a new building which seems to be the dominant feature of the phase. The plan of this building, Temple D,<sup>228</sup> may be another example of elaboration of our original temple plan; a long court, a row of rooms on the northwest side, and a transverse room across the northeast end are preserved. By analogy with the other temples one would expect a symmetrical arrangement of rooms on the opposite side.<sup>229</sup> The immense size of the building (its preserved parts measure approximately 54 × 35 m.), the stepped niches on its exterior walls and at the preserved end of its long court, and the large cruciform rooms wide open to the outside are its most unusual features. The last mentioned rooms remind us of the temples of level XIII at Tepe Gaura (see Fig. 8) and Temples XI and VIII at Abu Shahrain (see pp. 87 f.). We assume that these cruciform rooms or elaborate niches had some function in the cult, but the nature of that function we cannot guess. The position of the cella is likewise uncertain, but the complex niches at the northeast end of the long court suggest that it may have played an important part in the ritual. One more extraordinary feature of Temple D is that the northernmost of its staircases is accessible from the outside only. This temple, like B in the preceding stage, is oriented northeast-southwest.

In the last season (1938/39) scant remains of another monumental building, apparently belonging to level IVa, were found northwest of the Eanna precinct.<sup>230</sup> A "Riemchen" wall 1.40 meters thick was traced for more than 30 meters. It seems to be the outer wall of a large building and contains seven doorways, each about a meter wide. The rest of the building is unexcavated.

We cannot conclude our discussion of the temples without mentioning the structure called the "Red Temple" by Jordan. Comparatively little of that building was excavated, and the scattered groups of rooms designated by him as belonging to it cannot be combined into a coherent plan.<sup>231</sup> Little mention is made of its existence later, although UVB VIII 10 has a casual reference to "the so-called Red Temple." The use of red coloring on the clay plaster of the walls reminds us of the Gaura XIII temples.

This completes our survey of the temple remains up to level III, and it may be well at this point to summarize what we have found, both on the Anu ziggurat and in the Eanna precinct. The tripartite plan, with a row of fairly small rooms on either side of a much larger central room or court,<sup>232</sup> is characteristic, and frequently there are traces of stairways to the roof. In the ziggurat temples the central room is fairly clearly designated as the cella by the existence of altars for burnt offerings and of pedestals; no such marking-off of the central area occurs in the Eanna temples. Indeed, in the latter such features as altars, hearths, statue bases, etc. do not exist at all. Niching of the walls is likewise characteristic of the temples of both areas, ranging from alternation of simple niches with wall areas of equal width to elaborate stepped

228. UVB VI 8 f.

229. Somewhat in the manner of the reconstruction *ibid.* Fig. 2.

230. UVB XI 16.

231. See UVB II 29-31 and Pl. 4.

232. From the very large size of some of the Eanna buildings it would seem that the central area must have been an open court. It may have been roofed in the ziggurat temples; see UVB VIII 47.

niches, sometimes with vertical grooves in the intervening wall areas. In general, interior niching is confined to the central room or court and is simple in character. Cone mosaic is not found on the ziggurat, but jar-strengthening of the tops of its walls, which seems to be in the same line of development, does occur.<sup>233</sup> In the Eanna precinct cone mosaic is found *in situ* in phase IVb only, although it is assumed to have been used in other levels from VII on.

### LEVEL III

In level III a great change took place. The sacred area seems to have shifted to the northeast, and such buildings as existed there are quite different from anything we have yet seen. The level III temenos (Fig. 17) may be divided into two main parts: an area partially over the earlier temples and an area under and close to the Urnammu ziggurat.

The chief remains of IIIc, the earliest phase, were found in the second area and consist of a temple-terrace and a court of offering-places.<sup>234</sup> The terrace, the earliest real temple-terrace<sup>235</sup> which we know, is the first of a series which continues unbroken throughout the Early Dynastic period. The "Riemchen" massif<sup>236</sup> is about 23.50 × 18.50 meters in extent and is preserved to a height of about 2 meters. The whole terrace has not been traced, but its north and south corners have been identified. Along its northeast face is a row of engaged columns, not quite contiguous, 60 cm. in radius. There is some evidence that similar engaged columns adorned the northwest face, but the southeast face has shallow niches instead, a feature which may belong to the IIIb phase (see below); the southwest face is unornamented. Close to the southwest face and presumably related to the terrace architecturally are two walls, about 20 meters apart, which may bound a court; their interior faces are decorated with fairly complex niches. The back walls of the niches bear cone mosaic, the smaller ones a black-and-white zigzag pattern, the larger ones a lozenge pattern in black, white, and red.

Another niched wall, more or less in line with this supposed court and extending far to the southeast, seems to bound the great court of offering-places. A few of the offering-places are preserved, and apparently there was a line of them near this wall, an arrangement which continued through many succeeding phases.<sup>237</sup> These offering-places are troughs dug into the ground and plastered with clay. In each one numerous burnings took place, and after each burning the debris was cleared away and the trough replastered with clay. Gradually the floor was built up until it rose above the tops of the original walls. If it was desired to heighten the trough walls, they were built up with mud brick; one trough was completely filled in with brick after a few burnings had taken place.<sup>238</sup> The troughs were called "Brandgräber" by Jordan, who first discovered them.<sup>239</sup> Their possible uses formed the subject of considerable debate during the years after their discovery, but the final decision of the excavators is that they are more likely to have been used for ritual burnt offerings than for cremation. Their persist-

233. Two fragments of building models from the intermediate layers between levels C and D of the ziggurat show rows of little circles, which may represent cone mosaic. Somewhat larger circular depressions on a third fragment we suspect from their positions to represent beam ends (see below p. 154).

234. UVB VIII 10-12 and VII 9-11.

235. We use the term to designate a fairly low structure which separates the sacred building from profane soil but does not raise it notably above the level of other buildings. The Anu ziggurat may represent an earlier stage of the same concept, but the platforms of even its lowest levels seem to have been considerably higher than a temple-terrace. It is possible that the ziggurat represents another line of development. The low terrace from this time on seems to characterize Sumerian temple architecture.

236. So UVB VIII 11; *ibid.* p. 14 it is stated that the mud bricks of level III are small "Flachziegel" similar in form to "Riemchen" and that the baked bricks are unequivocally "Flachziegel." The earlier reports call the bricks of III "Riemchen." Lenzen, *Zikurrat*, p. 11, also calls them "Riemchen."

237. Similar places were found to the southwest in Pb XVII 2; see UVB VI 9-11 and Pl. 5 a.

238. See UVB VIII 11 f., whence the greater part of the foregoing description is taken, and UVB VI 10 f., Werner's description of one of the troughs in the southwest group.

239. UVB II 20-26.

ence in the same place from the earliest phase of level III in unbroken succession through level I 2 (i.e., through ten building phases), the destruction of each layer before the next one was put down, and the complete absence of human bones are the main reasons for this decision.<sup>240</sup>

The IIIb phase of the court of offering-places is better preserved than the earlier phase but does not differ in essentials. The chief change was the inclosing of each pair of troughs in a low brick-walled compartment. Due to the constant replastering of the floors the troughs themselves were completely filled in. For a while a shallow panlike depression was hollowed out in each new floor, but eventually new troughs were dug through these.

In phase IIIb the terrace was little changed,<sup>241</sup> although it was extended 3 meters to the northeast, and the new face bears shallow niches instead of engaged columns. We have suggested above that the similarly niched southeast face may be of this phase. Within the supposed court to the southwest are fragments of structures not easily explicable. In the north corner is a small massif oriented north-south which contains niches decorated with cone mosaic.<sup>242</sup> Parallel to the northeast wall of the "court" and only about a meter from it stands a wall, probably to be assigned to IIIb, with engaged columns (50 cm. in radius) spaced about 60 cm. apart; in the interstices are narrow, deep niches. Here occurs a new type of wall decoration: baked clay plaques of various shapes, and wedges inserted into the clay plaster in the same manner as the cones. Individual pieces of such wall decoration turned up in other areas.<sup>243</sup> Among the pieces found unattached are fragments of animal figures and Inanna symbols, as well as purely geometric shapes;<sup>244</sup> but such figures have not yet appeared *in situ*. The inlay decoration was clearly thought of as related to cone mosaic. The plaques were sometimes set into a background of cones, which still adhere to some of the inlays, and the surfaces of many inlays are covered with little impressed circles in patent imitation of cone mosaic.<sup>245</sup>

Although we are not dealing specifically with chronology, it may be mentioned here that the IIIb phase is dated paleographically to the time of the Jamdat Nasr tablets (see p. 155, especially n. 512).

Phase IIIa, the latest phase of level III, seems to have been by far the most important, for, in addition to buildings in the terrace area, it is represented by important building complexes to the southwest, partially covering the area of the temenos of level IV. In the earlier phases of III some buildings stood here, none of which yielded a coherent ground plan. Now we have remains of three structures which seem to be more or less contemporaneous, although their exact relationships are not understood: the "Southwest Court," the "Labyrinth," and the great gateway and double wall formerly called the "temple of level III."<sup>246</sup> Of the court, parts of three walls are preserved, all of which are niched; some rooms around it may originally have been connected with the court. Just southeast is the Labyrinth,<sup>247</sup> a curious complex of small rooms with very thin walls, whose layout is unique among Mesopotamian prehistoric buildings. Some of the rooms are accessible only by roundabout passages; there is no interior court, nor are there any long corridors or other efficient means of directing traffic through the building. Its location in a sacred area and the presence of niching in the interior walls of one of the rooms suggest that it had a religious function; but in form it has no relation to any temple which we know.<sup>248</sup>

240. First suggested by Werner in *UVB* VI 11 and corroborated by Heinrich in *UVB* VIII 11.

241. *UVB* VII 11. *UVB* VIII, Pl. 15, calls the large L-shaped terrace "Hochtterrasse IIIb-a"; but the text makes no mention of such an enlargement in phase IIIb, and *UVB* VII 13 assigns it to a (confirmed by Lenzen, *Zikurra*, p. 14).

242. Lenzen, *Zikurra*, p. 13; cf. *UVB* VII 12.

243. Cf. *UVB* II 14-16 (pieces assigned to level Ia) with IV 20 (pieces dated to level IIIa; cf. *UVB* VI 12).

244. Cf. *UVB* II 33-40 and III 11 with IV 21.

245. *UVB* II 35.

246. In *UVB* IV 19 f. and VI 12 f.; cf. *UVB* VIII 13 f., where Lenzen denies the likelihood of that identification. Lenzen, *Zikurra*, Pl. 3, shows the gateway as belonging to IIIb, but the text (p. 15) implies that it is of the IIIa phase.

247. *UVB* IV 19 f.

248. On possible additions farther to the northeast see *UVB* VII 13 and VIII 13.



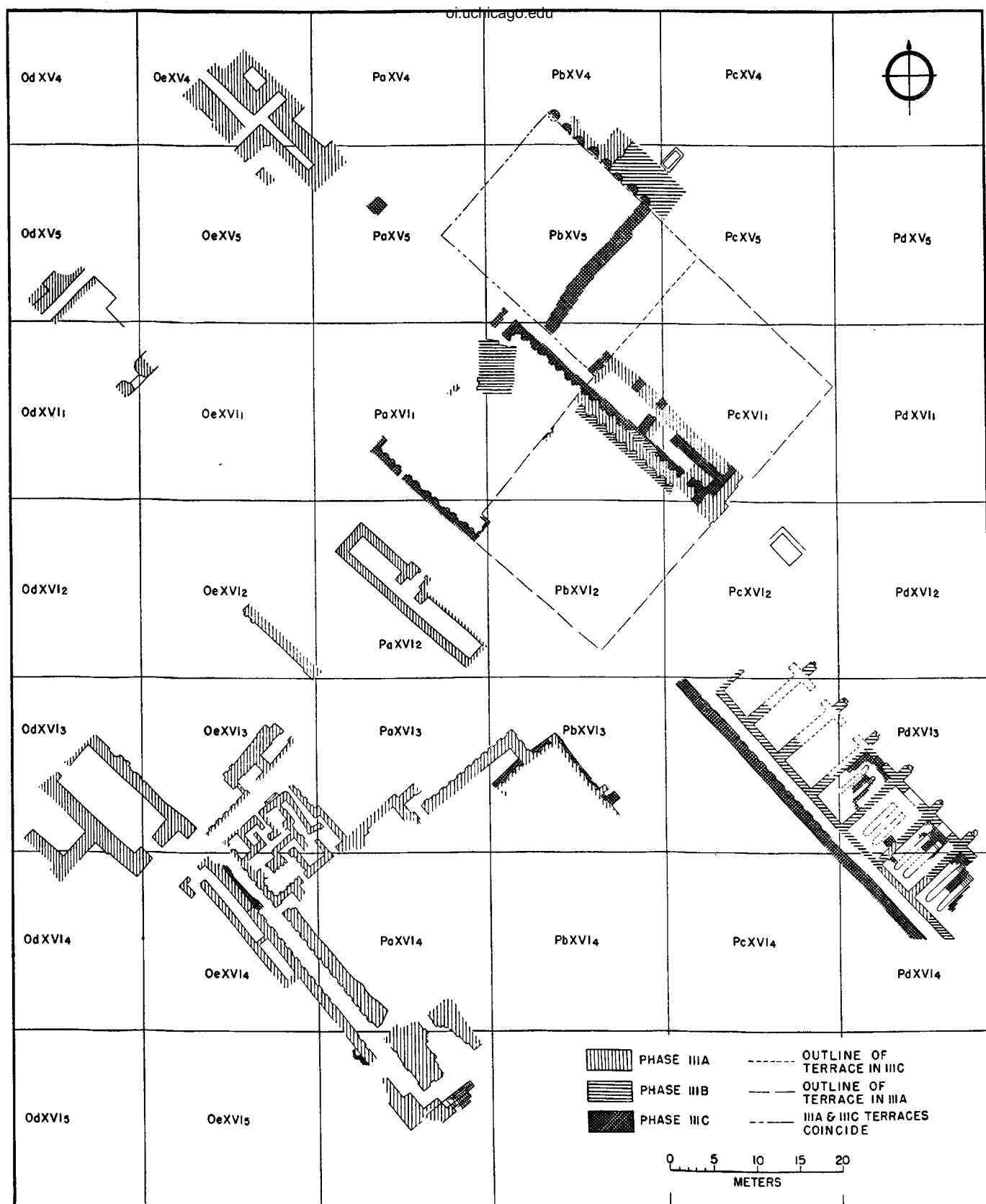


Fig. 17.—Plan of Eanna precinct at Warka, level III. After *UVB VIII*, Pl. 15, and *UVB VI*, Pl. 4



South of the Labyrinth are other remains, unfortunately very badly damaged.<sup>249</sup> On the southwest side there is a very heavy double wall whose inner face is niched. This is the earliest example of a double wall which we know; it seems a logical predecessor of the "Zingel" of historic times, a kind of casemate wall which frequently surrounded temple areas.<sup>250</sup> The inner section of this wall, about 25 meters long, is aligned with the southwest wall of the Labyrinth, from which it is separated by a doorway. The outer section extends southeastward from the west corner of the Labyrinth for nearly 38 meters and then turns northwest. Just beyond the corner a stairway of which only the mud-brick substructure remains led to a monumental multisteped gateway in the inner section of the double wall, which gives access to the terrace area southeast of the Labyrinth. Unfortunately the character of the structure or area which lay behind the gateway we shall never know, for an immense robber hole has destroyed everything between the entrance itself and the Labyrinth. The double wall and the gateway suggest a monumental court in front of the Labyrinth, bounded by the existing double wall and presumably a similar wall on the northeast. Originally this supposed court may have been connected with the Southwest Court,<sup>251</sup> whose walls are founded at approximately the same depth, while the Labyrinth is founded at a higher level.<sup>252</sup>

The find-spots of numerous clay cones and of clay plaques and wedge-shaped pieces like those mentioned above indicate that the great gateway was ornamented with mosaic designs apparently of two types: all-red mosaic of large cones and black-and-white mosaic of small cones. The mosaic panels were bordered by the larger pieces. One room of the Labyrinth shows a new type of interior wall decoration—a plastic lozenge pattern in the whitewashed clay plaster was painted black, white, red, and yellow; the plaster was renewed as necessary, and as the relief flattened out with successive replasterings it finally ended as a flat painted design.

Between the region which we have been discussing and the terrace area there is a long narrow room (in Pa XVI 2) which is of great importance because in it was found a mass of small objects known as the "Kleinfunde hoard," which is referred to frequently in our discussion of the various types of small objects (see pp. 134–55). The relationship of this room to the other buildings of the level is not certain, but its date is unequivocally IIIa according to the excavators.<sup>253</sup>

The terrace area shows considerable alteration in phase IIIa. The temple-terrace was enlarged to about three times its original size and now apparently has a hook or L form; where its faces have been found<sup>254</sup> they have shallow niches ornamented with cone-mosaic panels framed by clay plaques and wedges. The patterns are confined to zigzags and lozenges in black and white.<sup>255</sup> Southeast of the temple-terrace the court of offering-places was renewed but unaltered in essentials.<sup>256</sup> Northwest of the terrace appear huge pisé walls inclosing very small rooms and narrow corridors, perhaps part of a "Zingel" or casemate wall which may have inclosed the terrace area.<sup>257</sup> Still farther to the northwest, above the IVa(?) building discovered in the 1938/39 season (see p. 124), is a great "Riemchen" terrace of the "Jamdat Nasr" period, on which traces of buildings were found.<sup>258</sup> Not enough remains to allow the reconstruction of complete plans, but there are indications of a court with a range of rooms on either side. The

249. See mainly *UVB* IV 19–22.

250. *UVB* VIII, Pl. 5, gives a good example from Assyrian days, and Pl. 6 shows an almost identical layout at the time of the 3d dynasty of Ur.

251. The latter was named in relation to the Urnammu ziggurat area; its title is somewhat misleading in the present context, since it lies north of the double wall and the Labyrinth.

252. *UVB* VI 13; cf. *UVB* IV 20, where it is said that the southwest part of the Labyrinth is contemporaneous with the wall containing the great gateway and that the northeast part is later. According to *UVB* VIII 14 the northeast part is built partially of plano-convex bricks, which imply rebuilding in level II.

253. *UVB* VI 13 f. and VII 13 f.

254. See Lenzen, *Zikurrat*, p. 14.

255. *UVB* VII 12 f.

256. *UVB* VIII 13.

257. *Ibid.*

258. *UVB* XI 16.

walls are of large "Riemchen" ( $24 \times 8 \times 8$  cm.) and have simple niches whose backs bear cone mosaic in a black, red, and white zigzag pattern.<sup>259</sup>

Level II<sup>260</sup> seems more like a building phase of level III than a new level, for the main features of IIIa remain virtually unchanged. The L-shaped temple-terrace, the court of offering-places, the pisé walls northwest of the terrace, the Labyrinth, and the Southwest Court all continue. The most distinctive feature of level II is the transition from flat to plano-convex bricks, which marks the beginning of the Early Dynastic period.

#### DATING

The dating of the Anu ziggurat in terms of the better stratified material in the Eanna precinct has been a matter of concern from the time the former was discovered by Jordan. He dated the White Temple to the time of Eanna VI, chiefly because of the similarity of bricks in level A to some found in Eanna V.<sup>261</sup> Heinrich<sup>262</sup> points out that agreement in brick size alone does not suffice to connect two occurrences chronologically, because of variations in the size of bricks throughout the archaic levels. Even form is not conclusive; for, while the "Flachziegel" of the Anu ziggurat levels below A resemble those of Eanna levels earlier than V, those of the White Temple resemble likewise some forms known in Eanna III and even in II, which belongs to the Early Dynastic period. In this connection it may be significant that other scholars, on the basis of two objects found in the ziggurat, have wished to attribute the White Temple to the "Jamdat Nasr" period (Eanna III). However, there are two objections to so late a date for that structure. In the first place, if the "Flachziegel" of the White Temple could be accepted as indication that it is contemporaneous with the latter part of Eanna III and part of II, one would expect to find "Riemchen" in earlier levels of the Anu ziggurat, just as we do in Eanna; such have not been found. Again, the difference in elevation of the two areas is striking. The ziggurat was founded at 9.76 meters above datum; its platform in level B was just over +22 meters, while the nearest find-spot (in Nb-c XVI 4) of clay tablets of the types which characterize Eanna IV-III was at +19 meters. If the Anu ziggurat is approximately contemporaneous with the later archaic levels of Eanna we have the strange phenomenon of a ziggurat which was barely above the roofs of near-by ground-level temples! Both of these observations seem to indicate that the ziggurat is not as late as Eanna III.

In order to find a stratigraphic connection between the two areas the excavators dug a trench about 100 meters long between the west corner of the Mosaic Temple temenos and a point in the southeast side of Bit Resh where the platform of Anu level A 1 had been encountered.<sup>263</sup> Although this "Datierungsschnitt" apparently never reached the Eanna precinct itself, it produced some important evidence for dating<sup>264</sup> which we shall attempt to summarize.

The southeast face of the A 1 platform is not preserved but is indicated by a foundation course of limestone slabs which directly underlies and projects beyond the lowest course of that structure. From time to time retaining walls for the platform were built, composed almost wholly of fragments of the large "Flachziegel" of the platform itself. The oldest of these walls consists of three superimposed sections, the lowest of which is grounded at the same level as the platform and therefore is not likely to have been built much later. Above the second section lies debris containing many limestone splinters, and over this stretches a layer containing "Uruk" sherds, which are considered to be not later than Eanna IV. Pottery of the same type was found in and around both the Mosaic Temple and the later "Riemchen" building which cuts off its north corner (see p. 119). This would imply that the A 1 platform was built some

259. *Ibid.* Pl. 23 a.

260. *UVB* VIII 14 f. and Pl. 14.

261. *Ibid.* pp. 19-23.

262. See *ibid.* pp. 48-50 for his discussion of the various datings.

263. See *UVB* X 21 f.; Fig. 2 is a schematic plan, and Pl. 15 shows sections of the trench.

264. *Ibid.* pp. 29-32.

time before Mosaic Temple II and Eanna IV. Corroborative evidence to this effect is provided by the fact that the lowest of the four building levels beneath the Mosaic Temple (see p. 119) disappears under the A 1 platform.<sup>265</sup> Therefore we may assume that after the construction of the A 1 platform three of these levels, the two levels of the Mosaic Temple, and the "Riemchen" building which cuts off that temple's north corner all intervene before the close of Eanna IV. This assumption, of course, rests upon acceptance of the validity of the excavators' identification of the "Uruk" pottery mentioned above. Although equation of levels in different places by this method is not so cogent as actual stratigraphic connection, it still is a method universally used when stratigraphic connection is impossible and, carefully handled, can yield most valuable results. The only illustrated object from this area is a jar stopper from the Mosaic Temple which bears impressions of a seal showing the façade of a building and part of a human figure; although overlapping impressions make the subject difficult to decipher, there is no question that it is similar in type to various seal designs from Eanna IV.<sup>266</sup>

If the sequence of brick forms here runs as it does in the Eanna precinct, which is likely to be the case, we might suggest that the four "Flachziegel" levels lower than the Mosaic Temple should be equated with Eanna VII and earlier, that the Mosaic Temple itself might be contemporary with Eanna VI-V, and that the "Riemchen" building which cut off its corner should be dated to level IV.<sup>267</sup> Large use of limestone at Warka was revealed only by the Mosaic Temple and the foundations of the Limestone Temple of Eanna V; that fact suggests nearness in time, if not contemporaneity, of the two buildings.

If these suggested datings are correct, then the Anu ziggurat must be pushed well back in prehistoric times. The A 1 platform would have been built no later than the time of Eanna VIII, that is, around the beginning of the Protoliterate period (see p. 159), and the earlier stages of the ziggurat would date from the Warka period, possibly even beginning during the Ubaid period.<sup>268</sup> In this connection we may call attention to the marked similarity between the plans of the ziggurat temples and Shahrain Temple VII.<sup>269</sup> Thus the complete absence of "Riemchen" and likewise of any kind of writing in the ziggurat would be explicable. In the case of associated objects which resemble late Protoliterate types<sup>270</sup> we need only say that such types of objects begin earlier than had formerly been thought. We shall see in the discussion of small objects that those from the ziggurat have very few parallels among Eanna III types (see p. 158).

#### TELL ABU SHAHRAIN<sup>271</sup>

Over Temple VI of the Ubaid period (see p. 88) were remains of later buildings. Five extensions of the platform, each probably a terrace on which a temple stood, are attributed to the "Uruk" period. Temple V was built of large grayish bricks ( $46 \times 21 \times 5$ ,  $42 \times 20 \times 8$ ,  $41 \times 32 \times 8$  cm.) set in black or red mortar. The bricks of IV were greenish in color and noticeably smaller ( $26 \times 14 \times 9$ ,  $22 \times 12 \times 8$ ,  $26 \times 13 \times 7$  cm.). In Temple III the bricks were reddish and sometimes still smaller ( $21 \times 12 \times 7$  cm.), but some were as large as those of Temple V. When Temple II was built the platform of III was reinforced by a heavy wall of lime-

265. So *Kurzbericht Warka X*, p. 22, but not borne out by the sections of the trial trench (*UVB X*, Pl. 15).

266. *UVB IX*, Pl. 32 b and p. 29; cf. *UVB V*, Pls. 22-23, esp. Pl. 22 a.

267. A suggestion as to the brick forms used in the time of the Mosaic Temple is given by the fact that in the "Datierungsschnitt" a layer containing debris of the Mosaic Temple showed also walls built partially of "Riemchen." This situation reminds us of Eanna level VI, where "Riemchen" or "Riemchen"-like bricks begin to replace "Flachziegel" (see *UVB IV 9*).

268. Heinrich considers that the ziggurat may go back to the Ubaid period (*UVB X 24*); but it must be remembered that his dating scheme brings the Ubaid period down through Eanna XI (*Schülf und Lehm*, pp. 21 and 51), whereas we end it much earlier with XV.

269. Cf. our Figs. 14-15 with *Sumer III*, Fig. 3.

270. Cf. *UVB VIII 50-53*.

271. See *ILN*, May 31, 1947, pp. 581-83; *Sumer III* 101-2 and 106-10, Figs. 2 and 7.

stone blocks set in gypsum mortar, whose battered outer face was plastered with gypsum. The last of the prehistoric temples, Temple I, had a large terrace, also constructed of limestone set in gypsum mortar. "The outer face of this terrace, once more heavily 'battered', descended in a succession of stepped offsets, carefully plastered with gypsum, and no doubt giving an impressive architectural effect. Before reaching the terrace level the offsets developed a meandering line, so, perhaps, adapting themselves to the character of the facade above, now no longer existing." A very small area of the original terrace pavement of Temple I was found, yielding the outline of a rectangular room, and enough stones of the facade remained in place to suggest engaged columns. Clay and stone cones, some with copper-plated heads, and little inlay blocks of colored stone testify to the ornamentation of these buildings, although none was found *in situ*.

Other buildings attributed to the "Uruk" period are a structure suggested as a triple portico and a fairly large building with a central hall or court and smaller rooms on three sides. The latter is extremely well preserved, its walls as high as 2 meters; flat lintels were found in place over doorways and once a corbeled arch. Windows, originally barred with wood, remains of a ramp to the roof, and a well built kiln are other interesting features of this building. Walls and floors were plastered with fine clay.

#### UR

Fragments of architectural remains attributable to the Protoliterate period were found at Ur in the area of the later ziggurat. Under the Early Dynastic level called "Archaic II" is a terrace built of "Riemchen" measuring  $23 \times 10 \times 10$  cm. On a mud-brick pavement belonging to this complex (the terrace retaining wall is called "Archaic IV," a later revetment "Archaic III")<sup>272</sup> thousands of clay cones like those used in the Warka mosaics were found. They vary from 8 to 13 cm. in length; the blunt end may be painted red or black and in the larger ones is slightly hollowed. Another series of cones, 18 cm. long and with deeply hollowed ends, occurred at a somewhat lower level. Woolley deduces from this situation a development of cone mosaic out of the "jar mosaic" seen in the Anu ziggurat at Warka (see pp. 110 f.), with the deeply hollowed cones representing an intermediate stage. His theory seems *a priori* highly probable; but, since at Warka forms ranging all the way from "jars" to small solid pencil-like cones were found together in Eanna level VII (see p. 120), no chronological differences among the various forms are likely. With the smaller cones at Ur were found small disks of stone with the backs loop-bored; these, which must have been fastened into the walls like the flower petals in the Early Dynastic temple at al-Ubaid,<sup>273</sup> represent the earliest known occurrence of this typically Early Dynastic method of decorating buildings.

#### JAMDAT NASR

Of a monumental building at this site<sup>274</sup> we can unfortunately know little or nothing because of inadequate excavation and publication. What appears to be present is a large mud-brick complex bounded by a "Zingel"-type girdle wall. Various groups of rooms exist within this wall, but their relationships one to another and to the whole are obscure; there is no clue to the function of the building, except that "Zingel"-type walls are found in later times in connection with religious structures only. Since, furthermore, the monumental architecture of prehistoric times which we have so far surveyed seems to be exclusively religious in character, we may suspect that the Jamdat Nasr building also is a temple. Its mud bricks include both "Riemchen" ( $20 \times 8.5 \times 8$  cm.) and "Flachziegel" ( $23 \times 9 \times 6.5$  cm.); baked bricks were pierced by three holes. Several rooms within this complex contained Jamdat Nasr style pottery and tablets

272. C. Leonard Woolley, *The Ziggurat and Its Surroundings* (UE V [1939]) pp. 5 f.

273. UE I 81.

274. See S. Langdon, "Ausgrabungen in Babylonien seit 1918," *Der Alte Orient* XXVI (1927) Fig. 12 and pp. 70 ff.

whose script shows the stage called "Jamdat Nasr" (see p. 155). The possibility of a "Zingel" at Warka in Eanna IIIa has been mentioned on page 127; and that possible analogy, combined with the brick forms, suggests that this building is contemporaneous with Warka IIIa; but the character of the excavation prevents us from being sure even that the building is all of one period. Its walls are thick, and the masonry is said to be good. The conflagration which destroyed the building preserved traces of its roof, which was of wood and reed matting with a layer of clay on top of the reeds.<sup>275</sup>

#### TELL 'UQAIR<sup>276</sup>

A temple very similar in plan to the temples of the Anu ziggurat at Warka stands on the upper terrace of a more or less D-shaped platform measuring approximately 58 × 45 meters in its largest dimensions and more than 5 meters in maximum height. This platform was built solid of "Riemchen," and its faces are niched. Above the simple niches is a band of five rows of clay cones whose hollowed ends had been dipped in black paint. The straight side of the platform faces northeast; at each end of it a flight of stairs leads from the ground to the lower terrace. On the upper terrace, about 1.60 meters above the lower and reached by a single stairway at its north corner, stands the temple. Its walls of "Riemchen" rest directly on the bitumen pavement of the terrace. The building, insofar as it is preserved, shows the tripartite plan which characterizes the Warka temples: a long cella or central room with a row of smaller rooms on either side. At 'Uqair the rooms on the southwest side of the cella are only postulated, but the rest of the plan makes that reconstruction almost inevitable. Entrances on the long side of the building, a staircase in one corner, a stepped pedestal against one end of the cella, and a smaller pedestal near the center of the cella are all features which are reminiscent of the Anu ziggurat temples. No doorways are preserved in the ends of the cella; but, since only about half of the building is left, it is quite possible that at least one existed in each end. The projection of the end walls of the cella beyond the rest of the building further suggests that possibility, since the same feature occurs around doorways in the Warka temples.<sup>277</sup> The outer walls have double-stepped niches and are covered with white gypsum over a thick layer of mud plaster. The end walls of the cella have double-stepped niches inside also.

The most unusual feature of the 'Uqair temple, one wherein it differs from its Warka analogues, is the existence of painted frescoes on the inside. Lloyd states that "every surviving square foot [of the inside walls] bore traces of color washes or painted ornament"; on a white ground vivid reds, orange, yellow, and black were used. "The most usual arrangement was a band of plain color, usually some shade of red, forming a dado about 1 meter high all round the room. Above this there would be a band of geometrical ornament about 30 cm. high. The upper parts of the walls were decorated with scenes of human or animal figures on a plain white ground. Unfortunately, none of the human figures was recoverable above the waistline, owing to proximity to the surface." The altar also is painted, the front imitating a façade with cone mosaic in the niches; on one side are figures of lions or leopards. Other fragmentary frescoes show cattle and human figures. The style of representing these human and animal figures and the dress of the former remind one of the Uruk style glyptic (see p. 141).

The temple cannot be precisely dated in terms of the Warka stratification, but brick form and cones are paralleled at Warka in the earlier part of the Protoliterate period and we tentatively date the "Painted Temple" to that time, although in plan it bears closer similarities to the Anu ziggurat temples.

Sometime after the original structure was completed the lower terrace was extended on the

275. *Jemdet Nasr*, pp. 226 f.

276. The following description is drawn from *JNES* II 136-49 and Pls. III-XVI. Since the Warka temples are discussed in detail, we give only a summary account of other temples similar in form.

277. See *UVB* VIII, Pls. 19-20.

northeast face, the extension covering only about half of the length of that face, and two new stairways lead from the plain to this extension. At a later date the Painted Temple, like the White Temple at Warka, was filled in solidly with large rectangular bricks and its platform raised to make a new and much higher terrace which was apparently the substructure for some other edifice; and this new terrace was extended by a second filling still later.<sup>278</sup>

At the foot of the platform was discovered a rectangular room of "Riemchen," with a doorway at one end and an altar against the opposite wall. This little "chapel" was apparently not connected in any way with the platform of the Painted Temple; according to the section this building, which had two occupations, was not begun until after the Painted Temple had been filled in. Within and below it (inside the walls of an earlier structure) was found a good deal of Jamdat Nasr style pottery, which indicates that the chapel belongs to the latter part of the Protoliterate period.

#### KHAFAJAH

The earliest buildings at Khafajah date to a time contemporaneous with, or slightly later than, Warka Eanna IV.<sup>279</sup> The only one of monumental character is the temple of Sin, of which five major building phases<sup>280</sup> antedate the onset of the Early Dynastic period.

Sin I, the earliest phase, is a small building, measuring approximately  $13.50 \times 9$  meters, built on the familiar tripartite plan with a long central room, the cella, and small rooms on either side. The only preserved doorways are on the northeast side. Before one of these doorways (presumably the main one) stands a round structure, probably an offering-table, a feature which continues as an appointment of the Sin Temple into the Early Dynastic period. A raised structure at the northwest end of the cella presumably is the altar; it seems to have been stepped, reminding one of the stepped pedestals in both the Warka temples of the Anu ziggurat and the Painted Temple at Uqair. The long room opposite the doorways seems to have contained a stairway. In front of the building is an open space which later becomes an irregularly shaped courtyard. The building material is sun-dried bricks of "Riemchen" type; they average 21–23 cm. in length, with a section of  $9 \times 9$  to  $9 \times 11$  cm.

In the next phase, Sin II, the temple was built on approximately the same plan but with the sanctuary somewhat enlarged. The altar end is ornamented with a double-stepped niche behind the altar and a single narrow panel on either side.

In Sin III the stairway to the roof was moved to the court, which has now become a real part of the temple complex, and a circular hearth was placed in the cella in line with the main doorway and with the offering-table outside. A hearth in approximately the same position continues as a feature of the Sin Temple into Early Dynastic times.

Sin IV, which marks the beginning of Protoliterate *d* (see p. 159), is a more elaborate rebuilding than before. Over the stumps of the walls of Sin III new and heavier walls were built up to a height of about a meter; then the whole area was packed solidly with clay to form a socle, the first example at this site of an artificial terrace to raise the temple above the level of the surrounding buildings. This socle projects slightly in front of the temple proper, and a set of steps leading from the court was cut into the brick retaining wall of the socle in front of each of the two doorways. The temple itself shows little change from that of the previous stage, but the temple complex now includes several rooms to the east of the court, two of which con-

278. It should be mentioned that large clay corner plaques stamped with circles painted black in imitation of cone mosaic were found at Uqair (*JNES* II, Pl. XXVIII A 1–2 and pp. 154 f.). They are almost identical with plaques previously found at Warka in Eanna level III (see *UVB* II 32, Fig. 19) and, like their Warka counterparts, must have been used for architectural decoration in connection with an inlaid frieze.

279. See *OIP* LVIII 8, note 10, where Delougaz assumes that "the cultural phase represented by Sin Temples I–III follows that represented by Archaic Stratum IV at Warka without any serious gap between, or overlap of, the two."

280. See *ibid.* Pls. 1–5 and pp. 8–40 and 117–23.



tain round kilns. The walls of this level, made of "Riemchen," are faced mainly with headers, with a few stretchers placed among them at irregular intervals. A piece of mud with stone and shell inlay is considered to belong to the architectural decoration. Such inlaid design may represent a further step beyond the cone mosaic and the inlay of large clay plaques seen at Warka and 'Uqair.

The builders of Sin V, the last prehistoric temple, went back to the older custom of temple and court on one level and carefully filled in the court and the area east of it to equalize the level in all parts of the temple complex. In the sanctuary narrow double-recessed niches adorn two walls; these differ from the usual niches at both Warka and 'Uqair by being carved into the thick plaster rather than made in the brickwork itself. Niches carved in plaster are, however, known on the Anu ziggurat at Warka at the time of the White Temple (see p. 110). A rectangular offering-table in the sanctuary of Sin V is another new feature.<sup>281</sup>

#### TELL ASMAR

The Abu Temple at Tell Asmar was likewise founded before Early Dynastic times, but only its first stage is Protoliterate. This is the "Earliest Shrine," a peculiarly irregular little sanctuary whose unusual shape can only be attributed to the necessity of crowding it among pre-existing buildings.<sup>282</sup> Its bricks are small and irregular, handmade, so without any consistent dimensions. Essentially it consists of a little antechamber, entered at one corner, and a long room, the cella, against whose far end stands an altar. To the south is a court which perhaps belonged with the shrine, although no direct connection is apparent. It contains a circular offering-table at approximately the same place where the later Archaic Shrines I-III had one.

#### BURIALS

Warka, Telloh, Jamdat Nasr, and 'Uqair have yielded no graves which can be assigned to the Warka or the Protoliterate period; the numerous graves at Telloh which the excavator places in his "époque de Warka" seem by their contents to belong rather to the Early Dynastic period. In any event these graves are not described sufficiently to be of any assistance in a study of the prehistoric periods.

At Ur the graves of Ur-Ubaid III are simple pits containing bodies in a supine position.<sup>283</sup> Several hundred Ur graves are attributed by Woolley to the "Jamdat Nasr" period, but some of the pottery from them is believed by Delougaz to be of Early Dynastic date.<sup>284</sup> We cannot say, then, to what extent these graves are actually of prehistoric date. The type of grave, however, is consistent. It is usually lined with matting, or at least the body is wrapped in a mat; there is one rectangular coffin of wickerwork. The bodies lie on the side, either side indiscriminately, with no consistent orientation, and are usually sharply contracted.

At Farah graves found in a stratum beneath Early Dynastic houses would seem to be prehistoric but they could, of course, be Early Dynastic. In the most common type of grave the body is wrapped in matting and lies usually on the left side in a moderately flexed position. There are a few clay sarcophagi with lids. In them the body lies in the same position, and their contents are said to differ in no way from those of the other graves.<sup>285</sup>

A few graves at Khafajah are attributed to the Protoliterate period.<sup>286</sup>

281. Private houses contemporaneous with Sin IV and V (Houses 12-11) will be published in *Private Houses and Graves in the Diyala Region (OIP)*.

282. *OIP* LVIII 159 and Pl. 19 A.

283. *AJ* X 337 f.

284. See *AJ* XIV 363 f. and *OIP* LXIII, chap. iii.

285. *Fara*, pp. 17 f.

286. To be published in *Private Houses and Graves in the Diyala Region (OIP)*.

## STONE VESSELS

## WARKA

Numerous fragments of vessels of several different kinds of stone were found in the intermediate layers between levels *C* and *D* of the Anu ziggurat.<sup>287</sup> We have mentioned in chapter iii (p. 86) fragments of obsidian beakers and a spouted limestone vessel with basket handle because of their analogies to Ubaid material; but it should be recognized that it is quite within the realm of possibility that they all belong to the Warka period. The rest of the vessels we consider as probably *in situ* and therefore of the Warka period. There are beakers with simple pointed or flat bases. There are numerous bowl rims in limestone and alabaster; most of these appear to be from straight-walled, slightly flaring vessels, but in some instances the rims are slightly outrolled or grooved, as are the rims of some pottery vessels also. There is also a series of rims of very thin-walled obsidian bowls or beakers. Shallow troughs of rectangular horizontal section appear.<sup>288</sup> One bowl has a slightly sinuous profile with outrolling rim; a jar with marked shoulder, straight neck, and little ledge rim occurs; several fragments are ribbed or grooved on the outside near the rim.

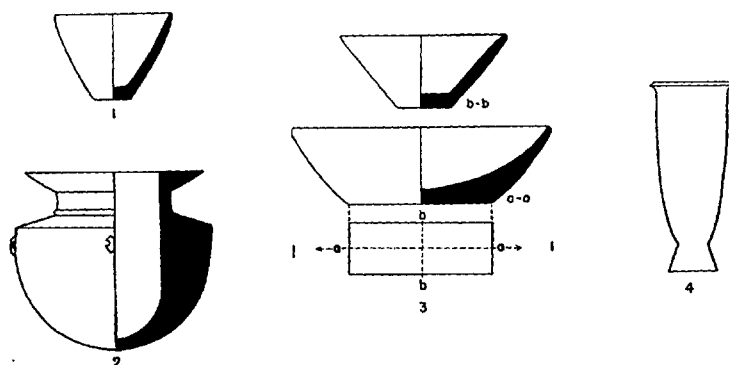


FIG. 18.—Protoliterate stone vessel forms. Scales, 1:2.91 (1-3) and 1:11.66 (4)

1. *Telloh*, Pl. IX 4385  
2. *Telloh*, Pl. X 5203

3. *Telloh*, Pl. X 5298  
4. After *UVB* VII, Pl. 24 a

In the White Temple (or possibly belonging to the filling above it) was found an alabaster vessel in the form of a bird, the earliest theriomorphic vessel from Warka.<sup>289</sup> It has a little cup in the center of the back, as do bird-shaped pottery vessels from Khafajah (see p. 109). The eyes were originally inlaid with some other material.

The "Kleinfunde" hoard, from level IIIa of the Eanna precinct (see p. 127), seems to consist of temple furnishings. The exact age of the objects is unknown, but they must antedate the Early Dynastic period, though by how much is uncertain. Our present concern is with the numerous stone vases which the hoard contained. A flaring bowl (Fig. 18, form 1) was found.<sup>290</sup> An otherwise unknown shape (form 4) is a chalice-like vessel with a hollow splayed foot; three such vessels<sup>291</sup> occur besides the famous sculptured example described below.

Two types of ornamentation were used, inlay and relief. We have already mentioned that in

287. *UVB* VIII, Pls. 58-60.

288. *Ibid.* Pls. 58:16664\* and 51 b and *UVB* IX, Pl. 29 a. It should be noted that these are not of the same form as the type (our Fig. 18:3) belonging to the latter part of the Protoliterate period, though the latter does occur in the same deposit (*UVB* VIII, Pl. 51 a).

289. *UVB* III 29 and Pl. 18 a.

290. *Kleinfunde*, Pl. 24 c.

291. *Ibid.* Pl. 21 a-c.

architecture the older cone mosaics were supplemented in the latter part of the Protoliterate period by flat plaques (see p. 126). This new technique, at approximately the same time, was used also for small objects, stone vessels being the most notable examples. Several spouted vessels, arguably libation vessels, whose forms are comparable with those of spouted pottery jars, are decorated with inlay.<sup>292</sup> Certain areas—usually horizontal or vertical bands, and sometimes circles or other shapes—were cut away; in the resulting sunken spaces was spread a layer of bitumen to hold little pieces of stone or shell of various colors which form designs in mosaic fashion. Eanna level III yielded a bowl with sunken design, originally inlaid, consisting of two flowers with intertwined stems.<sup>293</sup>

One of the most important vessels with relief decoration is a tall spouted jar whose body has a row of alternating lions and bulls.<sup>294</sup> The heads of the animals, carved virtually in the round, look straight out from the plane of the vessel surface, being turned at right angles to the bodies—a pose seen in some of the animal amulets described below. Two lions, almost fully modeled in the round, stand on the shoulder of this vessel, one on each side of the spout. Two other spouts, similarly “guarded” by lions, occur in the hoard.<sup>295</sup>

The most unusual vessel, and probably the most important object in the hoard, is a very large alabaster beaker of form 4, ornamented with three registers in low relief.<sup>296</sup> The scenes are duplicated in part in scenes on various cylinder seals of the Protoliterate period, and together they give us the earliest representations of certain symbols and cult practices which are to be part of the Mesopotamian religious milieu for generations to come. The lowest register on the beaker is in two parts, with rows of stylized grain stalks at the bottom and a row of animals, alternately a sheep and a calf, above. A narrower blank band separates this from the next register, which shows a file of nude men carrying food offerings: deep conical bowls heaped high with objects, possibly loaves of bread; hemispherical containers with incised patterns, perhaps representing baskets; and a spouted jar with pointed base and narrow mouth, a type common at Jamdat Nasr and other sites.<sup>297</sup> Above the middle register is another blank band and then the highest register, which is broader than the others. Here there is apparently a cult scene. A figure in a long robe, with a peculiar headdress which hangs down the back like a pigtail, stands with her back to two of the strange symbols known to belong in later times to the goddess Inanna. A nude man approaches her with a brimming conical bowl, like those carried by the figures in the middle register. The next figure is, most unfortunately, broken away, but it apparently represents a personage of considerable importance, perhaps the ruler. A fragment of a long patterned robe with fringe at the hem is visible, and a train or the end of a long elaborate girdle of similarly patterned stuff with long fringed tassel is carried by a little figure in a short kilt, who wears a headdress similar to that of the figure in front of the Inanna symbols. Behind the Inanna symbols stand two sheep who bear on their backs a two-stepped structure, on each step of which stands a tiny human figure. These figures also wear pigtails and long skirts; the first seems to hold a bowl or some such object, while the one behind appears to clasp his hands. Behind the latter figure the two-stepped object bears another Inanna symbol. Behind this group are large footed bowls of offerings, tall chalices of a shape similar to the vessel on which they are carved, and two theriomorphic vessels, one in the shape of a lion, the other in that of a sheep. That they actually represent vessels and not animals is made clear by a little raised cup in the back of each. A bull-shaped vessel with such a cup, through which liquid can be poured, was found at Khafajah (see p. 109). One suspects that this register represents the ruler of the city making offerings to the goddess of fertility, although the robed figure in front of the Inanna symbols might be a priestess rather than the goddess herself. The significance of the curi-

292. *Ibid.* Pls. 26–27 and 28 b.

293. *UVB VII*, Pl. 24 g.

294. *Kleinfunde*, Pls. 22–23 a.

295. *Ibid.* Pl. 23 b–c.

296. *Ibid.* Pls. 2–3 and 38.

297. Cf. e.g. *Jemdet Nasr*, Pl. LXIII 21; *Telloh*, Pl. IV 5434.

ous group behind the symbols is uncertain, but representations of beings on the backs of animals and of such strange double-stepped objects on the backs of animals are known otherwise. In the same deposit occurred a cylinder seal which shows a bull with a similar object on his back, but in this case the object bears only two Inanna symbols.<sup>298</sup> On both seal and vase the decoration on the two-stepped object suggests that it represents a ziggurat, or a terrace on which the goddess's temple was located.<sup>299</sup> Representations of deities mounted on the backs of animals or monsters are known from the dynasty of Akkad and from later times.

Two stone bowls with crudely depicted animal files were found in the first season at Warka, out of context,<sup>300</sup> and a limestone fragment with very nicely incised panel design, showing a zigzag pattern, was found in Eanna level III.<sup>301</sup>

#### UR

Stone vessels were very common in the "Jamdat Nasr" cemetery at Ur and form one of the best collections of this type of object known, even on the basis of the present incomplete state of publication.<sup>302</sup> Simple straight-sided flaring bowls (form 1) are found; heavy jars of form 2 (once with a band of rope molding around the shoulder edge) occur; and there is a very nice jar of almost pear shape with a low ridge separating neck and shoulder, a fairly small mouth, and a flat rim.<sup>303</sup> Double cosmetic jars, two little jars joined together by a "bridge" and usually supported by some kind of base, are found, likewise a type of vessel made of a solid block of stone with two or more mouths cut into it.<sup>304</sup>

Decorated vessels exist here, apparently mainly in the later graves. One simple bowl is decorated with two rows of petals in relief; another has a row of cattle around it, the bodies in low relief.<sup>305</sup> Another bowl bears a frieze of lions and bulls alternating,<sup>306</sup> a motif which later becomes characteristic of Mesopotamian art. A steatite bowl found in a house of the Persian period and attributed by the excavator to either the Gudea period or that of the 3d dynasty of Ur has a frieze of bulls in fairly high relief, with a head of barley above the back of each bull.<sup>307</sup> The heads of the bulls are turned outward at right angles to the surface of the bowl. This theme, combining animals (usually cattle) and grain, is common on Jamdat Nasr style cylinder seals; that fact, combined with the style of the cutting and the pose of the animals, makes us believe that the bowl should be attributed to the Protoliterate period. It is, however, a better carved piece than any of the others illustrated from Ur. Another vessel, probably a lamp, is in the form of a Tridacna shell, with an animal's head (said to be a bat's) carved underneath, presumably added by the artist as a whim because of the resemblance of the underside of the bowl to a flying bat.<sup>308</sup> The under part of a double cosmetic jar is rather crudely made to represent a ram.<sup>309</sup>

#### TELLOH

Numerous stone vessels from this site have been attributed to a time which falls within the Protoliterate period.<sup>310</sup> Simple flaring bowls of form 1 are the most common, and rectangular

298. *Kleinfunde*, Pl. 17 a.

299. It should be emphasized here that we do not know that Inanna was worshiped on a double-stepped terrace at Warka. The Anu ziggurat, at least in the A 2 phase of its existence, must have had somewhat that aspect, but none of the temples in what we know to be the precinct of Inanna's temple in later times stood on such an edifice.

300. *UVB I* (1931) Pl. 21 and pp. 42 f., Nos. 6-7.

301. *UVB VIII*, Pl. 29 e and p. 14.

302. See *AJ XIV* 364-69. We have spoken in the discussion of the pottery about the very confused state of the stratigraphy of the "Jamdat Nasr" graves at Ur (see above, p. 104, n. 87). Therefore we make no attempt here to speak of what is early or late in the series and treat the material as homogeneous.

303. See *AJ XIV*, Pls. XLVIII 19621 and XLVII 19401, 19519.

304. E.g. *ibid.* Pls. XLV 1 and XLVIII 19428.

305. *Ibid.* Pl. XLV 19378 and 20000 respectively.

306. *AJ XIII* (1933) Pl. LXV 1.

307. *AJ XII* (1932) Pl. LXXVIII and pp. 391 f.

308. *AJ XIV* 369 and Pl. XLVIII 19745.

309. *Ibid.* Pl. XLVIII 19426.

310. *Telloh*, pp. 50-54.

troughs with flat bases and straight flaring sides (form 3) occur.<sup>311</sup> There are heavy jars of form 2, usually with sharp shoulder, definitely offset neck, and flaring ledge rim; one is a virtual duplicate of a jar from Jamdat Nasr.<sup>312</sup> Pierced lugs or piercings through the shoulder of the jar itself are modes of suspension.<sup>313</sup> One little hemispherical bowl has a tiny lip spout; a larger bowl has a long beak spout at the lip.<sup>314</sup> Numerous tiny jars and bowls were probably used for cosmetics or perfumes; most of these are of very rough manufacture.<sup>315</sup> One little jar bears vertical herringbone incision on the body, but both form and incision are fairly crude.<sup>316</sup> Bowls are the best made vessels, usually very symmetrical and quite thin-walled and graceful. Limestone, marble, and alabaster are the only stones identified, but the photographs show that dark stones and rocks of porphyritic type were sometimes employed, especially for bowls.<sup>317</sup>

#### FARAH

Schmidt's Farah I yielded very shallow rectangular plates and a heavy globular jar.<sup>318</sup> Among the unstratified finds published by Heinrich and Andrae are vessels which have parallels in Protoliterate material from other sites. These include bowls, both flaring (form 1) and hemispherical in profile; globular and squat (form 2) jars, the latter sometimes with rope ornament or incised gashes around the shoulder joint; rectangular troughs (form 3); and bowls with tiny lip spouts.<sup>319</sup> Miniature jars, double cosmetic jars like those from Ur, and multiple-mouthed jars with as many as five openings also occur.<sup>320</sup> One double vessel is set on the heads of four couchant cattle, and its frame was originally inlaid with pieces of shell set in bitumen.<sup>321</sup>

#### JAMDAT NASR

The few stone vessels found at this site<sup>322</sup> include simple bowls, one of form 1, a rather barrel-bodied jar with four pierced lugs, and a squat carinate jar with outflaring rim (form 2). A globular pot with two ledge handles has its neck ornamented with sunken metopes, which may originally have held inlays of some other material. As at Telloh, the bowls are the best made vessels.

#### KHAFAJAH<sup>323</sup>

Protoliterate *c* has numerous simple bowls, usually shallow with fairly straight sides (form 1); one well cut specimen has a little offset base. There is a squat heavy jar (form 2), also a pear-shaped jar of more graceful form with its lower body ornamented with raised vertical bands of rope molding. A solid disk-shaped stand or lid with slightly raised border is similar to the pottery disk mentioned on page 109. A boat-shaped vessel, now broken, had three mouths; its sides are covered with rows of little pockmarks. The most elaborate vessel is a little jar on the back of a standing animal; the conception of such a piece is a nice one, but the execution in this case is of lamentable crudeness.

Protoliterate *d* yielded a greater number of vessels, and the technique in general is better than in *c*. The flaring bowls (form 1) are very graceful, and two are incised with vertical lines. There are two rectangular troughs (form 3) and also squat little jars of form 2. Disk-shaped stands or lids appear, also multiple-mouthed vessels, in all cases with three openings. A tall beaker, unfortunately broken, is a new form; and there are four small jars with suspension lugs, showing profiles very similar to those of the pottery "suspension" jars (Fig. 12, forms 18–

311. See *ibid.* Pls. IX 4385, X 4858 (material uncertain) and 5298, 5:3.

312. Cf. *Telloh*, Pl. 5:1 *b*, with *Jemdet Nasr*, Pl. LXVII 37.

313. *Telloh*, Pl. 4:3 and 2 *b* respectively.

314. *Ibid.* Pls. IX 4357 and 6:2 respectively.

315. E.g. *ibid.* Pl. 4:1.

316. *Ibid.* Pl. 7:3.

317. E.g. *ibid.* Pl. 5:2 *a*.

323. Khafajah stone vessels will be published in *Miscellaneous Objects from the Diyala Region (OIP)*.

318. *MJ* XXII 214 and Pl. XXVI 1–2.

319. See *Fara*, Pls. 8–12 and Fig. 26.

320. See *ibid.* Pls. 11–13.

321. *Ibid.* Pl. 23 and p. 54.

322. *Jemdet Nasr*, Pl. LXVII 34–40.

19). A crude bird-shaped vessel, the head broken away, is by no means as good as the Warka specimen mentioned on page 134. Two flaring bowls are decorated with inlaid bands and rosettes<sup>324</sup> in the manner of the spouted vessels from the Warka "Kleinfunde" hoard. A peculiarly shaped object which appears to be a tall lid also has inlaid decoration, and a small jar has a band around the middle with sunken places which probably originally held inlays. Among vessels with relief decoration there is a jar whose lower part has four animals' heads turned at right angles to the vase; the vessel is broken just below the heads, but their bodies may have supported the jar. The animals are alternately lions and bulls, the carnivore-ruminant theme so common on seals of this and later periods. A green stone bowl found in an Early Dynastic III shrine (Small Temple IX) is probably of Protoliterate date.<sup>325</sup> It has a representation in relief of cattle approaching a byre from which the foreparts of two calves project. A very similar design is known on a cylinder seal of Jamdat Nasr style,<sup>326</sup> and one whose subject is sheep rather than cattle occurs on a stone trough in the British Museum said to come from Warka.<sup>327</sup> Two carved fragments from Khafajah have what may be part of a representation of Imdugud, showing claws beneath a conventional type of fringe which is frequently used for birds' wings; these fragments exhibit the highest quality of carving seen in the Khafajah vessels. A double tube for cosmetic powder or oils is ornamented with bands of incised chevrons.

## GLYPHTIC

### WARKA

A stamp-seal impression was found in the Anu ziggurat below the ramp of level X, the lowest level.<sup>328</sup> It is square and contains a strange unidentifiable animal with curved neck and long straight horns. Above the animal's back is a bar with serrated edge, apparently a space-filler. The use of animal subject and of fill in the space above the animal's back reminds one of the glyptic style of northern Mesopotamia (see e.g. p. 63) which begins in Ubaid times (or before) and continues until much later; but the animal depicted here is unparalleled elsewhere. It must, of course, be mentioned that the date of this seal is not established, since we do not know how early is the level in question; it may belong to the Ubaid period or to the Warka period (see p. 129).

One stamp sealing was found in Eanna level XII<sup>329</sup> and therefore belongs indubitably to the Warka period as we define it. The sealing surface was round and fairly large and was covered entirely with an evenly spaced and well balanced pattern of curving elements; as far as can be determined from the photographs this is a purely gemoetric design with no representational elements at all. The fine composition indicates a highly developed sensitivity on the part of the artist, and the sharp, clear impression suggests that the cutting was likewise good. This is no more a first attempt in a new artistic medium than are the cylinder-seal designs of Eanna IV, but its predecessors are unknown. A chalcedony "seal ring" with incised lines on the sealing surface is said also to have been found in Eanna XII.<sup>330</sup>

In the intermediate layers between levels C and D of the Anu ziggurat was found a stamp seal<sup>331</sup> which closely resembles the type characteristic of northern Mesopotamia in Ubaid and later times. The sealing surface is round and contains the figure of a horned animal, probably couchant, with small fill motifs in the space above his back; his feet have curious curved appendages. A stamp seal with a similar animal was found at Tell Judaidah in Syria by the Oriental Institute's Syrian Expedition in a level dated to 'Amuq phase F, which is approximately

324. *OIP* LVIII 29 f. and Fig. 26.

325. *OIC* No. 20, Fig. 54 and p. 71; *OIP* LVIII, Fig. 98.

326. *Cyl. Seals*, Pl. VI a.

327. *BMQ* III (1928/29) Pl. XXII and pp. 40 f.

328. *UVB* VIII, Pl. 50 d and p. 53.

329. *UVB* III, Pl. 19 a and p. 30.

330. *Ibid.* p. 30.

331. *UVB* VIII, Pl. 50 a.

contemporaneous with the Warka period. The cutting of the Warka seal is adequate, but not excellent, and the composition of like quality; but the existence in the South of a seal so similar to contemporaneous products of the North is significant.

A second stamp seal found in the intermediate layers, again with round sealing surface, has a theme familiar on later seals, a ruminant attacked by another animal;<sup>332</sup> the attacker, instead of being a carnivore as is customary in Early Dynastic representations, seems to be a saluki. One such group occupies the lower part of the seal; above this a group facing in the opposite direction seems to show the attacker in front of the prey, probably so arranged for best adaptation of the two groups to the available space. The seal is damaged, but the cutting appears to be quite clear and sharp. There is no great vigor in the representation, nor is the modeling of the bodies on a par with that of later seals; the relief is fairly low, and there is almost no detail.

From the same layers comes the earliest cylinder seal yet found at Warka; it is made of gypsum and shows a frieze of human and animal figures.<sup>333</sup> Two nude human figures, apparently bald and clean-shaven, advance toward the right, their arms outstretched. Between them is depicted a crouching lion, with its head hanging down; and between the heads of the men (possibly being carried by the man on the left) is a small animal of unknown species right side up. Before the men is a quadruped, possibly a dog, walking, and a turtle posed as if viewed from above; three small fish fill the space between these two animals. Then comes a snake whose body runs somewhat diagonally the full height of the seal; before it is another crouching animal and a lion's head. None of the figures has any determinable relationship to any other; there was no attempt at composition, merely a juxtaposition of figures. Technically this seal is much inferior to the products of Eanna V-IV; the cutting is very deep (6 mm.), and the edges are all rounded without any sharp differentiations. Bodies of men and animals alike are very round and fat, while limbs are small and weak; the only detail is that which is absolutely essential for marking the parts of the bodies. The space is too crowded, and the two large figures of men on the left are not balanced by a corresponding mass on the opposite side. There are certain features, however, which connect this peculiar seal with later material. More or less even coverage of the entire surface with figures, a practice which necessitated the use of fill motifs, is characteristic of Uruk style glyptic.<sup>334</sup> The lion's head is depicted in profile, simply muzzle and ears with the back of the head rendered in one continuous curve—precisely the form used for amulets found in Protoliterate context at Tell Brak<sup>335</sup> and in Early Dynastic II context at Khafajah and Tell Agrab.<sup>336</sup>

From the holes of the Posthole Building in level C of the Anu ziggurat at Warka there are several cylinder impressions. One has been reconstructed as containing a double row of animals, passant, all facing to the left; apparently the upper register consists of lions and the lower of cattle.<sup>337</sup> Following every two pairs of animals and extending the height of the seal is an object which is apparently a long slender staff with splayed top ending in five points. A cylindrical object with three points on top occurs in a sealing from Eanna level IV,<sup>338</sup> and allied objects appear on a stamp seal from the Eye Temple at Tell Brak (see p. 185). The association of lions and cattle is common in sealings of the Protoliterate period, although never do we find it in precisely the same form.

Another fragment from level C shows a horned animal, apparently standing on its hind legs with its head turned back over its shoulder.<sup>339</sup> Flanking it on either side is what may be a large

332. UVB IX, Pl. 29 d.

333. UVB VIII, Pl. 49 a and p. 52.

334. See *Cyl. Seals*, p. 29.

335. See *ILN*, Oct. 15, 1938, p. 701, Figs. 20 and 24.

336. To be published in *Miscellaneous Objects from the Diyala Region (OIP)*.

337. UVB IX, Pl. 30 e.

338. UVB V, Pl. 22 c.

339. UVB IX, Pl. 30 b and p. 26.

amphora on a stand. The position of the animal suggests that it was one of a pair forming a heraldic group, another feature which is characteristic of Uruk style seals. A large two-handled amphora on a tall pierced stand, like those assumed for the last mentioned seal, occurs complete in a third sealing from level C.<sup>340</sup> Here it is flanked by two strange beings; the upper part of the body of each seems human, the arms outflung like a dancer's, but instead of legs there are more or less cylindrical members with splayed ends which turn up and terminate in four "prongs." Such a creature is not found on any other seal, but monsters of other varieties are relatively common in late prehistoric times.

A fourth impression from level C shows two figures walking left;<sup>341</sup> the first figure is damaged but resembles the bearded "king" with a knot of hair at the back of the head who appears frequently on Uruk style seals. He wears a knee-length robe or skirt; the left arm is bent at the waist; and over the left shoulder is something which seems to resemble the end of a garment such as is in later periods so often seen flung over a shoulder. The sealing is broken at this point, but all that is preserved is almost identical with the "king" figures. The second figure is smaller but likewise wears a knee-length garment and has the left arm bent at the waist. The hair seems to be worn in a short pigtail or lock which does not reach the shoulder; standing erect on the head is a stafflike object ending in three prongs. Behind this figure are two "Bügel-schäfte" facing each other. Heinrich<sup>342</sup> compares the pigtail of the second figure with that of the servant in the offering scene on the great alabaster beaker from the "Kleinfunde" hoard (see p. 135). He classifies the scene in the impression with representations of cult processions such as are found on sealings of Eanna level IVa, in which group he would include the alabaster vase also. He suggests that the first figure on the sealing carries an offering on his arm. It is to be noted, however, that offering-bearers usually are nude and clean-shaven and do not wear the hair in a knot at the back, whereas the dress and coiffure are precisely those of the "king." Never in any other context have we a being with such an object as that on the head of the second figure on the sealing, and we suggest that this figure represents a deity, especially since it seems to be associated with "Bügel-schäfte," which, occurring as they do on temple doorways, are probably connected with the cult in some way, if they are not actual emblems of divinity.

In the White Temple of the Anu ziggurat were found several so-called "gypsum tablets" with cylinder impressions.<sup>343</sup> Apparently the same seal was used for all the impressions on these tablets, but in the various photographs published there is no impression clear enough to tell us much about the design. There seems to be a group of men with arms raised, possibly holding weapons or other objects aloft; between them are other things, some of which resemble couchant animals and one of which seems to be a spriglike "tree." The cutting of the seal must have been poor, and there is little or no artistic sense displayed in the modeling of the bodies. The figures are disposed in a continuous friezelike pattern with more or less complete coverage of the surface.

A frog posed as if seen from above, with drill holes and incised lines in no discernible design on its base, was found in level B of the Anu ziggurat.<sup>344</sup>

In the ramp of level A of the Anu ziggurat were found several impressions of cylinder seals.<sup>345</sup> One shows intertwined serpents with a double-handled amphora between their heads.<sup>346</sup> Beside this group is another, apparently quadrupeds of monstrous form whose bodies also are intertwined; above them is another two-handled vase, with rounded body, constricted neck, and beveled(?) rim. Two impressions, though not from the same seal, show identical scenes:<sup>347</sup> in

340. *Ibid.* Pl. 30 h.341. *Ibid.* Pl. 30 f.342. *Ibid.* p. 26.

343. See UVB III 29 and Pl. 19 b; UVB V 48 and Pl. 23 c; UVB VIII 51 and Pl. 51 c.

344. UVB VIII, Pl. 50 c.

346. *Ibid.* Pl. 30 i, k.

345. See UVB IX 24-27.

347. *Ibid.* Pls. 31 a-b and 32 a.



the upper register, a file of cattle with three animals facing left and the fourth facing right; in the lower register, two cows back to back each facing a conical byre from which projects the forepart of a couchant calf. The type of animal file, the changes in direction, and the manner in which the bodies are modeled are features which are characteristic of Uruk style seals. Other impressions show nothing but two "Bügelschäfte" facing each other with their bases connected by a horizontal band.<sup>348</sup>

Two stamp seals from level A have designs in Jamdat Nasr drill-hole style, one showing couchant animals and the other unrecognizable.<sup>349</sup> A third stamp, scored in both directions with straight lines, is paralleled at Jamdat Nasr.<sup>350</sup>

The earliest cylinder of the Eanna precinct is represented by an impression from level V, which presents a peculiar scene.<sup>351</sup> In the center is a double-headed monster, each head having a long "horn" with four horizontal prongs; the left side of the impression is much better preserved than the right and seems to show a human head and two "arms" which reach out to a couchant deer. Above the deer is a lion passant with one forepaw raised to touch the monster's left "horn." Between the two "horns" of the monster is a long-tailed horned quadruped represented as if seen from above (like the turtle on the cylinder from the intermediate layers between levels C and D of the Anu ziggurat). On the right of the monster is a large double-handled amphora like those seen on seals from the Anu ziggurat, and on this amphora stands an animal with a curly tail. On the right of this group another quadruped seems to be rearing up on its hind legs; that pose, when considered in connection with the presence of a couchant deer on the other side of the monster, suggests that the animal on the right is a lion and that we have here the familiar motif of a carnivore attacking a ruminant. The cutting of the seal is quite good; the bodies of the animals stand in fairly high relief, but there is little or no modeling of details. In technique this seal is definitely better than the cylinder seal of the intermediate layers but inferior to the seals of level IV.

The cylinder seals of Eanna IV, known only from impressions, are of Uruk style, and we may summarize their characteristics as described by Frankfort.<sup>352</sup> The subjects include animal files, heraldic groups of animals, scenes of offering, sacrifice, or ritual acts (notably the feeding of the temple herd), "king on the battlefield," and symbols of the various fertility deities. Very fine and vigorous modeling and well balanced designs distinguish the style. This style survives in level III,<sup>353</sup> but the majority of seals of that level are of the Jamdat Nasr style.<sup>354</sup> Some of the older subjects—notably offering scenes, feeding of the herd, and animal files—survive, but the new seals are much simplified in subject and coarse in execution. The drill is lavishly used, and a special series of drill-hole designs—including squatting pigtailed women, animals, and geometric patterns—occur on very squat limestone cylinders.<sup>355</sup> A class of very long thin seals, usually of glazed steatite or glazed frit, contains geometric designs, which become one of the characteristic elements of Jamdat Nasr style glyptic.

A number of seals and impressions of both Uruk and Jamdat Nasr style were found in the "Kleinfunde" hoard.<sup>356</sup> Impressions of the Eanna IV type are very numerous, some from very

348. *Ibid.* Pl. 31 c-e.

349. *UVB VIII*, Pl. 50 e-f.

350. *Ibid.* Pl. 50 g; cf. *Jemdet Nasr*, Pl. LXXIII 15.

351. *UVB II* 51 and Fig. 44; *UVB V*, Pl. 28 a and p. 48.

352. See e.g. *UVB V*, Pls. 22-26; also *Cyl. Seals*, pp. 15-29. (Not all types of seals mentioned in the discussion occur at Warka.)

353. *UVB V*, Pls. 25 e and 26 e.

354. *Cyl. Seals*, pp. 30-38.

355. *UVB V*, Pls. 27 a-b and 28 e. Two impressions found in levels III-II (*ibid.* Pl. 27 c-d) we believe belong to Early Dynastic I; the latter is so attributed by Frankfort (*Cyl. Seals*, p. 42, n. 2). It should be remembered that the Early Dynastic period begins in level II (see p. 128 above). The impressions shown in *Kleinfunde*, Pl. 15 n-p, were found in level III.

356. See *Kleinfunde*, Pl. 15 b, for one of the finest of all the Warka seal designs.

excellently made seals; animal designs, including felines, monsters with intertwined necks, "king" scenes, building façades are all present. Here too are Jamdat Nasr types with "disintegrated" animal style, drill-hole technique, and a new design done in the crude linear technique which characterizes so much of the Jamdat Nasr style sealwork. The new design, of which there are several examples,<sup>357</sup> shows two beings wearing short skirts, horned headdresses (perhaps the horned crown denoting divinity), and carrying an Inanna symbol or a five-pronged scepter-like object similar to the "staff" described above; in front of, or between, these beings stand two large conical containers similar to those which on the great alabaster beaker are depicted as holding offerings. This is apparently another type of cult scene, perhaps with the beings representing actual divinities; on one seal<sup>358</sup> the headdress is drawn in purely linear technique with a projecting horn front and back, a fact which lends credence to the idea that the headdress is in all cases intended to represent the horned crown familiar as an emblem of divinity.

### UR

A steatite cylinder seal with a design of pigtailed squatting figures was found in the kiln stratum of the "Flood" pit.<sup>359</sup>

Great quantities of seal impressions were found in what are rightfully named "seal-impression strata," which were investigated in several of the pits. Strata 8-4 are attributed to the "Jamdat Nasr" period;<sup>360</sup> actually they contain material as late as Early Dynastic II, as Frankfort has pointed out,<sup>361</sup> and are by no means homogeneous as assumed by Legrain. We point out some similarities between the seal designs from these strata and those from Warka. The representation of vessels on seals has been seen at Warka; at Ur handled cups which may be conventionalizations of those actually known in pottery of the Protoliterate period (cf. Fig. 12, form 8) are occasionally the sole subject of a seal design.<sup>362</sup> Geometric designs of Jamdat Nasr type are quite common at Ur.<sup>363</sup> The use of a vessel as a fill motif and of separate animal heads<sup>364</sup> is paralleled at Warka. An animal represented as if seen from above, with head, legs, and tail outspread, is found in two cylinder-seal designs from Warka (see pp. 139 and 141) and appears at Ur in designs which seem to give somewhat the same effect of rather heterogeneous juxtaposition of figures.<sup>365</sup> A double-handled amphora like one on an impression from Warka appears at Ur,<sup>366</sup> and "Bügel-schäfte" occur at both sites.<sup>367</sup>

### TELLOH

Numerous stamp seals were found. The sealing surface may be round, square, almond-shaped, or shaped like a couchant animal.<sup>368</sup> The most notable animal-shaped example is a figure of Imdugud, the lion-headed bird which is the emblem of Ningirsu.<sup>369</sup> The designs on the Telloh stamps are mostly in drill-hole technique, consisting frequently of two animals *tête-bêche* or sometimes of a group of animals or a series of unrelated drill holes. Stamp seals with suspension lugs are said to be found,<sup>370</sup> but none is illustrated.

The cylinders have drill-hole animals, animals in linear style, geometric designs, and very commonly pigtailed squatting figures done in drill-hole technique.<sup>371</sup> These cylinders are mostly of the very squat shape common in the Jamdat Nasr style<sup>372</sup> and many are made of marble, another feature characteristic of such seals at other sites.

357. *Ibid.* Pl. 18.

358. *Ibid.* Pl. 18 a.

359. *AJ* X 333 and Pl. XLVI d.

360. *UE* III 2.

361. *Cyl. Seals*, p. 41, n. 1.

362. *UE* III, Pl. 1:4-5.

363. E.g. *ibid.* Pls. 1:8 and 2:26-28.

364. See *ibid.* Pls. 17:325 and 14:277.

372. De Genouillac states (*ibid.* p. 39) that this form of seal "est particulière à Uruk IV," a rather astonishing statement in view of the fact that no seals were found in Uruk IV, the glyptic of that level being known to us only from impressions.

365. *Ibid.* Pl. 15:282-83.

366. *Ibid.* Pl. 17:330; cf. *UVB* V, Pl. 26 b.

367. *UVB* IX, Pl. 30 f, and *UE* III, Pl. 20:385.

368. *Telloh*, Pl. 38.

369. *Ibid.* Pls. 38:1 e and 36:4 b.

370. *Ibid.* p. 43.

371. *Ibid.* Pls. 39-41.

## FARAH

The greater part of the cylinders from Farah belongs to the Early Dynastic period, but most of the Jamdat Nasr type designs which we have seen are also found here: pigtailed squatting figures in drill-hole technique, animal files in rough linear cutting or in a combination of linear and drill-hole techniques, simple geometric patterns based mostly on ovals or lozenges.<sup>373</sup> A few oval stamp seals show simple animal designs.<sup>374</sup>

## JAMDAT NASR

Both cylinder and stamp seals were found.<sup>375</sup> The cylinders show most commonly animal files in Jamdat Nasr style, with either linear or drill-hole technique; squatting human figures also occur. One stamp shows drill-hole animals; others bear geometric designs, always very simple—once a large X, once plain crosshatching, and once curved lines in a sort of tripartite swirl pattern.

Many of the tablets from Jamdat Nasr (see p. 155) bear seal impressions, but the fragments published add nothing to our knowledge of the glyptic of the Protoliterate period. There are animal files, human figures, and large double-handled jars.<sup>376</sup>

## KHAFAJAH and TELL ASMAR

The cylinders from Khafajah and Tell Asmar will be dealt with by Frankfort in his forthcoming *Stratified Cylinder Seals from the Diyala Region*;<sup>377</sup> there is no need to discuss them here except to mention that they include the well known Jamdat Nasr types previously described.<sup>378</sup>

Stamp seals are strangely rare. From Protoliterate c at Khafajah come two round stamps with designs made up of drill holes and a seal in the shape of a couchant animal, whose base bears a drill-hole design of four little animals;<sup>379</sup> the carving of this little seal is of much higher quality than that of most other animal figures.

## ANIMAL AMULETS

## WARKA

The "Kleinfunde" hoard yielded considerable numbers of small figures of animals which seem to be characteristic of the culture of southern Mesopotamia in Protoliterate and later times. Most common are couchant sheep or cows, usually with the legs doubled under the body and the head looking straight forward, but sometimes the head is turned sideways at right angles to the body or is bent over against the body so that the animal is looking over its shoulder.<sup>380</sup> Once a lion is depicted, and this beast, though couchant, has its forelegs stretched out straight ahead.<sup>381</sup> A feline, perhaps a panther, is found in a similar pose.<sup>382</sup> Birds are depicted occasionally, with folded wings and feet tucked under the body or with wings spread as if in flight; once Imdugud appears, and once a double fish.<sup>383</sup> These little figures are cut in stone or shell and are usually about 4 or 5 cm. long; almost all are perforated, either horizontally through the upper part of the back or vertically from the base to the top of the back. The

373. See *Fara*, where the best examples are shown on Pls. 61–72 mingled with impressions of Early Dynastic seals.

374. *Ibid.* Pl. 41 i, k–l.

375. *Jemdet Nasr*, Pl. LXXIII and pp. 281–86.

376. See S. Langdon, *Pictographic Inscriptions from Jemdet Nasr* ("Oxford Editions of Cuneiform Texts" VII [London, 1928]) Pls. XIV 45, XX 71, XXVI 96, and XXXI 121.

377. To appear in "Oriental Institute Publications."

378. See *OIC* No. 20, Figs. 28–29, for examples.

379. To be published in *Miscellaneous Objects from the Diyala Region* (OIP).

380. See e.g. *Kleinfunde* Pls. 9 and 12 d–e. The position with head turned is used for stamp-seal amulets also, as in *Telloh*, Pl. 36:6 f–i; most other examples are in collections and are of unknown provenience.

381. *Kleinfunde*, Pl. 13 b.

382. *Ibid.* Pl. 13 f.

383. See *ibid.* Pl. 13 c, e, j, i.

"panther," vertically perforated, has a copper spike through the perforation and was perhaps attached to a piece of furniture or an ornament. The horizontally perforated beasts may well have hung from necklaces as amulets (though some are rather large for that purpose); hence "amulets" is the most common designation for such figures. The eyes are usually deeply hollowed and probably were inlaid; the whole body of the "panther" is covered with irregularly shaped inlays of lapis lazuli. Ordinarily the details of musculature, horns, wings, etc. are incised. Some of these figures are very crude, but some are beautifully executed. An unusual figure made of copper represents a standing lion; it seems to be well made, but corrosion has destroyed the details.<sup>384</sup>

Figures similar to those of the "Kleinfunde" hoard were found in an earlier season: in Eanna III a cow with head straight forward and in Eanna III or II a representation of Imdugud.<sup>385</sup> A large group of animal figures was later found in level III.<sup>386</sup> This group has several examples of animals with inlays in the body, including two with trefoil-shaped inlays and one with quatrefoil-shaped inlays.<sup>387</sup> The cow with quatrefoil inlays is further distinguished by having only body and head in stone while legs and genitals were separately worked in silver; there are holes for attachment of ears, horns, and tail, which were probably also worked in metal. Of the metal parts only the hind legs are preserved; below the hooves are little dowels, which suggest that the animal was fitted into a base. Separate legs in gold, silver, bronze (actually copper?), and stone were also found.<sup>388</sup> A figure of a standing goat is nicely made of sheet gold over a bitumen core.<sup>389</sup>

The intermediate layers between levels *C* and *D* of the Anu ziggurat produced a flying bird and a few tiny animal figures of stone;<sup>390</sup> the latter are quite crude in execution and, though apparently all couchant, not precisely similar to any of the couchant types we have been discussing. They may be early attempts in a medium which was perfected later.

In the White Temple of the Anu ziggurat was found a curved "horn" made up of disks of differently colored stones cut to fit precisely together and strung on copper wire.<sup>391</sup> If this really represents an animal's horn, it is a unique example of such work as part of an animal figure. A couchant carnivore of clay was found in the ziggurat platform to the north of the White Temple.<sup>392</sup>

#### UR

A shell amulet shaped like a claw was found in disturbed soil in the "Jamdat Nasr" cemetery.<sup>393</sup>

#### TELLOH

A few couchant animals with heads forward, like those from Warka, are found,<sup>394</sup> also an Imdugud figure, a frog, a fish, and a standing pig.<sup>395</sup> An unusual type of bird is shaped rather like a claw and perforated through the breast.<sup>396</sup>

#### FARAH

A little amulet in the form of a pig is similar to that from Telloh, and a "claw-bird" like those from Telloh also occurs.<sup>397</sup>

384. *Ibid.* Pl. 13 a.

385. *UVB* II 26 f. and Fig. 12.

386. See *UVB* VII 13 f.

387. *Ibid.* Pls. 23 f-g and 24 b.

388. E.g. *ibid.* Pl. 23 q-s.

389. *Ibid.* Pl. 23 l.

390. *UVB* VIII, Pls. 49 b and 48 d-i.

391. *Ibid.* Pl. 49 c.

392. *Ibid.* Pl. 49 d and p. 51.

393. *AJ* XIV 371.

394. *Telloh*, Pl. 36:1-2, 5 c.

395. *Ibid.* Pls. 36:4 b, 36:3 c-d, and 35:1 k respectively.

396. *Ibid.* Pl. 36:3 b, 5 a-b.

397. *Fara*, Pl. 36 c 8 and 5 respectively.

## JAMDAT NASR

Only one very crude figure of a couchant animal, with head turned, was found here, and it is badly worn.<sup>398</sup> There is a broken figure of a pig like that from Telloh, and a little figure of an animal squatting on its hind legs represents apparently a bear.<sup>399</sup>

KHAFAJAH<sup>400</sup>

Protoliterate *c* does not have a large number of amulets. Two couchant animals with heads facing straight forward are cut from mother-of-pearl. Two other animals show the heads turned to the side. The couchant figures are not modeled fully in the round like the Warka figures but are flat. Standing figures also occur, most notably a pig like the Telloh and Jamdat Nasr examples. There are birds, usually seen from the side with folded wings and once viewed from above with wings outspread. Little frog and fish figures, all apparently unperforated, occur; the fish are the most common amulet type and are frequently ornamented with incision or holes for inlays. Three examples of a hitherto unknown type occur, an animal with elongated body and legs stretched out straight before and behind; one of these is a lion(?) with holes for inlays.

In Protoliterate *d* many of the same types occur. Couchant animals facing forward may be flat figures cut in shell or fully modeled in the round.<sup>401</sup> Couchant animals with heads turned are rarer than in *c*, and standing animals are more common. There are several examples of what looks like a curly-tailed dog. The standing animals do not have inlay holes as commonly as the couchant ones, nor were the elongated animals, several of which occur, inlaid. Birds are frequent, those with folded wings far outnumbering examples with outspread wings. "Claw-birds" like those from Telloh and Farah occur here. Fish are again much the most common type; a variant in this phase is a double fish,<sup>402</sup> like the example from Warka. Frogs occur, and there is one turtle, posed as if seen from above as on a cylinder seal from Warka (see p. 139). A bull's head with triangular inlay in the forehead may belong in Protoliterate *d* or in Early Dynastic I.

Most perforations are horizontal, but many amulets appear to be unperforated.

## PERSONAL ORNAMENTS

This category includes all articles of personal adornment other than animal amulets.

## WARKA

Beads are said to occur in the postholes of level *C* of the Anu ziggurat.<sup>403</sup> In Eanna III were found beads from necklaces and even a fragment of beadwork.<sup>404</sup> Possibly used as amulets were a large number of little clay objects found in Eanna IV which are supposed by the excavator to be mostly models of objects of daily use,<sup>405</sup> and that is certainly possible. We suspect that the perforated ones may have been worn as amulets. The forms of most of these objects are peculiar and indescribable, with the exception of a few simple ovoid and discoid pieces, barrels, cones, and one tetrahedron. Since similar objects are found at other southern sites (e.g. Telloh and Farah), they were apparently a recognized element in the culture and not purely a local whim at Warka. Perhaps some are game pieces (cf. p. 153).

398. *Jemdet Nasr*, Pl. LXXIV 6 (3308). Mackay (*ibid.* p. 275) calls this a bearded man with an animal's body, but the piece is quite analogous to the animal figures, and there seems little doubt that it may be so identified.

399. *Ibid.* Pl. LXXIV 5 (3343) and 6 (3304) respectively.

400. Khafajah amulets will be published in *Miscellaneous Objects from the Diyala Region (OIP)*.

401. For two examples of the latter see *OIC* No. 20, Fig. 31.

402. *Ibid.* Fig. 30.

403. *UVB* IX 25.

404. *UVB* VII 14 and Pl. 24 c.

405. *UVB* II, Fig. 41 and p. 48. Similar objects are said to have been found in level VI (*UVB* III 19).

The "Kleinfunde" hoard included numerous long barrel-shaped beads made from shell cores, occasionally with a few incised lines as ornament.<sup>406</sup> A long bone bead is covered with finely incised zigzags.<sup>407</sup> Thousands of beads were found in this hoard, their materials including limestone, carnelian, rock crystal, gypsum, lapis lazuli, amazonite, agate, amethyst, diorite, aragonite, and shell; the most common shapes are simple cylinders, barrels, rings, and bicones.<sup>408</sup> Heinrich suggests that a beautifully cut little flower of carnelian with silver stamen inserted could have belonged to a headdress such as the elaborate ones known from the Royal Cemetery at Ur;<sup>409</sup> we suspect that it might equally well be an architectural or furniture inlay. A stone "eye symbol," a type of object common in the North (see pp. 191f.), occurred.<sup>410</sup>

#### UR

The graves of Ur-Ubaid III, which we attribute to the Warka period (see p. 104), yielded necklaces or bracelets of shell and steatite ring beads; in the kiln stratum above there were long shell beads such as we have seen at Warka.<sup>411</sup>

In graves containing Jamdat Nasr type pottery, beads are common. Carnelian, lapis lazuli, and shell were the most frequently used materials, but agate, frit, gold, hematite, and crystal all occur. Very long shell beads are specifically mentioned, as are agate spacers shaped like double axes; the latter are unknown elsewhere. The beads were usually worn in necklaces, but girdles, bracelets, and occasionally anklets also occur.<sup>412</sup>

#### TELLOH

Telloh yielded a number of little clay objects such as were found in Eanna IV at Warka; many of the Telloh examples are duplicates or analogues of the Warka specimens, with similar shapes and frequently even with similar decoration. Noticeable among the amulets are shell rings with suspension loops, joined ovoids, and a little crescent.<sup>413</sup>

Beads are numerous. The stones are in general the same as those used at other sites; glazed frit is present, and there are said to be a few gold beads.<sup>414</sup> Numerous spacers were found here, multiple tubes with two or more perforations.<sup>415</sup> Drop-shaped pendants are common, and one long shell bead occurs.<sup>416</sup>

There are also little bone pins with plain or carved heads.<sup>417</sup>

#### FARAH

In Farah I there is a long bone object with incised zigzag pattern<sup>418</sup> which looks like a bead. Among the unstratified finds occur little clay pieces, mostly more or less barrel-shaped unperforated objects,<sup>419</sup> which might be game pieces rather than amulets (cf. p. 153). Numerous drop-shaped pendants<sup>420</sup> resemble those found at Telloh. A bone pin has a plain head with a simple groove around it.<sup>421</sup>

#### JAMDAT NASR

Comparatively few beads were found at Jamdat Nasr. The materials used include glazed frit, shell, limestone, agate, green felspar, alabaster, clay, crystal, and bone.<sup>422</sup> (It should be noted, in view of the fact that Mackay makes a point of the absence of lapis lazuli at Jamdat Nasr, that this material is found at most of the other sites which have comparable remains.)

406. See *Kleinfunde*, p. 41 and Pl. 31.

407. *Ibid.*

408. *Ibid.* pp. 42 f. and Fig. 7.

409. *Ibid.* p. 41 and Pl. 30 c.

410. *Ibid.* Pl. 33 q.

411. *AJ* X 337 and 333.

412. *AJ* XIV 370 and XIII 382.

413. See *Telloh*, Pls. 37:1 e-f and 35:2.

414. See *ibid.* pp. 61 and 44.

415. *Ibid.* Pl. 43:2 c and p. 61.

416. See *ibid.* Pls. 35:2 and 34:3 c.

417. *Ibid.* Pl. 34:3 a, e.

418. *MJ* XXII, Pl. XXVII 1 and p. 214.

419. See *Farah*, Pl. 34 h.

420. *Ibid.* Pl. 36 d 1.

421. *Ibid.* Pl. 38 d and p. 86.

422. *Jemdet Nasr*, p. 272.

Imitations in clay of long shell beads such as were found at Warka are known; frequently a spiral groove was cut to simulate that of the shell.<sup>423</sup> There are two long bone beads decorated with finely incised zigzags,<sup>424</sup> which are exact duplicates of a specimen found at Warka and similar to the object from Farah just mentioned. Most of the Jamdat Nasr beads are of very simple shapes and quite crudely made. A spacer with ten perforations is of wood.<sup>425</sup>

There are three double-winged flat amulets, one in shell and perforated horizontally near the top, the others in glazed frit and perforated vertically.<sup>426</sup> Ring-shaped amulets with several little protuberances, one of which is pierced for suspension, or merely with attached suspension loop are of shell or frit and are paralleled at Telloh.<sup>427</sup> Drop-shaped pendants also occur,<sup>428</sup> one being noticeably elongated. Unusual is a tiny squatting female figure,<sup>429</sup> nude and with the hair in the pigtail style depicted on seals and reliefs. An amulet of two joined ovoids<sup>430</sup> is paralleled at Telloh.

Several bone pins with plain or carved heads like those from Telloh were found.<sup>431</sup> Simpler objects with plain perforated heads are probably needles, but may have been used as ornaments.<sup>432</sup> A little toggle-shaped object<sup>433</sup> may be a nose- or an earplug. Fragments of copper suggested as possibly belonging to hairpins were found.<sup>434</sup> No such pins, however, have ever been found in dated context earlier than the Early Dynastic period.

#### Khafajah<sup>435</sup>

There is little discernible difference between the *c* and *d* phases of the Protoliterate period. A great many beads and pendants were found, sometimes in positions which permitted necklaces to be restrung. Most of them need no comment, but some are interesting. Long shell beads are not common, but several were found; long bone beads with incised decoration do not occur but have analogues in frit. Little rings with suspension loops like those found at Telloh and Jamdat Nasr occur here too, either in shell or in frit. Drop-shaped pendants in crystal are known, as at Farah, likewise elongated specimens, usually of shell, with grooves cut around the perforated end; the latter are more common in phase *d* than in *c*. One such pendant was found at Jamdat Nasr. Pendants of rather rhomboidal form with little projections either at two opposite corners or at all four corners are fairly common at Khafajah. Spacers are known, with either two or four holes, and there are numerous shell pendants of various shapes with holes for inlays. In phase *c* are three crescent pendants, one of gold and two of stone ornamented with inlays.<sup>436</sup> A squatting figure of a nude woman with knees wide apart (resembling an amulet from Jamdat Nasr) may belong to either *c* or *d*, and an amulet from phase *d* represents a man with hands bound behind him like the captives in seal impressions from Warka Eanna IV.

Important pieces from phase *d* are two little "eye symbols"<sup>437</sup> like that from Warka and a lapis lazuli leaf-shaped amulet with central rib, which has a counterpart from Tell Brak (see p. 188).

#### TOOLS AND WEAPONS

Strangely enough, tools, weapons, and objects of daily household use are quite rare. This is partly due to the fact that the greatest amount of digging has been done at Warka and Khafajah in temple areas, places such as are notoriously poor in these objects.

423. *Ibid.* pp. 275 f. and Pl. LXXIV 4.

424. *Ibid.* Pl. LXXIV 8.

425. *Ibid.* Pl. LXXII 14 and p. 273.

426. *Ibid.* Pl. LXXII 27-29 and p. 274.

427. *Ibid.* Pl. LXXII 16-19 and p. 274.

428. *Ibid.* Pl. LXXIV 6 (3097 and 3309).

435. Khafajah ornaments will be published in *Miscellaneous Objects from the Diyala Region (OIP)*.

436. *OIP* LVIII, Fig. 6.

429. *Ibid.* Pl. LXXIV 5-6 (3315).

430. *Ibid.* Pl. LXXIV 6 (3313).

431. *Ibid.* Pl. LXXI 8-12.

432. *Ibid.* Pl. LXXI 1-7.

433. *Ibid.* Pl. LXXI 15.

434. *Ibid.* p. 272.

437. *Ibid.* Fig. 24.

## WARKA

In levels *D* and *E* of the Anu ziggurat were found "weapons and tool parts of copper, gold and copper nails, and . . . a fragment of an iron tool."<sup>438</sup> In the intermediate layers between levels *C* and *D* were found numerous more or less pear-shaped maceheads.<sup>439</sup> "A number of . . . small maceheads" occurred in the postholes of level *C*.<sup>440</sup> Three fine pear-shaped maceheads, one fluted, occurred in level III of the Eanna precinct;<sup>441</sup> they are very like Early Dynastic specimens, and the finding of maceheads in temples is paralleled in Early Dynastic times.<sup>442</sup> In the "Kleinfunde" hoard copper nails were fairly common, as were fragments of copper from tools or other objects at present unidentifiable because of the extreme oxidation of the metal.<sup>443</sup>

## UR

The Ur-Ubaid III graves yielded pear-shaped maceheads, a stone hammer-ax, and a copper spearhead.<sup>444</sup> Copper and clay tools were found in the kiln stratum.<sup>445</sup>

In the "Jamdat Nasr" graves there is an almost complete lack of tools and weapons. There are only two little copper spoons with long handles (probably for cosmetics), the handle of one being twisted in cable fashion, and a heavy two-pronged copper instrument fixed to a wooden handle.<sup>446</sup> The latter sounds like the two-pronged "goads" known in Early Dynastic times from the Kish "Y" cemetery and other places. Here, as at Telloh, we have to reckon with the fact that the material attributed to prehistoric periods actually includes some belonging to historic times.

## TELLOH

Pear-shaped stone maceheads, a hammer-type macehead, and an unpierced grooved object which may be a macehead (as at Jamdat Nasr; see below) appear at Telloh, also numerous little polished stone celts.<sup>447</sup>

A great many copper tools and weapons found here were attributed by the excavator to his "époque de Warka." Such a large quantity of copper implements is unknown at any of the other sites, and, in view of De Genouillac's uncertain stratification and the known occurrence in close proximity of Early Dynastic material, we suspect that much of the metal which he attributes to his "époque de Warka" is actually of Early Dynastic date. In the latter period we would place the knives and spatulas, as well as the pins and little "vanity sets." Four fish-hooks<sup>448</sup> may be of Protoliterate date; they closely resemble some from Jamdat Nasr (see below).

## FARAH

Farah has numerous little clay spindle whorls with serrated edges and plain ones of clay or stone, clay cones apparently used for architectural decoration, and baked-clay sickles of the Ubaid type (see p. 85).<sup>449</sup> There is a stone celt, also a pear-shaped macehead.<sup>450</sup> Here, as at Telloh, we suspect that most of the metal tools and weapons, which appear in considerable quantity, date from the Early Dynastic period, but Schmidt found a copper dagger blade in Farah I.<sup>451</sup>

438. *UVB* VIII 53. It is regrettable that there is no more information about the iron tool.

439. *Ibid.* p. 53 and Fig. 7.

440. *UVB* IX 25.

441. *UVB* VII, Pl. 23 *n-p* and p. 16.

442. E.g. in the Temple Oval at Khafajah; see *OIP* LIII 27.

443. *Kleinfunde*, p. 47 and Pl. 35.

444. *AJ* X 337 f. and Pl. XLVII b.

445. *Ibid.* p. 333.

446. See *AJ* XIV 370 f.

447. See *Telloh*, Pls. 7:1-2 and 8:1 *a-b*, 3.

448. *Ibid.* Pl. 11:2 *a-d*.

449. *Fara*, Pls. 34 *g* and 35 *p*.

450. *Ibid.* Pl. 35 *l* and *g* respectively.

451. *MJ* XXII, Pl. XXVII 2.



## JAMDAT NASR

Two polished stone celts like those known in the Ubaid period (see p. 85) were found here.<sup>452</sup> New are long flat sandstone whetstones, pierced for suspension.<sup>453</sup> Numerous little plano-convex or biconical pierced objects are probably spindle whorls. The majority are plain, but some, usually of stone, are decorated with incised designs, most commonly a rosette.<sup>454</sup> Axes or adzes of clay<sup>455</sup> remind one strongly of model tools of the Ubaid period (see p. 85); one of these has a shaft hole and is so similar to Ubaid specimens that one wonders whether it is not actually of Ubaid date. Two objects which are probably maceheads occur.<sup>456</sup> Numerous large stone objects, more or less truncated cones in shape, with two grooves crossing each other at right angles on the top and continuing down the sides<sup>457</sup> may be maceheads which were tied onto shafts with leather thongs fitting into the grooves; or they may be weights or net-sinkers. Ovoid objects of clay which are probably sling-missiles occur;<sup>458</sup> these are very similar to objects of the Ubaid period (see p. 85), and again the question of date arises. Sickles of hard-baked clay like those of the Ubaid period (see p. 85) also are found.<sup>459</sup>

In copper there are a large adz or chisel, a little spatula, and two fishhooks.<sup>460</sup>

KHAFAJAH<sup>461</sup>

Few tools and weapons occur, the most important being a very fine long copper knife blade with saw-toothed edge. A bone implement, probably a chisel, is set in a bitumen handle, and pieces of flint also are set in bitumen. It will be remembered that bitumen handles were used in the Ubaid period at Tell 'Uqair (see p. 85). There are fragments of a baked-clay sickle.<sup>462</sup>

## METAL VESSELS

## WARKA

In the "Kleinfunde" hoard was found an almost hemispherical hole-mouth silver vessel with a long beak spout at the rim.<sup>463</sup> A conical object of sheet gold may well be a spout.<sup>464</sup>

## UR

Copper vessels are said by Woolley to be fairly numerous in the graves of the "Jamdat Nasr" cemetery, especially in the middle and lower graves. Generally these are flat-bottomed pans with carinate sides, and they may be up to 60 cm. in diameter. There are smaller bowls, two with long trough spouts and one with legs soldered to the sides, and a single "vase."<sup>465</sup>

## TELLOH

Since copper vessels are found at various other sites, we may attribute those from Telloh which do not have later parallels to the Protoliterate period. There are two little bowls with flat bases, flaring sides, and tiny lip spouts; a tall cylindrical vessel which still contains remains of what appears to be a black cosmetic powder; and three globular vessels with short necks and tubular spouts.<sup>466</sup>

452. *Jemdet Nasr*, Pl. LXX 23-24 and p. 266.

453. *Ibid.* Pl. LXX 15-17 and p. 266.

454. *Ibid.* Pl. LXXIV 9 and p. 267.

455. *Ibid.* Pl. LXXV 7-8 and p. 266.

456. *Ibid.* Pl. LXX 7-8.

461. The Khafajah material will be published in *Miscellaneous Objects from the Diyala Region (OIP)*.

462. E.g. *OIP* LXIII, Pl. 17 c.

463. *Kleinfunde*, Pl. 29.

464. *Ibid.* Pl. 30 d and p. 40.

465. *AJ* XIV 369. None of these is illustrated. In view of the uncertainty regarding the stratification of this cemetery, it is quite possible that some of the vessels belong to the Early Dynastic period.

466. See *Telloh*, pp. 47-49, Pls. 9:3 b, 10:1, and 11:1.

457. *Ibid.* Pl. LXXV 5 and p. 269.

458. *Ibid.* Pl. LXX 21, 26-27.

459. *Ibid.* Pl. LXXVI 11.

460. *Ibid.* Pls. LXXI 32, 30 and LXXV 4.

## FARAH

Several flat bowls of copper, fairly shallow and with rounded bases and slightly curved sides,<sup>467</sup> may date from the Protoliterate period.

## JAMDAT NASR

There is a low copper bowl with a little offset base, curving sides, and inturned rim.<sup>468</sup>

## KHAFAJAH

Several copper vessels were found, including some very large shallow bowls or pans.<sup>469</sup>

## SCULPTURE

The earliest monumental sculpture known in southern Mesopotamia, both in the round and in relief, occurs at Warka in Eanna III. Animal figures in the round, on a larger scale than the amulet figures discussed above, are not uncommon, especially at Warka; they may perhaps be considered as transitional between the amulets and monumental sculpture, which appears late in prehistoric times and begins to flourish in the Early Dynastic period.

## WARKA

Found in the intermediate layers between levels *C* and *D* of the Anu ziggurat was a tiny figure of a woman in light translucent stone;<sup>470</sup> only the upper torso and the arms are preserved, but they indicate that the modeling was excellent. The figure is nude, with arms bent at the elbows and fists clenched. The squared aspect of the shoulders and upper arms, the numerous right angles and almost flat planes of the body seem to betoken the same artistic feeling which later emerges in the "geometric" style of Early Dynastic II.<sup>471</sup> Another little human figure from the intermediate layers is of soft gypsum, and the poor condition of the stone prevents observation of details; even the sex is dubious. The pose is approximately the same as that of the other figure, but the arms seem to be against the body and possibly a staff or some other object is held in one hand.<sup>472</sup>

Several roughly worked gypsum figures of kneeling bearded men were found in a Parthian temple at Warka and recognized as very much older by Jordan.<sup>473</sup> They are so crude that no details are visible, save that the arms appear to be bound behind the back like those of the captives on some Eanna IV seal impressions. A similar figure was found in level *A* of the Anu ziggurat. Heinrich suggests that these figures form a group of captives like those portrayed in certain seal designs of Eanna IV.<sup>474</sup> Dowel holes in the undersides indicate that the figures were attached to bases.

The unchallenged masterpiece of early Mesopotamian sculpture is an almost life-size head from Eanna III.<sup>475</sup> This piece, perhaps a mask, is made of marble and exhibits a style which in some ways resembles the Sumerian sculpture of the Early Dynastic period and in others is markedly different. The hair is represented merely by a series of flat waves with scallops projecting onto the face; there is a deep gash across the center of the head suggesting that a wig or headdress of some other material was fastened over the stone. A deep hole on either temple just in front of the ear also may have served for fastening the wig or head-dress. The ears are not covered by the hair, which swirls out a little below them, where it is pierced on either side, perhaps for earrings. The ears are rather summarily rendered and

467. *Fara*, p. 87 and Fig. 48.

468. *Jemdet Nasr*, Pl. LXXI 31.

469. These will be published in *Miscellaneous Objects from the Diyala Region (OIP)*.

470. *UVB VIII*, Pl. 49 *e* and p. 52.

471. See *OIP XLIV* 19-27.

472. *UVB IX*, Pl. 29 *c* and p. 25.

473. *WVDOG LI*, Pls. 93 *i* and 94, pp. 67 *f*.

474. *UVB VIII* 51.

475. *UVB XI* 19-21 and Pls. 1, 21, and 32.

perhaps, as Lenzen suggests, they too were covered by the wig or headdress. The eyeballs, now lost, were made of some other material; the eyes are large and almond-shaped, with the folds of the eyelids quite clearly marked. The eyebrows are formed by deep curves, originally inlaid, which meet over the nose in a manner characteristic of later Sumerian sculpture. The nose is unfortunately broken at the lower part, but enough remains to show in profile that it must have been the large beaked type common in later Sumerian sculpture. The lower part of the face is astonishing from the standpoint of later Mesopotamian art, for the cheeks and chin instead of being pure geometric planes are softly and delicately modeled, the little fold of flesh under the chin being especially naturalistically rendered. The mouth is sensitively carved; the slight indentations from the nose to the corners of the mouth and below the lower lip are of a subtlety unmatched elsewhere in Mesopotamian art.<sup>476</sup> The find-spot of this head precludes its being later than the Protoliterate period; but the style of art from which it sprang, its technical and artistic forebears, and the fate of this sensitive style of sculpture are problems which must for the present remain unsolved. It is as inexplicable as the magnificent cylinder seals of Eanna IV, or perhaps even more so.<sup>477</sup>

Several excellent pieces of animal sculpture were found at Warka, mostly in the "Kleinfunde" hoard. In all cases but one only the head is preserved. The exception is a figure of a couchant sheep with the head turned at right angles to the body; it differs from the amulets only in size (it is 10 cm. long) and in fineness of execution, especially in the carving of the head. There is a perforation from back to base, in which still remains a silver rod.<sup>478</sup> Two heads of sheep from much larger figures are excellently modeled. One head is 15 cm. long, the other 11 cm.<sup>479</sup> The latter, in serpentine, particularly shows a sense of plastic values on the part of the artist and a delicacy of detail which are almost comparable to those displayed in the human head from Eanna III. Separate animal heads and ears, in metal or stone, and a foot and an eye, in stone, were found.<sup>480</sup>

Another very beautifully carved animal figure was found in the first season, unstratified. It is a couchant cow which had originally rosette-shaped inlays all over the body and apparently inserted horns. The head points straight forward, and the beautifully stylized rendering of the soft folds of the muzzle is a delight.<sup>481</sup>

The earliest piece of monumental sculpture in relief comes from Eanna III.<sup>482</sup> Perhaps the great alabaster beaker from the "Kleinfunde" hoard (see pp. 135 f.) should be considered the earliest example, but it represents the practice of putting scenes of monumental character on objects of daily use. Now for the first time appears a stela, an independent art form, made for the sole purpose of depicting a scene or theme which had some intrinsic significance.<sup>483</sup> The

476. A tendency to softness of modeling is visible in the later, "realistic" style of Early Dynastic sculpture (see *OIP* XLIV 28-33 and LX 4-7) but in our estimate is far from achieving the goal attained by the Warka head. In spite of Frankfort's belief that this head is not too far removed from a contemporary Khafajah figure (see below) and from Early Dynastic styles (see *OIP* LX 1 f.), we feel that it is of a different style.

477. A reconstruction of this head has been made in the Iraq Museum; see Seton Lloyd in *Sumer* II (1946) 5-9 and Pls. V-VI.

478. *Kleinfunde*, Pls. 6 and 7 b-c, p. 17.

479. *Ibid.* Pls. 7 a and 8 b, 4 b and 8 a respectively. Two similar heads were found in an Early Dynastic building (*UVB* XI 21 and Pl. 33).

480. *Kleinfunde*, Pl. 14.

481. *UVB* I, Pl. 18 and pp. 41 f.

482. *UVB* V, Pls. 12-13 and pp. 11-13.

483. Whether the scene on this stela is to be interpreted as historical, as Frankfort interprets the "king-on-the-battle-field" scenes of the Uruk style cylinders (see *Cyl. Seals*, pp. 22 f.), or as religious, depicting some cosmic battle, we cannot say. It is even possible that it is purely decorative and has no commemorative value. But the important point seems to be the transition from a utilitarian object as a medium of artistic expression to a special art form. A similar intellectual process occurs in Egypt in the 1st dynasty in the transition from aggrandized cosmetic palettes as media to stelae. The many problems, both psychological and artistic, which this transition involves are too complex to be dealt with here, but the phenomenon is sufficiently interesting to warrant its mention at least.

stela, made of a block of basalt, measures approximately  $80 \times 57$  cm. but is not entirely preserved; the block is irregular in shape, and no attempt was made to form it artificially other than to smooth off one face. The representation consists of two groups: the upper depicts a bearded man in knee-length skirt spearing a lion rearing on its hind legs, and the lower shows a similar man aiming with a bow and arrow at a similarly posed lion. There was no attempt to separate one group from the other or to compose them artistically, though they do more or less symmetrically fill the available space. The details of the representation are particularly interesting for comparative purposes. The bearded man in each group is almost certainly the same individual (or rather of the same type) as the "king" of the Warka IV cylinders. Both have knee- or calf-length skirt with fastening down the side and rolled edge at the waist, fillet around the head, long beard with rounded edges, shoulder-length hair with rounded edges, large beaked nose, and even apparently the same type of spear. The most amazing parallel for the representation on the stela is to be found on the famous Gabal al-Araq knife handle, dating from the end of the predynastic period in Egypt, one of whose faces has at the top a heraldic group of two rampant lions between which stands a bearded man who closely resembles the figures on the Warka stela in all details of costume, hairdress, etc. The lions on the knife handle, though more delicately done, resemble the stela lions in pose and conventions of rendering, especially in the deep line which marks the juncture of hind leg and body.<sup>484</sup> The Warka stela is further interesting as being our only indication that the bow and arrow were known at this time. The bow is a simple one, and the arrow is of the type with chisel head and feathered end.

#### UR

In the kiln stratum of the "Flood" pit appeared a very finely made animal figure in steatite, a wild boar couchant with paws stretched out in front and head looking straight forward.<sup>485</sup> The muzzle is carved to show the tusks and folds of flesh, a stylized but very nice piece of work. There is a large groove around the animal's belly, probably to hold a support of some kind. A hollow on top of the back has a raised rim, which gives the object the appearance of a theriomorphic vessel, but the body is apparently solid.

#### TELLOH

Telloh yielded a figure of a couchant sheep, rather crudely done, but definitely similar to the Warka example mentioned above. One may guess from the photograph<sup>486</sup> that this is larger than the amulets, but the text does not mention the object.

#### KHAFAJAH

A little figure found in Sin Temple IV at Khafajah scarcely deserves to be called monumental, particularly in view of the magnificent Warka head, but it is definitely outside the figurine class.<sup>487</sup> It is about 10 cm. high and represents a woman dressed in a short skirt with edge rolled at the waist; the upper body is nude, and the hands are clasped just below the breasts. The head is bare with a band around it; the long hair hangs straight and plain almost to the waist. The face shows some roundness as to cheeks but exhibits that tendency to split the face into separate planes which characterizes the "earlier style" of Early Dynastic sculpture.<sup>488</sup> The features are summarily indicated, except the large hooked nose, which is quite carefully modeled. The eyes are fairly deep but apparently were not inlaid; the eyebrows are raised ridges and do not meet over the nose. The body is less squared in outline than is usual in later sculpture, and the full breasts are more naturalistically modeled than in later figures. In technique

484. See A. Scharff in *Zeitschrift für ägyptische Sprache und Altertumskunde* LXXI (1935) 94-96 and Pl. I a-c.

485. *AJ* X, Pl. XLI b and pp. 33 f.

487. *OIP* LVIII 26 and Fig. 23; *OIP* LX 1 and Pl. 1.

486. *Telloh*, Pl. 7:5.

488. See *OIP* XLIV 19-27.

this little figure is only mediocre, even without comparison to the Warka head, but it represents, as does the latter, the new idea of sculpture in the round on a considerably larger scale and in a more permanent material than had been known before.

Clay figurines still exist in the Protoliterate period at Khafajah. There are several crude animals, not essentially different from those of the Ubaid period, and from phase *d* the upper part of a human figure.<sup>489</sup> This is slablike, the occipital region projecting slightly and the great beaked nose projecting much more prominently. The eyes are applied pellets of clay with a horizontal gash across each; the eyebrows are applied strips, nicked to represent hair. No other features are represented. The outspread arms are simple curving winglike appendages. The sex of the being is dubious, but another figure with similar face is clearly represented as a woman by the addition of small pellets for breasts.<sup>490</sup> The bodies of two other female figures show the usual emphasis on sexual attributes; one is distinguished by a series of incisions on the right shoulder, perhaps representing tattooing.

A rather elaborate carving worked *à jour* in alabaster shows a "two-story" arrangement with a bull in the lower panel on each long side and human figures standing in the upper panels. The one preserved end has a "Venetian-blind" pattern. What the object represents, or what it was used for, we cannot say, nor have we any clear idea how it looked when complete. All which is now preserved may be but the elaborate substructure for a stone vessel.<sup>491</sup>

#### MISCELLANEOUS OBJECTS

A vessel of glazed frit was found at Ur in the kiln stratum of the "Flood" pit.<sup>492</sup> Two little frit jars from Khafajah may be Protoliterate or Early Dynastic I.

Numerous little slate and limestone objects called "gamesmen" occurred at Jamdat Nasr; some are ovoid, and others flat-based with slightly carinate profiles and pointed tops.<sup>493</sup> It is quite possible that some of the little clay pieces found at Warka, Telloh, and Farah and classified as personal ornaments (see e.g. p. 145) may be game pieces, especially the cones, tetrahedrons, and spheres.

In the "Kleinfunde" hoard from Warka numerous pieces of stone and shell which may be inlays were found.<sup>494</sup> Many of the little squares, triangles, or rhomboids would fit together as tesserae in mosaics. Identical objects from Khafajah, however, are known to be beads which were strung together to form intricate designs, and we suspect that the examples from Warka are perforated and are beads rather than inlays. There are also in the Warka hoard numerous petals and centers of rosette-like flowers which remind one strongly of the "flower-cones" from the temple of Ninhursag at al-<sup>c</sup>Ubaid.<sup>495</sup> Eyes for inlay are published with the Warka hoard (but see p. 157) and from the intermediate layers between levels *C* and *D* of the Anu ziggurat.<sup>496</sup> Other pieces which look like inlay parts are perforated and strung on copper wires,<sup>497</sup> like the parts of the curved "horn" from the White Temple of the Anu ziggurat (see p. 144).

A large stone object from the "Kleinfunde" hoard consists of a rough base and a smooth

489. *OIC* No. 20, Fig. 57 c.

490. *Ibid.* Fig. 57 b. This and the next two mentioned are from Sin Temple V (originally VI in *OIC* No. 20), which extends into Early Dynastic I (see *OIP* LXIII, Table III).

491. *OIC* No. 20, Fig. 27 and p. 35. This object too may belong to Early Dynastic I, since it is from Sin V (originally VI).

492. *AJ* X 331.

493. *Jemdet Nasr*, Pl. LXXIV 7 and p. 278. An exact duplicate of the carinate variety was found at Khafajah.

494. See *Kleinfunde*, Pls. 32-34.

495. See *UE* I 118-20 and Pl. XXXIV 1.

496. *Kleinfunde*, Pl. 32 d and p. 28; *UVB* VIII 52 and Pl. 48 a.

497. *Kleinfunde*, Pl. 34 b.

ring at the top. The excavator suggests that it might have been used for hitching animals, with the rough part buried in the earth.<sup>498</sup>

A stone object with cylindrical shaft over which is fitted a piece of sheet gold with splayed top was found in the intermediate layers between levels *C* and *D* of the Anu ziggurat at Warka; it is bored lengthwise.<sup>499</sup> It is suggested that this object is a scepter, but it may have formed part of some piece of furniture or of an object of cult usage.

Traces of woven cloth are impressed on a copper animal amulet from Eanna level III at Warka;<sup>500</sup> the existence of cloth even before this time could have been suspected on the basis of the existence of spindle whorls.

A large *Tridacna* shell from Khafajah is ornamented with bands of inlay very similar to those of the inlaid stone vessels from Warka and Khafajah. A fragment of a model boat in bitumen occurs in phase *c*; it somewhat resembles clay models of the Ubaid period (see p. 87).

Clay plaques which were used as inlays in some of the Warka temples are mentioned on page 127. Pieces found include animal figures, rosettes, Inanna symbols, crosses, and purely geometric elements, the last used probably as frames or corner pieces for friezes. Quite a few of these inlays are covered with circles, either simple or with dot centers, in obvious imitation of cone mosaic; other pieces have incised or relief ornament. These plaques were found in levels III-I of the Eanna precinct,<sup>501</sup> so their usage apparently carried on into the Early Dynastic period.

Among the most important objects which have come from prehistoric levels at Warka are fragments of small stone building models found in the intermediate layers between levels *C* and *D* of the Anu ziggurat.<sup>502</sup> Their chief importance is the invaluable assistance they render in our attempts to reconstruct actual buildings. All are fragmentary, but they clearly imitate such buildings as those in the Anu ziggurat, where they were found. The largest has one corner preserved entirely.<sup>503</sup> The walls are niched; the projecting parts bear numerous vertical striations, which one suspects are arbitrary representations of elaborately recessed niches. The backs of the niches seem to indicate that the building had three stories; in the lowest third there are numerous horizontal indentations across the backs of the niches, just as in the exterior niches of the White Temple (see p. 111). At the top each niche is cut through by a triangular window, an indication as to how the actual temples received light. Above the niches are two horizontal courses, each of which has at its top rows of small regularly spaced holes; these might represent the ends of the beams which carried the roof of an actual temple. A fragment from another model likewise shows a corner.<sup>504</sup> Here the niches are not stepped, but they have horizontal indentations across the backs and each of the intervening wall areas has a vertical groove in the center. The most important feature of this piece is a doorway at the corner, in precisely the position of the main entrance to the *D-E* temples of the Anu ziggurat; the doorway is provided at either side with a "Bügelchaft," as we often find doorways represented on seals and reliefs. Two fragments<sup>505</sup> show horizontal members ornamented with little circles, perhaps representing cone mosaic.

At Warka in the intermediate layers between levels *C* and *D* of the Anu ziggurat were found "an astonishing number of lumps of unformed copper," some of which are as large as a fist; but all are almost completely oxidized.<sup>506</sup> In the same layers appear small pieces of gold foil.<sup>507</sup> Traces of copper appear in Eanna level XI.<sup>508</sup> The "Kleinfunde" hoard yielded pieces of silver;

498. *Ibid.* Pl. 36 b and p. 46. Stone rings, presumably to tether animals, were found *in situ* in levels *C* and *E* of the Anu ziggurat (see p. 115 above).

499. *UVB* IX, Pl. 29 b and p. 25.

500. *UVB* VII, Pl. 24 k.

501. See *UVB* II 33 and Figs. 19-31; *UVB* XI 22 and Pl. 34.

502. *UVB* VIII 45 and Pl. 48 b, k-n.

503. *Ibid.* Pl. 48 l.

504. *Ibid.* Pl. 48 k.

505. *Ibid.* Pl. 48 b, m.

506. *UVB* IX 25.

507. *UVB* VIII 53.

508. *UVB* III 30.

and sheets of thin gold, some with nail holes (often still holding copper nails) which bespeak their use as overlays, occur.<sup>509</sup> Copper ornamentation was used in Temple I at Shahrain.<sup>510</sup>

It may be pointed out here that the earliest datable occurrences of copper in the South are in the Warka period, while in the North copper seems to be used during the Ubaid period (see p. 64) and even to some extent in the Halaf period (see p. 37). The fact that most of the early levels at the southern sites are under, or close to, present water level is sufficient excuse for the lack of preserved metal, even if it had been known and used for some time.

We have several times mentioned the Jamdat Nasr tablets in connection with the dating of remains within the Protoliterate period. These were found by Langdon at the site of Jamdat Nasr in the large building described above (see pp. 130 f.), groups of tablets occurring in several different rooms.<sup>511</sup> The documents all seem contemporaneous, and they exhibit a stage of writing in which the pictographs have become largely conventionalized but are not yet entirely abstract, as they become in the Early Dynastic period. These tablets were associated with various types of objects, most notably painted pottery of Jamdat Nasr style and seals with drill-hole designs. The relative date of the material was established by the sequence of levels in the Eanna precinct at Warka, for tablets of the same type were found in level IIIb,<sup>512</sup> while tablets inscribed with signs of more explicitly pictographic character were found in IIIc and IV and others of a more advanced paleographic stage occurred in level IIIa.<sup>513</sup> The association of Jamdat Nasr type tablets, Jamdat Nasr style pottery, drill-hole style seals, and certain other elements of material culture thus became the distinguishing criterion of a culture period named after the site of Jamdat Nasr,<sup>514</sup> which has until recently been generally accepted (see p. 97).

## COMPARATIVE STRATIGRAPHY

### WARKA

The first problem in comparative stratigraphy is the correlation of the Anu ziggurat levels with those of the Eanna precinct. In describing the architectural remains we indicated (see pp. 128f.) that the most recent evidence suggests that the A 1 platform of the Anu ziggurat was built somewhere around the time of Eanna VIII, though some scholars consider the White Temple contemporary with Eanna III. Since the two areas were used for the same purpose, if the White Temple and Eanna III are contemporary we have every right to expect the objects they contain to be similar in character. Unfortunately the evidence available at present is indecisive, for very few objects are published. Some pottery from the Eanna precinct has been published,<sup>515</sup> but none at all from the Anu ziggurat. Some other types of small objects from the ziggurat are published, but, with the exception of the "Kleinfunde" hoard (whose stratigraphic value is lessened precisely for the reason that it is a hoard and thus may contain objects of levels earlier than that in which it was found), virtually nothing but seal impressions<sup>516</sup> is published for the Eanna precinct. In this difficult situation any conclusions which we may draw will obviously be tentative and subject to revision with publication of additional evidence.

509. *Kleinfunde*, p. 47 and Pl. 35.

510. *ILN*, May 31, 1947, p. 581.

511. See Langdon in *Der Alte Orient* XXVI 73. The tablets are published in Langdon, *Pictographic Inscriptions from Jemdet Nasr*.

512. *UVB* II 27-29 and IV 22 mention such tablets in Eanna III-II, and *UVB* III 11 and IV 19-22 attribute III-II to the "Jamdat Nasr" period, while *UVB* V 9 f. speaks only of III as "Jamdat Nasr." *UVB* VI 12 is the first report to state that the Jamdat Nasr type tablets were found in the IIIb phase, and later reports (*UVB* VII 11, VIII 8 f., and XI 24) agree. However, the entire level III seems tacitly to be attributed to the "Jamdat Nasr" period even in these later reports, and *UVB* IX 10 explicitly attributes IIIa to the "Jamdat Nasr" period.

513. See *UVB* XI 24 f. For description and discussion of the Warka tablets see A. Falkenstein, *Archaische Texte aus Uruk* (Deutsche Forschungsgemeinschaft, Berlin, "Ausgrabungen . . . in Uruk-Warka" II [Leipzig, 1936]).

514. See e.g. H. Frankfort, *Archeology and the Sumerian Problem* (SAOC No. 4 [1932]) pp. 10-15; *DSA*, pp. 49 ff.

515. *UVB* IV, Pls. 16-21.

516. *UVB* V, Pls. 22-28.

There are only two facts with which we can deal: the stratification of the published objects from the ziggurat, and the fact that all material in the "Kleinfunde" hoard must be pre-Early Dynastic.<sup>517</sup> First, then, let us see whether the objects from the ziggurat are markedly similar to those from the hoard and, if they are not, let us look for parallels from other sites which may give us a basis for dating. If the ziggurat is much earlier than Eanna III, we cannot, of course, expect to find closely comparable objects from other sites, since there is little material outside that from Warka datable to the Warka and early Protoliterate periods.

Since most of the objects from the ziggurat, except those of known Ubaid types, have just been described in detail, we merely list them here with such parallels as can be adduced.

*Level X.*—A stamp-seal design depicting a horned animal<sup>518</sup> is said to be in the Jamdat Nasr style, but we see no connections with that style except in the use of animal subject. The type of animal is not known in Jamdat Nasr style seals; the fairly high relief is quite different from the Jamdat Nasr techniques, which use thin lines or drill holes; the square outline, though known in Jamdat Nasr style seals, is not at all characteristic of them.

*Levels D–E.*—There are no illustrated objects except some little "paint pots."<sup>519</sup> Similarly shaped vessels without traces of paint occur at Telloh.<sup>520</sup> The metal tools and weapons mentioned (see p. 148) provide no certain parallels for objects known elsewhere.

*Intermediate layers between levels C and D.*—A stone block whose upper surface was worked into a shallow pan with an outflow channel is compared by the excavator with the built offering-places in Eanna II, but the description of the latter suggests no similarity.<sup>521</sup>

Stone beakers with knob bases have no parallels, and those with pointed bases might only with some stretch of the imagination be considered similar to certain decorated spouted vessels of the "Kleinfunde" hoard.<sup>522</sup> Stone bowls are paralleled by vessels found in late Protoliterate context, but the forms are too simple to be very significant.<sup>523</sup> A heavy rim fragment of stone<sup>524</sup> is probably from a jar of form 2 (see Fig. 18), which occurs frequently at sites which yielded late Protoliterate material (see pp. 136–38). A stone trough with rectangular horizontal section<sup>525</sup> is a typical late Protoliterate form (Fig. 18:3; see pp. 136–38). Another type of shallow stone trough, with a handle at each end,<sup>526</sup> and a stand with triangular recesses for inlays<sup>527</sup> have no parallels.

A group of tiny couchant animals in stone (see p. 144) is compared with animal figures from Eanna III.<sup>528</sup> None of the ziggurat figures illustrated finds a close parallel elsewhere, with the possible exception of one from Telloh.<sup>529</sup> A flying bird is similar in pose to one from the "Kleinfunde" hoard,<sup>530</sup> but the latter is modeled in more detail. A larger couchant animal<sup>531</sup> has the pose common for animal amulets, but such a large crude figure is not known anywhere else in prehistoric times.

517. Some objects of the "Kleinfunde" hoard are paralleled by objects from the Khafajah Protoliterate strata, which help to fix the probable date of the former.

518. *UVB VIII*, Pl. 50 d and p. 53.

519. *Ibid.* Pl. 51 e and p. 53.

520. *Telloh*, Pl. 24 1 d–e.

521. *UVB VIII* 51 and Pl. 52 b, also p. 14.

522. See *ibid.* Pls. 59 and 58; for the beakers with pointed bases cf. *Kleinfunde*, Pl. 27.

523. See esp. *UVB VIII*, Pl. 60; cf. *Kleinfunde*, Pl. 24 c; *AJ XIV*, Pl. XLVIII 19621; *Telloh*, Pls. 5:2 a, IX 4516, and X 4356; *Jemdet Nasr*, Pl. LXVII 36, 40; unpublished specimens from Khafajah.

524. *UVB VIII*, Pl. 60:9990c.

525. *Ibid.* Pl. 51 a.

526. *Ibid.* Pls. 51 b and 58:16664\*; *UVB IX*, Pl. 29 a.

527. *UVB VIII*, Pl. 52 d.

528. *Ibid.* p. 52. The reference there given is to *Kleinfunde*, Pl. 12 b, which is apparently in error for Pl. 12 a, since none of the ziggurat figures resembles Pl. 12 b. Pl. 12 a, however, shows a group of purchased objects presumed to come from the neighborhood of Warka.

529. Cf. *Telloh*, Pl. 36:2.

530. *UVB VIII*, Pl. 49 b; cf. *Kleinfunde*, Pl. 13 e.

531. *UVB VIII*, Pl. 49 g.



Two small human figures in stone have no parallels (see p. 150).

The more or less pear-shaped maceheads (see p. 148) are of a type common throughout prehistoric and protohistoric Mesopotamia.

An object which is called a scepter (see p. 154) is unparalleled. The use of gold leaf over another material is known elsewhere but is not restricted in date.

An eye for inlay is paralleled by eyes published with the "Kleinfunde" hoard (see p. 153), but, since the latter have no Warka field numbers but only Berlin Museum numbers, we suspect that they did not come from the Warka excavation. Such eyes occur as statue inlays throughout the Early Dynastic period.<sup>532</sup>

For stone building models (see p. 154) the only comparable piece is a clay censer in the form of a building from Gaura XIII (see p. 50).

Two stamp seals were found (see pp. 138 f.), but neither design resembles Jamdat Nasr style designs in technique of cutting or composition. A cylinder seal has certain features which connect it with Uruk style seals (see p. 139), but nothing closely comparable is known.

*Level C.*—The postholes of this level yielded beads and stone maceheads which are not illustrated (see pp. 145 and 148) and a number of cylinder-seal impressions. The impressions have features which seem to point toward Uruk style glyptic (see p. 139) but are apparently not at the stage of development reached in seals of Eanna IV.

*Level B.*—A couchant carnivore in clay, with forelegs stretched out in front and head looking straight forward, resembles in pose a lion from the "Kleinfunde" hoard and perhaps one from Telloh as well as one which is depicted on the altar of the Painted Temple at 'Uqair.<sup>533</sup> The modeling of the animal's head is unusually fine and has no counterpart elsewhere. A "horn" made of stone disks strung on copper wire exhibits a technique used for ornaments in the "Kleinfunde" hoard (see p. 153), but such work as part of an animal figure is unknown.

A frog, posed as if seen from above, is said to be closely related to one found in Eanna III,<sup>534</sup> but we see no marked similarity between the two pieces. It is classified as a stamp seal because it has drill holes and incised lines on the base. "Gypsum tablets" bear poor impressions of a badly cut cylinder seal which seems to be different in both subject and technique from any others we know (see p. 140).

An alabaster bird-vase belongs possibly to the filling above the White Temple (see p. 134). A stone bird-vase comes from Khafajah but is not a very close parallel. The Susa counterparts suggested by Jordan<sup>535</sup> are not valuable as evidence for dating. The idea of theriomorphic vessels was known in Mesopotamia as early as the Halaf period (see p. 32).

*Level A.*—A little figure of an indeterminate animal is compared by Heinrich with one from Eanna III<sup>536</sup> but seems to us very far removed from it. Some purchased figures already mentioned in connection with figures from the intermediate layers between levels C and D (see n. 528) are similar. A gypsum figure of a kneeling fettered man is not illustrated but is said to be like those found out of context in a Parthian temple at Warka (see p. 150). No counterparts of these are known in early times, but in pose they resemble the captives in Eanna IV seal impressions.

An unillustrated potsherd with red paint and a dark-colored design is said to belong to the "Jamdat Nasr" period (see p. 102).

Two stamp seals are of the Jamdat Nasr drill-hole style, and a third has simple crosshatching (see p. 141). One of the drill-hole seals has a close parallel from Telloh,<sup>537</sup> and the crosshatched

532. See e.g. *OIP* XLIV and LX.

533. *UVB* VIII, Pl. 49 d. Cf. *Kleinfunde*, Pl. 13 b; *Telloh*, Pl. 36:1 (position of forelegs uncertain); *JNES* II, Pl. X.

534. *UVB* VIII 51 and n. 4.

535. *UVB* III 29.

536. *UVB* VIII, Pl. 48 c and p. 51.

537. *UVB* VIII, Pl. 50 e; cf. *Telloh*, Pl. 36:6 a.

one has a duplicate from Jamdat Nasr. Numerous cylinder-seal impressions (see pp. 140f.) were found between two pavements of the ramp. The designs include animals with intertwined necks and animal files which resemble Uruk style designs, but a strange design consisting of nothing but "Bügelshäfte" has no counterparts elsewhere.

On the basis of the foregoing list it is evident that the majority of the published objects from the Anu ziggurat have no counterparts elsewhere and that most of the citations to *Kleinfunde* refer either to objects of unknown provenience or to objects with little actual relationship to any of the ziggurat finds. Of objects from the ziggurat which have parallels in late Protoliterate material—that is, among objects known to occur in Eanna III,<sup>538</sup> at Khafajah in Protoliterate *c* and *d*, or at Jamdat Nasr itself—we have only the following:

1. A probable example of stone vessel form 2 (see Fig. 18), from the intermediate layers between levels *C* and *D*. The piece is broken, but rim, neck, and shoulder strongly suggest this form.
2. A rectangular-sectioned stone trough of form 3 (see Fig. 18), from the intermediate layers.
3. A series of stone bowls, from the intermediate layers. These are paralleled in late Protoliterate material, but the same forms continue in the Early Dynastic period.
4. Possibly a figure of a bird with outstretched wings, from the intermediate layers.
5. Possibly an alabaster bird-vase, probably from level *B*.
6. Three stamp seals, from level *A*.
7. Supposed Jamdat Nasr polychrome sherd, from level *A*.

The stamp seals and the polychrome sherd may be discounted, since the objects found in level *A* are of various dates (see e.g. p. 84). We cannot ascertain when the later platform (*A* 1) was destroyed, but the earliest covering strata found date to the Assyrian period. It is therefore probable that the platform was exposed until that time, so that objects of various periods could well have mingled with the debris of the bricks as the platform gradually disintegrated from erosion. The bowl forms have too long a range of existence to be significant. The flying bird and the bird-vase are only vaguely similar to late Protoliterate types. That leaves only stone vessels of forms 2 and 3, which were found in a context virtually sealed from later penetration, as reasonably close parallels to material found in late Protoliterate context.

Ziggurat objects with counterparts in other periods include an eye inlay of a type used for statues throughout the Early Dynastic period and stone temple models, which are reminiscent of a clay censer in the form of a building from Gaura XIII. Many cylinder-seal impressions are suggestive of Uruk style seals, but there are no conclusively Uruk style designs; the closest parallels are impressions found in the ramp of level *A*.<sup>539</sup>

It seems to the author that the bulk of the evidence supplied by the small objects, like that furnished by the architecture, points to a date for the Anu ziggurat before Protoliterate *c-d* and even before the full development of the Uruk style glyptic. This view would see the ziggurat cylinders as precursors of the Uruk style<sup>540</sup> and the little animal figures as predecessors of the finely made animal amulets of the "Kleinfunde" hoard and of sites which yielded late Protoliterate objects. Regarding the examples of stone vessel forms 2 and 3 we would say simply that these forms, which have been heretofore regarded as typical of the "Jamdat Nasr" period, begin at an earlier period. This explanation seems not implausible, since Jamdat Nasr type ob-

538. The possibility of "Kleinfunde" objects deriving from earlier levels than that in which they were found need not concern us greatly here, since the only "Kleinfunde" parallels are for types found in late Protoliterate context elsewhere.

539. These furnish good evidence for dating since they were clearly deposited between two pavements in a context hardly liable to penetration by later material.

540. We may mention that in technique the designs have nothing in common with the Jamdat Nasr style—no drill holes, no plain linear cutting—but throughout show an attempt at rounded, modeled forms.

jects survive into later periods, as witness the many Jamdat Nasr style seals found at Tell Agrab in an Early Dynastic II temple.<sup>541</sup>

Since we are still uncertain as to the exact dating of the Anu ziggurat, it may seem that the listing of parallels was pointless. We believe, however, that it is of value not only negatively, in reiterating our uncertainty in the absence of more stratigraphic criteria, but also positively, in showing the tenuousness of the basis for a "Jamdat Nasr" date.

#### SOUTHERN MESOPOTAMIA

In the material so far published there is in the Warka period nothing comparable with finds from the type site except a few related features in the Ur-Ubaid III graves and the kiln stratum at Ur (see p. 104) and isolated finds from other sites (see Table 2). Only with Warka Eanna VIII begins a material culture which finds numerous parallels at other southern sites, and the numbers and significance of these parallels increase toward the end of the Protoliterate period.

The phases of the Protoliterate period as established by Delougaz on the basis of evidence from Warka and Khafajah may be defined as follows. Phase *a*, representing the very beginnings of writing (of which no records have yet been found) and thus the formative phase of the new culture, is at present known only from Eanna VII-VI; phase *b* represents the stage of writing shown by the Eanna IV tablets, and the culture, now at its height, is exemplified by the magnificent temple sequence of Eanna V-IV and the Uruk style glyptic; phase *c* is represented by the earliest material from Khafajah, comprising Sin Temples I-III; phase *d* includes Sin Temple IV and part of V, which carries over into Early Dynastic I. Delougaz does not equate Warka Eanna III with any phase of the Protoliterate period, believing the material attributed to it to be a mixture. The author, while accepting this stratigraphy in the main, would amend it slightly. First, it seems most probable on the basis of the pottery that the Protoliterate period begins with Eanna VIII instead of VII, the former level marking the beginning of certain ceramic features which carry on in succeeding levels—notably sinuous-sided bowls (Fig. 12, form 7), handled cups (form 8), and fine wheelmade light-colored pottery (see pp. 99 f.). Secondly, we believe that Eanna IV and III can be somewhat more precisely dated on the basis of evidence from Khafajah. Since Eanna IV still has beveled-rim bowls (form 4) and sees the first appearance of flaring bowls (form 12), we suggest that it continues into Protoliterate *c*. Eanna III has several elements which connect it with Protoliterate *d*, the most important being inlaid stone vessels, relief-decorated stone vessels, and double-fish amulets;<sup>542</sup> hence we are inclined to attribute that stratum to the *d* phase. The fact that both Eanna III and the strata attributed to Protoliterate *d* at Khafajah immediately underlie Early Dynastic strata<sup>543</sup> and that there is no evidence of a break or a noticeable interval of time between the Protoliterate and Early Dynastic strata at either site seems further indication of approximate contemporaneity of phase *d* and Warka III.

With these amendments, the chronology of the Protoliterate period in terms of the Warka

541. To be published in Frankfort, *Stratified Cylinder Seals from the Diyala Region (OIP)*. Frankfort is inclined to believe that all these seals are heirlooms from the late Protoliterate period, but allows the possibility that some classes may continue to be made in the Early Dynastic period. In view of the large number—approximately half of the total number of seals found—the writer believes it more likely that the majority of the seals are Early Dynastic products in the style which originated in the previous period, while some few may be actual heirlooms.

542. Most of these parallels come from the "Kleinfunde" hoard, and it may be argued that they are not valid, since the material in a hoard may not all be contemporaneous. However, we are not attempting to show that the entire hoard dates from phase *d*, but merely to date specific types of objects. These particular types of stone vases and amulets do not occur at Khafajah before phase *d*, and it seems reasonable to assume that the same is true of Warka and that therefore Eanna III, the stratum in which the hoard was buried, is at least partially contemporaneous with Protoliterate *d*.

543. We have stated above (p. 128) that the appearance of plano-convex bricks in Eanna II places that rather ephemeral level in the Early Dynastic period, and we suspect that the pottery vessels of known Early Dynastic types, such as the solid-footed chalices, listed as coming from III/II belong to level II (see p. 102).

stratification stands as follows: phase *a* is Eanna VIII-VI; phase *b* is Eanna V-IV, with IV possibly carrying on into *c*; phase *d* probably contains Eanna III. The foundation of the Sin Temple at Khafajah at the beginning of Protoliterate *c* cannot be precisely equated with any Warka level; but the likelihood is that Sin I is approximately contemporaneous with the end of Eanna IV.

Using Warka as the standard for the Warka period and Protoliterate *a-b* and Khafajah and Tell Asmar as the standard for Protoliterate *c-d* we shall now attempt to date the other sites by the elements which they share with the type sites. Shahrain, Ur, and Raidau Sharqi have not yet provided enough material to justify any attempt at precise dating, although the Shahrain pottery seems to cover both the Warka and Protoliterate periods.

Telloh, however, has provided more evidence. A carinate ring-based spouted jar (Fig. 12, form 10) and jars with maximum diameter well toward the bottom (see p. 105) are paralleled in Eanna VII, and various spouted vessels are roughly similar to specimens from Eanna V.<sup>544</sup> Numerous other parallelisms between Telloh and the type sites include pottery forms 4 (Warka XII-IV, Protoliterate *c* at Khafajah), 8 (Warka VIII-VI), 11 (Warka VI, Khafajah *c-d*), 12 (Warka VI-III/II, Khafajah *c*, Asmar *d*), 18 (Khafajah *c-d*), 19 (Khafajah *c*), possibly 23*a* (Khafajah *c*), numerous spouted jars (Khafajah *c-d*), saucer-shaped lids (Khafajah *c*), multiple-spouted vessel (Khafajah *d*), Jamdat Nasr style painting (Khafajah *c-d*); stone vessel forms 1-2 (Khafajah *c-d*), 3 (Khafajah *d*); Jamdat Nasr style cylinders (Khafajah *c-d*); animal-shaped stamp seals (Khafajah *c*), drill-hole designs on stamps (Khafajah *c*); couchant-animal amulets (Khafajah *c-d*), frog and fish amulets (Khafajah *c-d*), "claw-bird" amulets (Khafajah *d*), pig amulet (Khafajah *c*); long shell bead (Khafajah *c-d*); drop-shaped pendants (Khafajah *c-d*), ring pendants with suspension loop (Khafajah *c-d*). Telloh therefore shows material of the entire Protoliterate period.

Farah I contains numerous spouted jars (Khafajah *c-d*), pottery form 12 (Warka VI-III/II, Khafajah *c*, Asmar *d*), a jar similar to form 17 (Khafajah *d*), form 19 (Khafajah *c*), Jamdat Nasr style painting (Khafajah *c-d*). Unstratified finds from Farah include stone vessel forms 1-2 (Khafajah *c-d*), 3 (Khafajah *d*), inlaid stone vessel (Khafajah *d*); Jamdat Nasr style cylinders (Khafajah *c-d*), drill-hole designs on stamps (Khafajah *c*); pig amulet (Khafajah *c*), "claw-bird" amulet (Khafajah *d*); drop-shaped pendants (Khafajah *c-d*). The site shows nothing demonstrably earlier than Protoliterate *c*.

Jamdat Nasr has twisted handles of pots (Warka VIII) and a bent spout (Warka VII-VI), which suggest settlement in the Protoliterate *a* phase. It has nothing especially characteristic of the *b* phase, but has the following parallels to material of the later phases: pottery forms 4 (Warka XII-IV, Khafajah *c*), 8 (Warka VIII-VI), 11 (Warka VI, Khafajah *c-d*), 12 (Warka VI-III/II, Khafajah *c*, Asmar *d*), 14 (Warka IV-II, perhaps Khafajah *d*), 17 (Khafajah *d*), 18 (Khafajah *c-d*), 19 (Khafajah *c*), numerous spouted jars (Khafajah *c-d*), possibly saucer-shaped lids (Khafajah *c*), Jamdat Nasr style painting (Khafajah *c-d*); stone vessel forms 1-2 (Khafajah *c-d*); Jamdat Nasr style cylinders (Khafajah *c-d*), drill-hole designs on stamps (Khafajah *c*); couchant-animal amulets (Khafajah *c-d*), pig amulet (Khafajah *c*); drop-shaped pendants (Khafajah *c-d*), ring pendants with suspension loop (Khafajah *c-d*), squatting nude female figure (Khafajah *c* or *d*). Probably settlement at this site continued through the entire Protoliterate period.

At 'Uqair bent spouts (Warka VII-VI) were found in the Painted Temple and the fill above it along with beveled-rim bowls of form 4 (Warka XII-IV, Khafajah *c*). The "Jamdat Nasr" chapel yielded pottery forms 11 (Warka VI, Khafajah *c-d*), 12 (Warka VI-III/II, Khafajah *c*, Asmar *d*), 17 (Khafajah *d*), 18 (Khafajah *c-d*), 19 (Khafajah *c*), saucer-shaped lids (Khafajah *c*), Jamdat Nasr style painting (Khafajah *c-d*).

544. Telloh, Pls. IV 5434 and VII 4981; cf. UVB IV, Pl. 19 D *a'*, *c'*.

To summarize the phases of the Protoliterate period we suggest the following attributions:

- Phase *a*: Warka Eanna VIII–VI, level *A* of the Anu ziggurat, and Mosaic Temple I; unstratified material from Telloh and Jamdat Nasr; possibly the Painted Temple at ‘Uqair.
- Phase *b*: Warka Eanna V–IV, Mosaic Temple II; unstratified material from Telloh and probably Jamdat Nasr; possibly the Painted Temple at ‘Uqair.
- Phase *c*: end of Warka Eanna IV(?); unstratified material from Telloh and Jamdat Nasr; beginning of Farah I; possibly the “Jamdat Nasr” chapel at ‘Uqair; Khafajah Sin Temples I–III.
- Phase *d*: Warka Eanna III; unstratified material from Telloh and Jamdat Nasr; end of Farah I; possibly the “Jamdat Nasr” chapel at ‘Uqair; Khafajah Sin Temple IV and part of V; Asmar Earliest Shrine of the Abu Temple and material from soundings.

The Warka and Protoliterate cultures seem to be indigenous Mesopotamian products as far as we can tell. Their influence, particularly in the latter part of the Protoliterate period, spread quite widely through the Near East. Characteristic products, especially cylinder seals, have been found from Iran to Egypt. The contacts with northern Mesopotamia will be discussed in the next chapter after we have examined the cultures of the North in the late prehistoric age.

## V

## THE GAURA AND NINEVITE PERIODS

**N**INEVEH and Tepe Gaura are the main sources of information for the post-Ubaid phases in the North, but other sites contribute some data. At Nineveh level 3, though it begins in the Ubaid period, has features which suggest that it continues beyond that time; levels 4 and 5 represent a long span, perhaps extending into Akkadian times. At Tepe Gaura levels XIA–VII seem to represent about the same span of time, and at Nuzi levels IX–VII, as revealed in a test pit, fall within this range. Settlement at Tell Billa begins in late prehistoric times. Grai Resh was first occupied in Ubaid times, but most of the published material is post-Ubaid. Tell Brak has architectural remains comparable with those of the latter part of the Protoliterate period in the South. Tell Shaghir Bazar, after a gap starting sometime in the Ubaid period, was occupied again in late prehistoric times. As will be evident, the cultural divisions of the North do not coincide very well with those of the South. Hence we have adopted for the North the terms used in this chapter's title (see p. 194).

## POTTERY

We begin the discussion of pottery with that of Nineveh, since the distinctive ceramic types of Ninevite 5 are the key to the dividing point between the two periods with which we are concerned.

## NINEVEH

In discussing the pottery of Ninevite 3 (see pp. 56 f.) we called attention to the probability that this level extends beyond the Ubaid period. Ninevite 4 seems to cover a considerable length of time and to be divisible into two phases.<sup>1</sup> The pottery, however, is published as one body, so we deal with it as such.

Red-slipped pottery, stated to be similar in all respects to that of Warka, appears in quantity.<sup>2</sup> The vessels are said to have angular shoulders, sharp overhanging rims, and usually flat (or some ring) bases (apparently similar in profile to forms 18–19; see Fig. 12); but no such forms are illustrated. It is said that many such vessels have three or four perforated lugs, but the four-lugged jars illustrated<sup>3</sup> have very much more rounded profiles than those of the South and are round-based. They also have necks, whereas in the South many examples are almost hole-mouthed.

Pottery with incised decoration is found in Ninevite 4; combing is used,<sup>4</sup> also linear incision. A four-lugged jar (form 13) has a band of crosshatching on the shoulder between the lugs and closely resembles a red-slipped jar from Warka Eanna VI.<sup>5</sup> A sherd has a similar band of crosshatching on the shoulder; another has crescents, which may be fingernail impressions, at the neck.<sup>6</sup> Two sherds found near the bottom of the stratum have a multilinear pattern (perhaps combed);<sup>7</sup> two found near the top bear respectively a cable molding around the neck and a

1. AAA XX 165.

3. *Ibid.* Pl. LII 9–10.

2. *Ibid.*

4. *Ibid.* Pl. L 2, 14.

5. Cf. AAA XIX (1932) Pl. LXI 1 with UVB IV, Pl. 19 D b.

6. AAA XX, Pl. L 9 and 11 respectively.

7. *Ibid.* Pl. L 10, 12. It is impossible to recognize the precise style of incised work from the drawings.

row of little deep-cut triangles.<sup>8</sup> Incised decoration is found on the shoulder of a handled cup of form 8 (see Fig. 12) and on a little pot of form 20;<sup>9</sup> what appears to be a simple incised line connects the handles of a four-lugged jar of red-slipped ware.<sup>10</sup>

The first examples of reserved-slip ware appear in Ninevite 4, most of them near the top of the stratum. The earliest example is a jar with almost globular body, constricted neck, flat rim, and a long spout set diagonally on the shoulder.<sup>11</sup> Numerous other spouted vessels, all said to be characteristic of the "Jamdat Nasr" period, exist, but only a few are shown.<sup>12</sup> Two unstratified spouted jars are very similar to examples from the site of Jamdat Nasr.<sup>13</sup> Usually the spout seems to point diagonally up from the shoulder, as is the case in the South, but one spout is almost horizontal, and the down-bent spout also is known.<sup>14</sup>

There is a series of almost straight-sided bowls of form 21, which is unknown in the South; the rim is splayed outward and usually thickened, and there is a fairly sharp break between the vertical side and the rounded base.<sup>15</sup> The "Glockentopf" or beveled-rim bowl, familiar in the South (form 4), is said to be the most common form in this stratum, and flaring bowls of form 12 also occur.<sup>16</sup> A four-lugged jar with a cream-colored slip is somewhat similar to form 18 but has a ring base.<sup>17</sup> A handled cup (form 8) with incised decoration is mentioned above. A sharply carinate hole-mouth pot<sup>18</sup> seems to belong to level 4 (see p. 193). Attributed to 4-5 is a series of carinate bowls (form 23a) with disk or ring bases.<sup>19</sup>

The pottery of Ninevite 5 shows some striking new features. There is a new fabric, which is generally light gray in color but may be light cream or greenish; it is compact and fine in texture and is fired to a considerable hardness. Vessels of this fabric are either plain or incised, sometimes very elaborately.<sup>20</sup> There are fairly deep carinate bowls with pointed bases and nearly vertical sides (form 23b); occasionally the upper body is ribbed horizontally.<sup>21</sup> Other forms include chalices of form 24;<sup>22</sup> round-bodied pots with fairly wide necks;<sup>23</sup> and small jars rather like form 20 in profile but usually with more pointed bases, which have slits cut in the sides at about the point of greatest diameter, a new means of suspension.<sup>24</sup> Lugged jars have by now disappeared completely. Jars similar in shape to form 20 frequently have the upper body horizontally ribbed<sup>25</sup> in the manner of bowls of form 23b. A cup with slightly concave sides and tapering base<sup>26</sup> is significant for comparative purposes (see p. 193).

The technique employed for the elaborately incised vessels involves cutting away portions of the clay so that bands and panels are left in relief. The deeper portions are usually undecorated, while those in relief are ornamented with linear incision or punctuation. The effect of the best of these is excellent, for the work is most skilfully done.<sup>27</sup> Simple linear incision is used alone also, in single or multiple lines, horizontal zigzags, and often "feathered" lines. Hatched triangles, diamonds, and "butterflies" occur, also bands filled with short gashes and blocks ornamented with excised triangles. Plain incision is not infrequently combined with the relief technique. The most notable incised design, probably showing influence by the painted ware, is the figure of a goat, body and horns filled with fine hatching.<sup>28</sup>

8. AAA XX, Pl. XLIX 37, 21.

9. *Ibid.* Pl. LII 14 and 13 respectively.

10. *Ibid.* p. 167, Pls. L 6-8 and LI 7.

11. Cf. AAA XIX, Pl. LXI 18-19, with *Jemdet Nasr*, Pl. LXIII 8, 15.

12. AAA XX, Pls. L 7 and LI 7 respectively.

13. *Ibid.* Pl. XLIX 34-36 and p. 167.

14. See *ibid.* p. 168 and AAA XIX, Pl. LXI 27, 29.

15. AAA XIX, Pl. LXI 20 and p. 88.

16. AAA XIX, Pl. LVIII 10-13; AAA XX, Pl. LIII 3-5.

17. AAA XIX, Pl. LIV 5; bowls shown in Pl. LXI 4-6 may belong to Ninevite 4, but the form is close to that of the painted chalices of Ninevite 5.

18. *Ibid.* Pl. LVIII 23-25.

19. AAA XX, Pl. LII 2-6.

20. E.g. *ibid.* Pl. LII 1.

21. *Ibid.* Pl. LII 9.

22. *Ibid.* Pl. LII 12 and p. 167.

23. *Ibid.* Pl. LXI 9.

24. *Ibid.* Pl. LXI 4-7.

25. See *ibid.* p. 83 and AAA XX 172.

26. *Ibid.* Pl. LIII 8.

27. See *ibid.* Pl. LXII.

28. *Ibid.* Pl. LXIII 1.

The painted ware which is characteristic of Ninevite 5 has five main forms: chalices of form 24,<sup>29</sup> chalices with bowl of form 22 and long cylindrical stem with splayed foot,<sup>30</sup> deep bowls of form 23,<sup>31</sup> sharp-profiled little jars of form 25,<sup>32</sup> and larger stemmed jars which may be sharp shouldered or rounded in profile.<sup>33</sup> The fabric is light in color, of medium coarseness, with inclusions of chopped straw or grits in the largest examples; the surface was usually wet-smoothed before application of the paint. Paint is usually dark purple to brown, with some bright red and even green; the design is always monochrome.

The style of painting differs from any which we have previously seen. Practically the entire area of the vessel is covered with zones or panels containing motifs in profusion.<sup>34</sup> The result is a "blackness," a feeling of heaviness and overlaborateness, which is not discernible in any of the earlier Mesopotamian pottery. There is too much paint and too little background for satisfactory aesthetic result. Almost always the drawing is crude and the delineation coarse; where solid blocks of paint are not employed the outlines are filled in with closely spaced hatching or crosshatching. Feeling for the shape of the vessel is virtually absent in many examples; even the sharp shoulder in jars of form 25 is often ignored and crossed without a break by vertical panels extending from neck to base. The combination of vertical and horizontal panels is not a happy one, for the design area is then divided into rough blocks without regard for the shape of the vessel. The lower part of the vessel is differentiated from the upper in many cases, often by a heavy festoon design; the foot usually has only plain bands of paint. Designs are not well composed, and motifs seem sometimes to wander about the zone or panel rather than being arranged in an orderly decorative scheme. The considerable use of animals and birds is noteworthy. Long-necked goats, fish, and squat birds are common (Fig. 19, motifs 70-84); the animals are almost invariably in horizontal rows, the birds sometimes in vertical rows. Between the long necks of the goats there is usually fill (e.g. motif 83), crosshatched ovoids being the most common motif. "Barred" lines and groups of little sigmas, which also occur as fill, are found in Samarran pottery as are long-necked quadrupeds and squat birds somewhat similar to those of Ninevite 5.<sup>35</sup> One wonders whether these are motifs which belong to the general Iranian highlands tradition and occur in Mesopotamia whenever the latter country is under the influence of Iran.

The place of origin of the Ninevite 5 pottery styles is unknown. Some connection with Iran in the Hissar II and III stages probably exists, for Tepe Hissar has gray ware and chalice forms very similar to those of the Ninevite period. The Ninevite 5 type of painting, however, is quite different from that of Hissar, and the latter site has no elaborate incision. The existence at Hissar of vessels similar to forms 22 (on a stem), 23b, and 24 and of others resembling forms from Gaura or Nineveh further indicates some kind of connection between the two areas.<sup>36</sup> An Iranian origin for Ninevite 5 chalices is quite unproved,<sup>37</sup> though the possibility that Hissar II

29. E.g. AAA XIX, Pl. LIV. Some of these have more of a stem than form 24.

30. *Ibid.* Pl. LVI 1, 3, 5 and pp. 84 f. No complete specimens were found.

31. *Ibid.* Pl. LIII 1-4, 6-9, 11-14.

32. *Ibid.* Pl. LV 1-3, 6-8.

33. *Ibid.* Pl. LVII.

34. For a complete repertoire of the motifs employed see our Fig. 19. We have not attempted to give all possible orientations of each motif; many here oriented horizontally are used vertically also, and vice versa. In the animal and bird designs scarcely any two vessels show the same style of drawing for the figures, and here we have attempted to show only the types without all possible variants.

35. *Samarra V*, Fig. 20 ("barred" line and long-necked quadruped); Pl. XLIII 215, 217, 290 (sigmas); Figs. 9 and 11 (birds).

36. See *Hissar*, Pls. XXV H 5119 (form 22); XXII H 2990, H 3058 (form 23b); XXI H 4693, H 4627, H 4796 (form 24). Cf. *ibid.* Pl. XXVI H 3903 with *Tepe Gaura I*, Pl. LXV 59; *Hissar*, Pl. XXVI H 5153, with AAA XX, Pl. LIII 11; *Hissar*, Pl. XXIV H 2147, with AAA XX, Pl. LIII 9.

37. See SAOC No. 23, p. 48, n. 88. We believe with McCown that "if the 'chalice ware' represents Iranian influence, this amounts merely to inspiration."



1. AAA XIX, Pl. LIV 2
2. AAA XIX, Pl. LV 8
3. AAA XIX, Pl. LIII 13
4. AAA XX, Pl. LIV 3
5. AAA XX, Pl. LVIII 4
6. AAA XIX, Pl. LIII 7
7. AAA XIX, Pl. LIII 15
8. AAA XIX, Pl. LIII 15
9. AAA XIX, Pl. LIV 2
10. AAA XIX, Pl. LIII 3
11. AAA XX, Pl. LIX 11
12. AAA XIX, Pl. LIV 1
13. AAA XIX, Pl. LIII 2
14. AAA XIX, Pl. LIV 9
15. AAA XX, Pl. LXI 5
16. AAA XIX, Pl. LVII 5
17. AAA XX, Pl. LV 3
18. AAA XIX, Pl. LIII 6
19. AAA XIX, Pl. LIII 11
20. AAA XIX, Pl. LIII 15
21. AAA XIX, Pl. LIII 9
22. AAA XIX, Pl. LIII 14
23. AAA XX, Pl. LXI 19
24. AAA XIX, Pl. LIV 8
25. AAA XIX, Pl. LV 2
26. AAA XX, Pl. LXI 3
27. AAA XIX, Pl. LIX 23
28. AAA XIX, Pl. LIII 13
29. AAA XX, Pl. LVIII 1
30. AAA XX, Pl. LIV 5
31. AAA XX, Pl. LIV 4
32. AAA XIX, Pl. LIII 11
33. AAA XIX, Pl. LIV 6
34. AAA XIX, Pl. LVI 6
35. AAA XIX, Pl. LIII 6
36. AAA XIX, Pl. LIII 4
37. AAA XIX, Pl. LIV 2
38. AAA XX, Pl. LIX 4
39. AAA XX, Pl. LV 2
40. AAA XX, Pl. LIV 5
41. AAA XX, Pl. LVIII 11
42. AAA XIX, Pl. LIII 1
43. AAA XIX, Pl. LIV 7
44. AAA XX, Pl. LIV 5
45. AAA XIX, Pl. LV 6
46. AAA XIX, Pl. LVII 6
47. AAA XX, Pl. LVIII 6
48. AAA XX, Pl. LVIII 2
49. AAA XIX, Pl. LIII 12
50. AAA XIX, Pl. LIV 4
51. AAA XX, Pl. LVIII 15
52. AAA XX, Pl. LVI 10
53. AAA XX, Pl. LXI 15
54. AAA XIX, Pl. LV 1
55. AAA XIX, Pl. LIII 3
56. AAA XIX, Pl. LIII 8
57. AAA XIX, Pl. LV 7
58. AAA XIX, Pl. LV 3
59. AAA XIX, Pl. LVI 1
60. AAA XIX, Pl. LVII 7
61. AAA XIX, Pl. LIX 27
62. AAA XX, Pl. LVIII 14
63. AAA XX, Pl. LX 3
64. AAA XX, Pl. LX 12
65. AAA XX, Pl. LX 15
66. AAA XIX, Pl. LVI 5
67. AAA XX, Pl. LXI 1
68. AAA XIX, Pl. LIV 7
69. AAA XIX, Pl. LVI 5
70. AAA XIX, Pl. LIX 10
71. AAA XIX, Pl. LIX 2
72. AAA XIX, Pl. LIX 12
73. AAA XIX, Pl. LIX 13
74. AAA XX, Pl. LVII 8
75. AAA XX, Pl. LVII 13
76. AAA XX, Pl. LVII 15
77. AAA XX, Pl. LVII 20
78. MJ XXIII, Pl. XLVIII 1
79. AAA XIX, Pl. LIX 23
80. AAA XIX, Pl. LIX 16
81. AAA XIX, Pl. LIX 25
82. AAA XIX, Pl. LVII 4, 10
83. AAA XIX, Pls. LVI 7, 3 and LIX 20; AAA XX, Pl. LVI 17, 13
84. AAA XIX, Pl. LIX 19

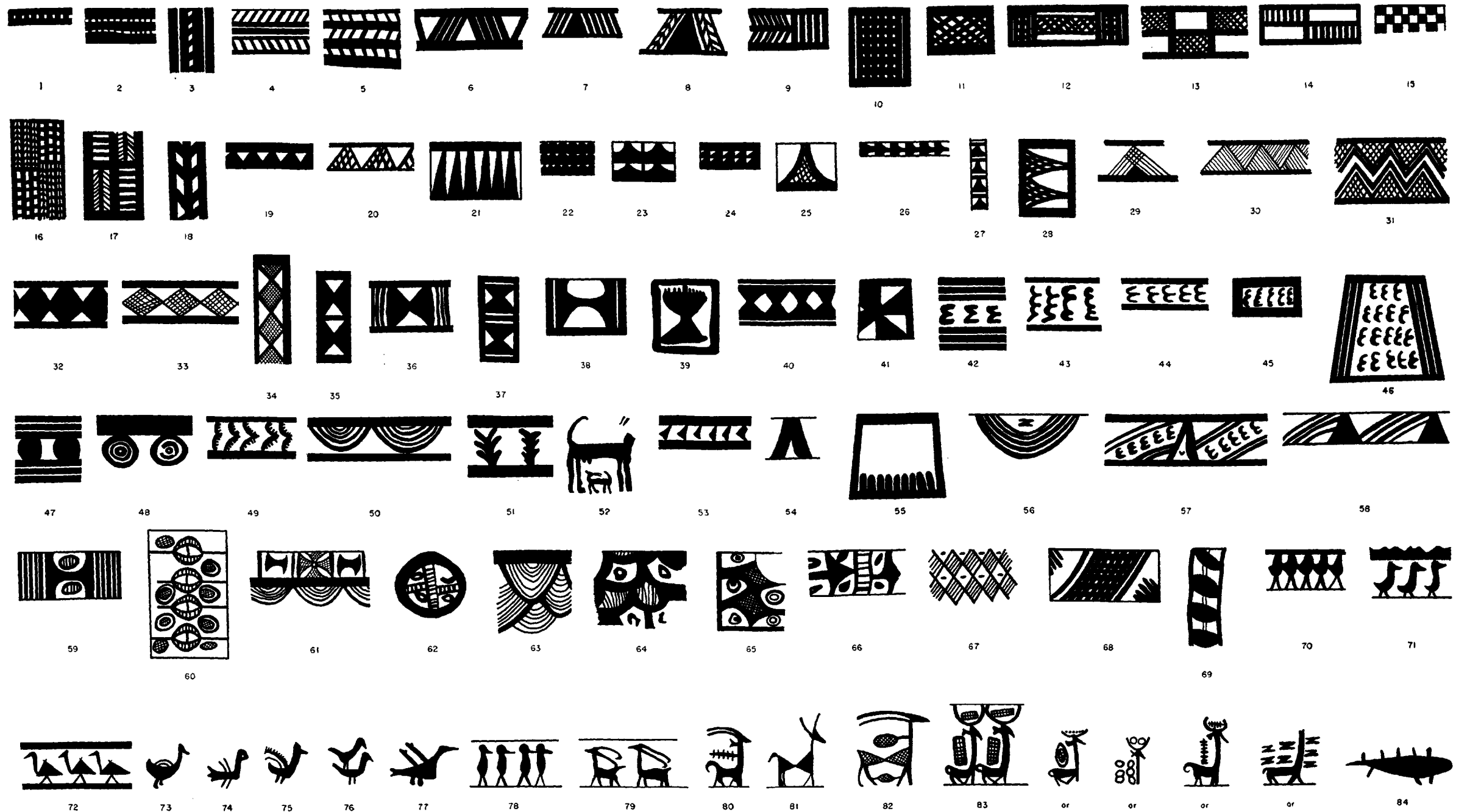


FIG. 19.—Ninevite 5 pottery motifs



and Ninevite 5 have a remote common ancestor cannot be completely excluded. The existence in Iran as early as Siyalk III 6-7 of chalices similar to form 24<sup>38</sup> shows that this form is well rooted in the Iranian pottery tradition.

It would be satisfying if we might connect the Ninevite 5 painting stylistically with the Jamdat Nasr painting in the South, but it cannot be done. Not only is the Ninevite 5 pottery exclusively monochrome and never used with red slip, but the motifs used and the manner of their combination are to a large extent different in the two areas.

#### Nuzi

We have seen (pp. 55 f.) that levels XII-X in the L4 pit belong to the Ubaid period. Levels VIII-III are attributed to the Ga.Sur period, the period designation being taken from the name used most frequently for the site in the tablets found in the upper levels (V-III).<sup>39</sup> Levels V-III can be dated to the Akkadian period on the basis of these tablets, but levels IX-VI must be dated chiefly by their pottery.<sup>40</sup> We are here concerned only with the pre-Akkadian levels.

Both IX and VIII contain beveled-rim bowls (form 4);<sup>41</sup> level IX has two examples of knobbed pottery, which has parallels in the Diyala region from Early Dynastic III to Akkadian times<sup>42</sup> but which occurs in Ubaid levels at Nuzi (see p. 56). A fragment of knobbed pottery was found in Nuzi VIII and another in VI.<sup>43</sup> Level VIII yielded one complete jar, somewhat resembling form 20 but more carinate, in a fabric "suggestive of the ware of later levels"; many fragments of this ware were scattered over the pavement of VIII.<sup>44</sup> Below the pavement was a handled cup of form 8,<sup>45</sup> a form which occurs in Ninevite 4 also. In Nuzi VII there is a round-based carinate bowl of form 23a,<sup>46</sup> which is found in Ninevite 5 also. A second carinate bowl, with profile concave above the carination and a long tubular spout, is unusual;<sup>47</sup> the profile is somewhat similar to that of form 22, but the details of the two forms are quite different. The pottery of level VI must be dated mainly with reference to the South. A ring-based shouldered jar is similar to forms in the Protoimperial-Akkadian range in the Diyala region, and the type of horizontal ribbing on a cylindrical vessel is paralleled in the Early Dynastic III-Akkadian range in the Diyala region.<sup>48</sup> "Two cups with rounded bottoms and straight sides" are probably like cups known in Gaura VI and Billa 5.<sup>49</sup> Level VI at Nuzi therefore seems to be later than the field of our inquiry.

#### TELL BILLA

Level 7, which rests directly on virgin soil, and level 6 are clearly connected with Ninevite 5, since the two most distinctive ceramic features of Ninevite 5, the painted and the elaborately incised ware, are both present.

Level 7 contains chalices of form 24, which may be either painted or plain, and a simple rounded bowl with slightly outturned rim as well as one that is not far from form 23a.<sup>50</sup>

38. *Sialk*, Pls. LXVII S 70 and LXX S 39.

39. See *Nuzi*, pp. xxxvi, 18, 367, and 516. In a more detailed discussion of the stratigraphy (*ibid.* pp. 18-41) level IX is included with the Ga.Sur levels, and on the basis of beveled-rim bowls we believe it clearly belongs in the same period as VIII.

40. A single Akkadian tablet was found in level VII, but it is said to be "obviously intrusive" (*ibid.* p. 516, n. 6).

41. *Ibid.* p. 19 and Pl. 50 A.

42. *Ibid.* p. 601 and Pl. 42 P; see *OIP* LXIII, where such pottery is called "studded ware."

43. *Nuzi*, pp. 602 f.

44. *Ibid.* p. 19, Pls. 51 J and 50 C-F.

45. *Ibid.* p. 19 and Pl. 51 L.

46. *Ibid.* Pl. 50 L.

47. *Ibid.* p. 20 and Pl. 50 H. A rather similar bowl in red ware occurs in Gaura XIII (see above p. 49).

48. *Ibid.* Pl. 53 A (cf. *OIP* LXIII, shapes C.427.350 and C.566.350) and H (cf. *OIP* LXIII, shape C.215.210).

49. *Nuzi*, p. 20; see *Tepe Gaura* I, Pl. LXVII 105, and *MJ* XXIII, Pl. LIV 3.

50. See *MJ* XXIII, Pls. XLVIII and XLIX 1, 3, 5.

Level 6 likewise yielded chalices, though usually with deeper and more rounded bowls than occur elsewhere and frequently incised.<sup>51</sup> We believe that bowl form 23a also is present in this level; it is not reconstructed in the publication, but several rim sherds with paneling and other incised designs seem to belong to such a form.<sup>52</sup> Bowls somewhat similar to form 24 but with the sides more rounded and bent in more toward the rim occur not infrequently;<sup>53</sup> the upper body may be ornamented with incision or with horizontal ribbing. In another bowl form the body is concave above the carination.<sup>54</sup> Carinate bowls with rounded base or solid disk base (form 22) occur,<sup>55</sup> and two strange double-curved bowls resemble bowls from Gaura VIII-VI.<sup>56</sup> Very squat jars with constricted necks and flaring rims occur; somewhat similar jars, though not so squat, are found in Ninevite 5.<sup>57</sup> A hole-mouth pot with lugs at the mouth is almost identical with one from Shaghir Bazar 5.<sup>58</sup>

Painting is very common in stratum 7 but fairly rare in 6, when incised ware becomes common; this is the only site which shows stratigraphic separation of the painted and incised wares. In level 6 the technique of pottery-making is greatly improved; the fabric is finely levigated and hard fired, predominately gray with a blue or green tinge.<sup>59</sup> In general, too, the vessels of level 6, though many are of shapes also found in 7, are more refined and graceful. The painted ware is invariably slipped, while the unpainted and incised wares are commonly wet-smoothed.

An interesting feature is the usage in tombs of level 7 of small bowls as lids for larger ones,<sup>60</sup> a custom followed during the Protoliterate period in the South, where little saucers are used as lids for jars (see e.g. p. 108).

#### TEPE GAURA

In level XIA there is a sudden and profound change in the pottery. Painting almost ceases, and no other kind of ornamentation takes its place; there are considerable changes in the shapes of vessels and in the fabric also, that of the new period being decidedly inferior. There is still a fair amount of pottery, although not as large a quantity as in level XII, partly because urn burials are now more scarce. Almost all the distinctive forms of the late Ubaid period—ring-based bowls, U-shaped pots, pots with sloping shoulders, short-necked globular jars, cups, and beakers—have disappeared. Storage jars survive, as do carinate bowls with rounded bases and inturned rims, but both types are less common than before. Ring bases are quite rare, but spouted vessels increase in quantity. Most vessels are crudely shaped and possess irregular profiles; they are still handmade, and the tournette is used less often than it was in level XII. The fabric is usually brown, red-brown, or buff, the green and greenish gray common in the late Ubaid period having almost disappeared. The fabric is softer and coarser than before and tempered with straw, coarse sand, pebbles, and once ground shell. Vessels generally have thick walls. Surfaces are often very rough, but more cooking-pots are burnished than before.

Flat-based bowls with rather straight flaring sides<sup>61</sup> comprise the most common form of the stratum; they begin in level XII but are now much more frequent. A type with more rounded sides has an offset base.<sup>62</sup> Round-based bowls are generally carinate and resemble some of the

51. *Ibid.* Pl. L.

52. See *ibid.* Pls. LXX-LXXI.

53. *Ibid.* Pl. LII 1-6.

54. *Ibid.* Pl. LI 2, 6; cf. *Tepe Gawra* I, Pls. LXIII 25 (VIII A), 21 (VIII C), LXV 55 (VII), and LXVII 101 (VI).

55. *Ibid.* Pl. LI 4-5, 7.

56. *MJ XXIII*, Pl. LIII 4, 6; cf. *AAA XX*, Pl. LII 2-6 (with suspension holes).

57. *MJ XXIII*, Pl. LIII 7; cf. *Iraq III*, Fig. 15:8.

58. In this connection the fine blue-gray fabric of Gaura VII-VI (see below p. 169) is interesting, also the gray-to-greenish fabric of Ninevite 5 (see above p. 163).

59. *BASOR* No. 42 (April, 1931) p. 13.

60. *Tepe Gawra* II, pottery figs. 328 and 330.

61. *Ibid.* pottery figs. 333-37.

carinate bowls of Warka XIV.<sup>63</sup> Two bowls with tubular spouts<sup>64</sup> resemble in profile an obsidian bowl from a tomb of Gaura X (see p. 182); a shouldered pot has a very long trough spout with numerous perforations and decorated with tiny pellets of clay.<sup>65</sup> Deeper pots<sup>66</sup> have varying profiles, usually rounded; a hole-mouth form with rounded shoulder is typical of this level; another type has a double rim, the inner part of which is pierced in many examples; a ring-based globular pot with a painted design zone on the shoulder is a prototype of a group found commonly in succeeding strata. Only four storage jars, rather shouldered vessels with round bases and definite necks, were found.<sup>67</sup> Smaller jars<sup>68</sup> are among the most popular forms, usually with globular bodies and short vertical or flaring necks (e.g. form 20); some are shouldered, but none has a sharp carination. Numerous examples have double necks, a peculiar feature of which two isolated examples occur in earlier strata—one in a well of level XIII (see p. 50). There is a unique jar-shaped strainer whose entire body is covered with perforations, also a simple funnel.<sup>69</sup> Hollow jar stands with splayed bases<sup>70</sup> begin here and become common later.

Levels XI–IX are treated as a unit, the pottery showing a homogeneity which the architecture corroborates (see pp. 173–75). No noticeable changes in fabric occur in these levels, and most of the forms continue throughout. Fabric is predominantly brown or buff; red, red-brown, and a little gray or black are found in XI–X, and there is some greenish pottery, which is always of especially fine quality. The other pottery tends to be coarse and poorly fired. Often the surface is left rough, but there is a relatively large number of vessels with slips, usually light in color; wet-smoothing is greatly restricted. Several kinds of decoration are now used. Incision, impression, punctation, and appliqué all occur on beakers, apparently in levels XI and XA only. Simple painting, mostly restricted to lines, dots, smears, or crosshatched triangles and apparently unrelated to the Ubaid painting, occurs throughout. The least popular type of decoration is burnishing, which occurs in XI and XA only and is confined to the exteriors of gray or black vessels. An important technical feature is the introduction of the fast wheel in level IX, but wheelmade vessels are not common until level VIII.

Flat-based bowls like those of XIA continue to be common throughout levels XI–IX; usually they have flaring sides, which may be rather sinuous, and the bases tend to be offset (similar to form 7). A few ring-based bowls like those of the late Ubaid period occur,<sup>71</sup> but round-based bowls are clearly typical. They usually have formed rims, often tapered toward either inside or outside and sometimes grooved on the outside; some resemble rims of Ninevite 3.<sup>72</sup> One bowl, whose rim is pinched and forms a “pouring lip,” is decorated with a stamped or impressed rosette design.<sup>73</sup> A unique bowl from level IX has modeled animal figures, which were attached to the floor of the vessel before it was fired. Very deep round-based bowls seem to be confined to level XI. Carinate vessels with constricted necks and flaring rims, often with lines incised about the lower part of the neck, occur in levels XI–X.

Beakers appear for the first time since level XIII, but diminish in quantity from XI through IX; most are round-based with carination just above the base and side slightly concave.<sup>74</sup> Often they are decorated with incision, punctation, impression, or appliqué; punctate designs, usually simple rows of dots which were perhaps made by a comb, are the most popular. Painted designs also occur, the most ambitious being a crudely drawn scene depicting three human

63. *Ibid.* pottery figs. 332 and 336; cf. *UVB* IV, Pl. 17 D d. Ninevite 3 also has round-based carinate bowls; see e.g. *AAA* XX, Pl. XLIX 4.

64. *Tepe Gawra* II, pottery figs. 340–41.

65. *Ibid.* pottery fig. 342 and *BASOR* No. 62, p. 7, Fig. 2.

66. *Tepe Gawra* II, pottery figs. 343–48.

67. See *ibid.* pottery figs. 349–51.

68. *Ibid.* pottery figs. 353 and 355–59.

69. *Ibid.* pottery figs. 360 and 366 respectively.

74. *Ibid.* pottery figs. 392–98; cf. *AAA* XX, Pl. XLIX 25, 35–36.

70. *Ibid.* pottery fig. 365.

71. *Ibid.* pottery figs. 381–84.

72. E.g. *AAA* XX, Pl. XLIX 3, 15–16.

73. *Tepe Gawra* II, pottery fig. 377.

beings with sprigs in their upraised hands, two indeterminate animals, and a large sprig between two crosshatched triangles (the last mentioned arguably representing a tree in a valley between two mountains).<sup>75</sup>

A few plain chalices with simple shallow bowls and fairly tall splayed bases occur.<sup>76</sup> Hole-mouth pots continue in level XI,<sup>77</sup> but disappear thereafter. Double-rimmed pots like those of XIA also continue<sup>78</sup> but are very rare in levels XA and X. Ring-based pots with globular bodies and short wide necks<sup>79</sup> occur in all these levels but are most popular in X and IX and then disappear. Other forms known in level XIA continue, including jar form 20.<sup>80</sup> Shouldered jars, usually only about 10 cm. high, are popular; other jars have almost globular bodies, and another double-necked jar occurs.<sup>81</sup> Two rounded bowls with bottoms pierced to allow them to act as funnels occur, and simple round ladles with the handle at right angles to the bowl are found in all four strata.<sup>82</sup> Unusual is a tall stand flaring toward the base and pierced with rectangular and triangular "windows";<sup>83</sup> the "windows" recall the supposed architectonic decoration seen in the Ubaid period (see p. 50). A spout from a zoomorphic vessel of level XI is in the form of an animal's head with holes for inlaid eyes and ears. Level IX yielded a fragment of a kernos, which might be a later intrusion.

Pottery from the tombs (see pp. 180 f.) is strangely rare, only fourteen vessels having been found. A few painted and burnished vessels which resemble pottery of levels XIA and XII come from tombs attributed to levels XIA and XI. An XIA tomb also has a more or less straight-sided bowl with rounded base and outrolled rim; this is said by Tobler to be identical with a vessel from the XIA occupational debris, but the identification does not seem certain to the writer.<sup>84</sup> A round-bodied jar with a short wide neck has a zone of incised crosshatching on the shoulder, and an inturned-rim bowl of gray-black fabric is burnished on the exterior; both pieces (from a tomb attributed to level XI)<sup>85</sup> are said to resemble XIA-XII pottery but to be possible in the occupational debris of levels XI-IX also. A simple flat-based bowl form with flaring sides,<sup>86</sup> of which two examples were found (in tombs of levels X-IX), is typical of the XI-IX range of occupational debris; and a little globular-bodied jar with slightly offset flat base, straight neck, and outrolled rim is paralleled in the same range.<sup>87</sup> A more or less cylindrical form with ring base and two suspension holes near the rim,<sup>88</sup> in green-gray burnished fabric, has no parallels.

A certain continuity prevails in the three phases of level VIII. The pottery<sup>89</sup> is mainly wheelmade, but handmade vessels, especially large or peculiarly shaped ones, are not infrequent. The fabric is generally buff, rarely shading to red; there is also a pale greenish fabric, and the rougher pottery may be reddish, brown, or gray. The fine pottery is wet-smoothed as a rule, but some jars have a cream slip. There are "single cases" of gray and red slip, but burnishing of any kind is rare. Incised lines occur occasionally in phases B-C; in A (the latest phase) fine herringbone incision occurs on a gray vessel<sup>90</sup> and painted decoration appears on the shoulders of jars and on chalices, of which only the bases were found.

Simple round-based bowls with straight or inturned rims are common throughout stratum VIII. A specimen from phase B with a sharp break in profile near the top and a concave rim<sup>91</sup> somewhat resembles form 22. An unusual type<sup>92</sup> has a double-curved body and an

75. *Tepe Gawra* II, pottery fig. 398.

76. *Ibid.* pottery figs. 400-401.

77. *Ibid.* pottery figs. 402-4.

78. *Ibid.* pottery figs. 405-7.

79. *Ibid.* pottery fig. 409.

80. *Ibid.* pottery fig. 415.

81. *Ibid.* pottery fig. 4; cf. pottery figs. 418-25, which, however, do not have the offset base.

82. *Ibid.* pottery fig. 6.

83. See *Tepe Gawra* I 41-44.

84. *Ibid.* pottery figs. 418-25, 429, 431, and 434.

85. *Ibid.* pottery figs. 436-37 and 439.

86. *Ibid.* pottery fig. 435.

87. *Ibid.* pottery fig. 3; cf. No. 335.

88. *Ibid.* pottery figs. 1-2.

89. *Ibid.* pottery fig. 5.

90. *Ibid.* p. 41 and Pl. LXX 216.

91. *Ibid.* Pl. LXIII 20.

92. *Ibid.* Pl. LXIII 21.

inner-ledge rim reminiscent of some Ubaid-period rims (see e.g. pp. 47f.). Phase A has a bowl with double-curved body<sup>93</sup> which is quite different in profile. Carinate round-based bowls with out-turned rims occur in phase A; somewhat similar bowls, deep or shallow, with inturned rims, frequently have three or four suspension holes.<sup>94</sup> In phase A form 23b occurs and may have horizontal ribbing on the upper part,<sup>95</sup> a feature found in Ninevite 5 also (see p. 163). Significant for comparative purposes (see p. 193) are a sharply carinate round-based hole-mouth pot in gray ware and a round-based cup with flaring, slightly concave sides, both from phase B.<sup>96</sup> Simple flat-based bowls occur in all phases.

Jars, both spouted and unspouted, are common, the spouted ones especially so in phase A. They are usually round-bodied, frequently resembling form 20 in profile, and almost always round-based. The rims are usually simple or slightly ledged; sharply beveled rims, such as are found in the South, are unknown. In general the jars, with their rounded bases, slight carination, and gently flaring necks, resemble those of levels XI–IX. One jar has horizontal ribbing on the upper body, and the same type of ribbing covers the entire body of cylindrical beakers of a type which is common throughout level VIII.<sup>97</sup> A cup or beaker from phase A, with straight sides and base tapering sharply to a point, bears finer horizontal ribbing on the upper body; it is paralleled in Ninevite 5.<sup>98</sup> Two jars of phase A with large crosshatched triangles painted around the shoulder<sup>99</sup> are among the few examples of painted pottery from level VIII. Multiple-mouthed jars are found in phase A.<sup>100</sup> Ladles like those of levels XI–IX continue.<sup>101</sup>

In level VII<sup>102</sup> a great many features found in VIII continue. Buff is still the predominant color, but the number of greenish vessels increases; a new fabric, which continues into stratum VI, is very well fired and dark bluish gray in color. Again the surface is usually wet-smoothed, but slips are more common than in level VIII and may be cream, pink, or brown. Burnishing also is more frequent, especially on the dark bluish-gray vessels. Painting appears much more commonly, mostly in simple geometric patterns of crosshatching, triangles, scallops, etc.; animals and human figures occur, though rarely. The most elaborate published examples, one a chalice, are definitely of the Ninevite 5 type of painted pottery.<sup>103</sup> Incision is even more frequent than painting and may be combined with the latter. Simple linear incision is the rule; apparently the elaborate type of incised decoration characteristic of Ninevite 5 is unknown here. Some vessels are decorated with plastic animals: an animal-head handle, a ram's-head spout, snakes and scorpions in relief.<sup>104</sup>

Some of the shapes well known from preceding levels continue, notably rounded jars similar to form 20 in profile and simple flat-based bowls.<sup>105</sup> There is a bowl with double-curved profile<sup>106</sup> different from those of VIII. Jars are now more common than bowls, and they are more rounded in profile than those of VIII; some are close to the globular jars of the Ubaid period (cf. Fig. 6, form 9). There is one almost pear-shaped jar which rather resembles form 11 but has a more flaring mouth, a beveled rim, and a ring base.<sup>107</sup> A few spouted vessels occur; one, with spout low on the body,<sup>108</sup> is almost like vessels from Warka Eanna VIII which are suggestive of lamps (see p. 100). Besides simple flat-based bowls there are carinate bowls of form 22 (a type which becomes very common in level VI) and a shallow bowl with ring base and heavy double rim.<sup>109</sup> A long-necked bottle is unique.<sup>110</sup> Cylindrical cups or beakers, sometimes

93. *Ibid.* Pl. LXIII 25.

94. *Ibid.* Pl. LXIII 28–29, 32 and p. 43.

95. *Ibid.* Pl. LXIII 34.

96. *Ibid.* Pls. LXIV 46 and LXIII 35.

97. *Ibid.* Pls. LXIV 48 and LXIII 36, p. 43.

98. *Ibid.* Pl. LXIII 34; cf. AAA XIX, Pl. LVIII 4.

99. *Tepe Gawra I*, Pl. LXIV 42 and p. 43.

100. *Ibid.* Pl. LXIII 38–39 and p. 44.

101. *Ibid.* Pl. XXXI b and p. 44.

102. See *ibid.* pp. 44–49.

103. *Ibid.* Pls. XXIX a (= LXV 58) and LXXVI 10.

104. *Ibid.* p. 68, Pls. LXXVII 7 and LXXVI 7, 11.

105. See *ibid.* Pls. LXVI and LXV 56.

106. *Ibid.* Pl. LXIII 55.

107. *Ibid.* Pl. LXV 65.

108. *Ibid.* Pl. LXV 62.

109. *Ibid.* Pl. LXV 52, 57.

110. *Ibid.* Pl. LXV 60.

with horizontal ribbing as in level VIII, continue here and go on into level VI. The bowl of the painted chalice mentioned above is in shape similar to form 23a; the chalice forms typical of Ninevite 5 (form 24 and bowls of form 22 with long solid stems) do not occur here. There is a "chalice" with plain, slightly flaring bowl and short solid stem with splayed hollow foot.<sup>111</sup>

Probably to be considered in this context are some vessels found in a trial trench attributed to levels earlier than VIII.<sup>112</sup> Two tripod-based bowls, one of which is painted, find their closest parallel in Shaghir Bazar 5; the smaller of the two is similar to form 22.<sup>113</sup> Two shallow bowls with painted designs<sup>114</sup> have no counterparts but apparently were found with the first two.

We may mention here some striking differences between the pottery of Gaura XIA-VII and that of Ninevite 4-5. The Gaura levels have almost nothing in common with Ninevite 4; they lack burnished red-slipped ware, reserved-slip decoration, angular-shouldered jars of forms 18-19, handled cups of form 8, and beveled-rim bowls (form 4). Likewise there are few correspondences between the Gaura levels and Ninevite 5; the forms and the style of painting which characterize Ninevite 5 are rare at Gaura, and the fine incised ware is absent.

#### GRAI RESH

At least levels IV-I come after the Ubaid period, and level V is apparently transitional from that period, since it contains the last of the Ubaid painted ware (see p. 57). The pottery of levels IV-II is discussed as a unit.<sup>115</sup> Three different wares are found: a buff ware with cream slip; a straw-tempered ware with grayish core and pink slip, sometimes with burnish on the insides of vessels; and what Lloyd calls "the well-known 'Uruk grey' ware," a straw-tempered gray fabric with gray slip and burnish on one side or both sides of the vessels.<sup>116</sup> The gray burnished ware is represented by two forms,<sup>117</sup> one like form 20, the other a wide-bellied, hole-mouth form which is quite similar to pots from Gaura XIA-XI (see pp. 167 f.). The pink-slipped ware is characterized by rounded bowls with tiny outturned rims; rather roughly made chalices consisting of simple flaring bowls on tall, hollow, slightly splayed feet also occur in this ware.<sup>118</sup> Similar bowls and chalices occur in the cream-slipped buff ware, also tall narrow-mouthed jars and little spouts which were made apparently by thrusting a finger through the wall of the jar and forming the edge of the hole into a lip.<sup>119</sup> The Grai Resh chalices are paralleled by a small group from Gaura XI-IX (see p. 168); feet of similar type (called "tall ring bases") occur in the South in Ubaid context and in Warka Eanna III-II (see p. 102). Miniature vessels exist in all three wares, notably a carinate shape resembling form 20.<sup>120</sup> There are rough beveled-rim bowls of form 4,<sup>121</sup> which appears in Ninevite 3 and is said to be the most common form in Ninevite 4 (see pp. 57 and 163). Numerous bowl rims, mostly of the heavy "club-headed" variety,<sup>122</sup> are not mentioned in the text; the writer has seen many such rims in the gritty gray ware mentioned in note 116 and therefore suspects that the pictured examples from Grai Resh are of the gray ware found in levels IV-II and are from those levels. A carinate vessel closely resembling the beakers of Gaura XI-IX is figured<sup>123</sup> but not mentioned in the text.

The pottery of level I is not illustrated. The level is said to be "dated by much fine, buff pottery of the Ninevite V type, which is later characterized by elaborate incised ornament."<sup>124</sup>

111. *Ibid.* Pl. LXV 59.

112. *Ibid.* p. 38.

113. *Ibid.* Pl. LXII 3, 16; cf. *Iraq* III, Fig. 10:15.

114. *Tepe Gaura* I, Pl. LXII 1-2.

115. *Iraq* VII 18 f.

116. The writer has seen a good deal of pottery which seems to be of this ware at Peabody Museum in the collections obtained by the Harvard survey in the Sinjar area. Most of it is very coarse, dark gray in color, and noticeably full of white grits. It occurs at many sites in the Sinjar area.

117. *Iraq* VII, Pl. III, Fig. 7:4, 9.

121. *Ibid.* Pl. III, Fig. 7:13.

118. *Ibid.* Pl. III, Fig. 7:7 and 6 respectively.

122. *Ibid.* Pl. III, Fig. 7:14.

119. *Ibid.* Pl. III, Fig. 7:2.

123. *Ibid.* Pl. III, Fig. 7:5.

120. *Ibid.* Pl. III, Fig. 7:3.

124. *Ibid.* p. 18.



## TELL BRAK

A number of fragments of beveled-rim bowls (form 4) were found "in the debris from the earliest Eye-Temple, and in the subterranean chambers beneath it"; two rather squat jars similar to form 20 but with more carinate profiles and a spouted jar of form 9 were found in association with the deposits of the Gray Eye Temple.<sup>125</sup> On another part of the site occurred a miniature bowl of form 22 but without the disk base.<sup>126</sup> The painted and incised varieties of Ninevite 5 pottery are said to be found at Brak,<sup>127</sup> but none is illustrated. We have already mentioned (see p. 58) the red-slipped pottery with black designs found beneath the platform of the earliest Eye Temple.

## TELL SHAGHIR BAZAR

Levels 5 and 4 are said to be homogeneous and to be characterized by the presence of the painted and incised wares typical of Ninevite 5.<sup>128</sup> Some of the forms found in Shaghir Bazar 5 do carry over into 4, but these two wares seemingly do not appear in the later level. An earlier report also speaks of incised ware in "levels 4-5," but all examples cited come from level 5.<sup>129</sup> We therefore consider level 5 certainly contemporary with Ninevite 5 and level 4 possibly so.

In both levels the fabric is usually light-colored, but in level 5 gray burnished ware occurs quite frequently, both plain and incised. Most of the vessels are wheelmade, only rather coarse ones and unusual pieces such as tripod bowls apparently being made by hand.

In Shaghir Bazar 5 two forms characteristic of Ninevite 5 painted and incised wares (forms 23-24) occur,<sup>130</sup> but some examples are plain. Rounded jars with constricted necks in a few cases bear painting,<sup>131</sup> but not of the Ninevite 5 type. These occur in both levels, and the crude designs consist of crosshatching, rows of triangles, crosses, a row of birds, ladders, a "butterfly," and indeterminate patterns. They may, as Mallowan suggests, be local imitations of the Ninevite 5 painted ware. Some such jars bear incision of Ninevite 5 type.<sup>132</sup> A Shaghir Bazar 5 bowl of form 23a<sup>133</sup> is so like Nineveh specimens as to be considered an actual import. The incised designs show considerable use of dots and rows of tiny gashes.<sup>134</sup> The elaborate type of incised decoration characteristic of Ninevite 5 has been found only once at Shaghir Bazar itself, but two examples were found at near-by Arbit.<sup>135</sup>

In the plain pottery of Shaghir Bazar 5 there are numerous bowl forms, usually fairly shallow and open. Bowl form 23a occurs with a little disk base, and form 23b appears in gray ware; a rather graceful form with outturned rim and ring base occurs in a greenish fabric.<sup>136</sup> There are two bowls with tripod feet, an unusual type of base whose only parallels are two unstratified specimens from Gaura (see p. 170), and a carinate bowl with disk base.<sup>137</sup> There is a chalice of form 24, also a little jar approximating form 20 but with a tiny ring base and an almost globular jar with tiny ring base and offset neck and ledge rim.<sup>138</sup> A nearly globular hole-mouth pot has pierced handles.<sup>139</sup> A double-mouthed vessel,<sup>140</sup> quite rough, has no counterpart except in a vessel of the Ubaid period from Arpachiyah (see p. 54). From its find-spot under level 5 graves the Shaghir Bazar piece is considered as probably contemporary with Ninevite 3,<sup>141</sup> but that level at Nineveh has no comparable form.

125. *Iraq* IX 222 and Pl. LXVI 4 (beveled-rim bowl); 224 and Pl. LXVII 11-12 (form 20); 228 and Pl. LXIX 3 (form 9).

126. *Ibid.* p. 233 and Pl. LXXIII 1.

127. *Ibid.* pp. 44 f.

130. See *ibid.* Figs. 9:3, 10:7, and 18; *Iraq* IV, Fig. 25:1-2.

131. *Iraq* III, Fig. 19:6-8; *Iraq* IV 149 f. and Fig. 25:6-7, 9.

132. *Iraq* III, Fig. 19:1-4.

133. *Iraq* IV, Fig. 25:1.

136. *Iraq* III, Figs. 9:3 (form 23a) and 10:7 (form 23b), 16-17.

137. *Ibid.* Fig. 10:12, 15; *Iraq* IV, Fig. 18:7.

138. *Iraq* IV, Fig. 25:2; *Iraq* III, Figs. 14:2 and 28:6.

139. *Ibid.* Fig. 15:8.

140. *Iraq* IV, Fig. 19:5.

128. *Iraq* IV 95.

129. *Iraq* III 12.

134. E.g. *Iraq* III, Fig. 18:4, 6.

135. *Ibid.* Fig. 19:1; *Iraq* IV, Fig. 25:4-5.

141. *Ibid.* p. 142.

In the plain pottery of Shaghir Bazar 4 bowl form 23 recurs, and one with slightly flaring sides is found.<sup>142</sup> There are numerous rather round-bodied jars with short necks and little ledge or rolled rims; such jars are found in the "Khabur" and unpainted wares of the upper levels but are not unlike jars from Gaura VIII-VII.<sup>143</sup> A hole-mouth pot has barrel handles.<sup>144</sup> A bowl of form 23b has horizontal ribbing on the upper body,<sup>145</sup> a feature of similarly shaped vessels from Gaura VIIIA (see p. 169).

## ARCHITECTURE

### NINEVEH

The earliest traces of stone walling are found in Ninevite 3, and stone walling and loose burnt bricks occur in Ninevite 4.<sup>146</sup> Fragments of burnt clay and bitumen from stratum 4 bear impressions of reeds and reed matting,<sup>147</sup> giving evidence of the use of wattle-and-daub for building. Apparently there are no building remains in Ninevite 5.

### TEPE GAURA

Level XIA is conspicuous for a unique architectural feature, the so-called "Round House."<sup>148</sup> The position of this building in the center of the occupied area, the circular plan, the massive walls, and the single entrance make a defensive function very likely; and the numerous celts, maceheads, and hammerstones found within it corroborate the idea. The outside diameter is 18-19 meters, the exterior wall being one meter thick with a "pier" which may represent repair work added along one side. It is built of mud bricks measuring 50-56 × 26-28 × 10 cm., which are said to be laid in stretchers in three parallel rows. The single entrance seems to be above ground level and is reached by a ramp of earth on a foundation of stones. Within the building the six central rooms form a rectangular "block," with the other rooms grouped around them; this central portion was suggested as a sanctuary by Speiser,<sup>149</sup> but Tobler believes that identification unlikely. The general massiveness of the building is enhanced by the fact that all room walls abutting on the outside wall are bonded into the latter, forming in a sense interior buttresses. One room contained carbonized grain kernels and may have served as a storeroom; three stamp-seal impressions with animal designs, possibly labels from sacks of grain or other produce, were also found in this building.<sup>150</sup>

This is the first fortified level at Gaura, a feature which sets it off from the preceding strata. On opposite sides of the settlement are watchtowers, presumably guarding the gates which gave access to the top of the mound from north and south. These buildings are thick-walled; one contained clay sling-pellets, which were probably part of the armament of the guard. A street bisecting the settlement connects the two towers. Along the east and southeast edges of the mound, where an easy slope makes the settlement accessible from the plain, all buildings face the center of the mound, their backs forming a "common echeloned front or city wall." The Round House presumably completed the fortification by serving as the inner citadel. All the defensive preparations betoken an unsettled age and are probably to be connected with the introduction of the new civilization; it is quite likely that peoples were migrating, and their

142. *Iraq* III, Fig. 10:4 (form 23a), 11 (form 23b); *Iraq* IV, Fig. 18:16.

143. E.g. *Iraq* III, Fig. 13:12; cf. e.g. *Tepe Gawra* I, Pl. LXVI 80.

144. *Iraq* IV, Fig. 19:11.

146. *AAA* XX 134.

145. *Iraq* III, Fig. 10:10.

147. *Ibid.* p. 148.

148. *BASOR* No. 62, pp. 1 (photograph) and 11 (plan). It may be cautioned here that the semi-isolated position of the building makes its stratigraphic position somewhat uncertain. It is definitely later than level XII and seemingly later than some walls of XIA, but earlier than level XI. It is accordingly attributed to a late phase of level XIA.

149. *Ibid.* p. 12.

150. *Tepe Gawra* II, seal figs. 154, 161, and 166.

penetration into a new area was by no means sure to be peaceful. It will be remembered that the settlement of level XII was forcibly destroyed and the city at least partially burned; the conquerors, who doubtless founded level XIA, seem to have made sure that their own city was not exposed to attack.

In the northern sector of the city there appears to be a sanctuary of tripartite plan, harking back to the temples of early Ubaid times in levels XIX–XVIII (see p. 65). The temple of level XIA is small, measuring approximately  $8.40 \times 8.25$  meters, and the rooms on the northwest side have almost completely vanished. The long central room is entered through a portico formed by the projecting walls of the side rooms, and the rear wall of the cella is in a “bay” formed by the much slighter projection of the side rooms at that end. Such a “bay” is seen as early as level XVI (see p. 67) and is another feature connecting level XIA with the Ubaid period.<sup>151</sup> The portico entrance is characteristic of all later temples at Gaura. Numerous burials are associated with this sanctuary. The temple was altered and perhaps secularized after a certain period of use; changes were made in the walls, and ovens were built within the building.

There are several large private houses in this level. A building with an unusually regular plan has a white-plastered central room with a niche in the center of the front and of the back wall and three small rooms on either side. Although it markedly resembles the temples, Tobler believes it to be a private house because the entrance to the central room is on one of the long sides instead of at one end. However, it must be remembered that in level XIII the cellas of all the temples seem to have been entered through the long sides, so the placing of the entrance does not appear to be an absolute criterion of sacred or secular function. This building also differs from most temples in not having its corners oriented to the cardinal points, but the XIX–XVIII temples also lack that feature, while the building with the White Room in level XII, which is not considered to be a temple, does have its corners so oriented. The fact that this building of XIA is surrounded by small and poor buildings also does not necessarily indicate that it had a secular function; not infrequently, especially after temples had been in use for some time, poor buildings might encroach upon a sacred area. We are personally inclined to call this building with the white-plastered room a temple, but obviously our identification is open to question. Its bricks,  $47\text{--}50 \times 24\text{--}26 \times 8\text{--}10$  cm., are smaller than those of the Round House (which seems to be late in XIA) and closely resemble the bricks of level XII; perhaps this “temple” represents a very early phase of level XIA.

The bricks of level XIA are reddish brown or gray, usually the latter; stone, as usual, is rare.

In level XI a segment approximately  $55 \times 60$  meters, only a small portion of the settled area of the mound, was excavated. Streets, partially stone-paved, divide the settlement into sectors and indicate city planning. The main street runs northwest-southeast, probably connecting the two gates or approaches to the top of the mound, as in the preceding level. The southern watchtower of level XIA was apparently reused. On the northern edge of the mound is the largest structure of this level, about 11.50 meters square. The plan is not wholly reconstructible, but a double doorway set in a “bay” gives access from the street. Interior walls of the front portion show a thick red plaster, and one room has wattle or reed flooring. This structure stands above the temple of level XIA and has graves associated with it, but shows no features of a sacred building; its isolated position and massiveness, and the fact that many clay sling-pellets were found in it, suggest rather a defensive function.

The temple of level XI stands on what is now the extreme eastern edge of the mound; its east corner has collapsed or been eroded away. The building is 9.75 meters square and possesses several features which characterize temple architecture at Tepe Gaura: orientation of corners

151. We have seen in discussing the pottery that level XIA, while clearly marking the beginning of a new culture period, is not completely divorced from the preceding period (see pp. 166 f.).

to the cardinal points, tripartite plan, and a roughly rectangular podium of clay and limestone in the cella near the entrance. The podium itself shows no traces of burning, but the pavement near it is marked by fire. There are no niches in the exterior walls, but the rear wall of the cella has a shallow white-plastered niche, whose base is 30 cm. above the floor. An unusual feature of this building is the existence of two short spur walls, with traces of red plaster, projecting from the sides of the cella near the rear end, perhaps marking off a "chancel." Fifty-four burials, the largest number associated with any building at Gaura, lie beneath or near the temple. This building was clearly abandoned before the close of level XI; some new walls were built over part of it, and cooking ovens or kilns were located against it.

Ovens and kilns are common in the northwest and southeast sectors of the mound. Private dwellings of this level are quite flimsy. The bricks are usually gray, although brown ones are known; they are among the largest at Gaura, measuring  $47-54 \times 23-26 \times 11-13$  cm. Stone slabs and small boulders are commonly used for paving and for thresholds.

Stratum XA is of little interest architecturally. Tobler describes it as a "small and crowded collection of unimportant, shapeless houses." Apparently the population at this time was small, for only about half of the available area was utilized. A small complex of thick-walled rooms at the southeast edge of the mound might be a watchtower like those of the preceding levels.

Level X again has an extensive settlement; the southwest and southeast sectors are unoccupied, but the other portions of the mound are closely packed with houses, some quite large and well planned, separated by streets and small passages. Beehive-shaped ovens, probably for bread since they are often associated with mortars sunk into the floors, are said to be ubiquitous. Some very large structures, differently made, are probably pottery kilns.<sup>152</sup>

The temple of level X is ruined and most details are lost, but it lies only 10-15 cm. under that of level IX and seems to be similar to the latter. It measures  $12.30 \times 11.15$  meters, its corners are oriented to the cardinal points, and apparently its exterior walls are niched. The location of the entrance is unknown, as is the length of the series of side rooms, but the tripartite plan is discernible; there may have been a staircase leading to the roof. Since the pavements are gone, it is not known whether there was a podium. A number of streets seem to lead to the temple, suggesting that the level was planned around it.

An unusual architectural unit consists of a single large rectangular room, some of whose exterior walls bear wide shallow niches such as are usually associated with temple architecture. The entrance is in the center of one of the long sides, and the wall facing the entrance also has a large niche. The building is oriented with its corners to the cardinal points. Its most peculiar feature is a brick pavement a meter thick covering the entire room. Directly beneath this strange room lies one of the large tombs which characterize levels XIA-VIII (see pp. 180 f.), and Tobler suggests that the unique structure is a shrine connected with that tomb.

Bricks are now brown or reddish brown in color, with only a few of the gray ones which characterize the earlier levels; sizes range from  $50 \times 25 \times 11$  cm. to  $46 \times 21 \times 10$  cm. Some pisé walls are known. Stone is sometimes used for paving.

In level IX occupation is again restricted, this time to only about half of the habitable area of the mound. The settlement seems to have been primarily a religious one with the temple occupying the central position. This temple,  $13 \times 11.40$  meters in size and well preserved, is of our familiar type: a tripartite building, its corners oriented to the cardinal points, with a portico entrance. A rectangular podium within the cella is marked by fire; its top bears an incised outline<sup>153</sup> of a rectangle with a projection at one end. Doubly recessed niches on the exterior walls of this temple must have made it more impressive in appearance than most of its prede-

152. One such is published in *BASOR* No. 51 (Sept. 1933), Fig. 6. The attribution to level IX has now been superseded.

153. Called "roughly anthropomorphic" by Tobler.

cessors, and this method of decoration is continued in the temples of level VIII. An unusual feature is a "wing" consisting of one large room at the northwest side, which is clearly a secondary addition to the building. One room of the temple proper contains a projecting wall which is probably the newel wall of a staircase<sup>154</sup> such as that assumed for the temple of level X. The same room contained many clay sealings, all bearing impressions of the same seal, suggesting that temple property was stored there. A second podium, in the "wing," is a feature not found in any other temple; it lies almost in a corner, and the base is 73 cm. above the floor, but it seems stratigraphically impossible for the podium to belong to any other structure. Perhaps the added portion of the building formed a second shrine. Some time late in level IX most of the doorways from the cella were blocked up, leaving a relatively small part of the original temple in use. Connected with this temple by a mud-brick pavement is a complex of thick-walled buildings of regular plan, suggested as priests' residences.

Bricks are usually  $40 \times 20 \times 10$  cm. or slightly larger. Stone is used only for drains, and is rare even there. Pebbles and potsherds are occasionally used as paving.

Between levels IX and VIII there is again a subphase which has no significant architectural remains.

In VIIIC, the earliest phase of level VIII, the architectural tradition of the previous levels continues, but the acropolis is expanded considerably.<sup>155</sup> Two rather large temples of the usual plan (the "Eastern" and "Western" temples), which are isolated from the other buildings of the phase, and two edifices of slightly different plans (the "Central" and "Northern" shrines), which are incorporated into other buildings, mark this as the most important phase architecturally since level XIII (Fig. 20).

The Western Temple is a virtual duplicate of the temple of level IX and so placed that, had the older temple remained standing, they would have almost directly faced each other. The new temple, however, is distinguished by a window in each of the double-recessed niches at the front and by lack of a podium. The Eastern Temple is similar in plan but lacks windows and has a podium. The Central Shrine, which faces the Western Temple, has a portico entrance directly into the cella, as do the other temples, but this entrance is on the long rather than the short axis of the building. Possibly the building to the northeast of the Central Shrine was already in existence when the shrine was built, so that this plan was utilized in order to save space. As in the Western Temple, the two front niches are pierced by windows. Instead of small rooms on either side of the cella, there are two small rooms at one end of it. The function of the building which backs up against the Central Shrine is unknown. The walls are very thick and show no signs of doorways to most of the rooms. The area southeast of the Central Shrine, partially surrounded by niched walls, may be a court connected with the temples. The Northern Shrine also is close to a complex of rooms whose purpose we cannot discern, and it differs in plan from all other religious structures of this phase. There are no niches outside and only two simple ones at one end of the long chamber inside. There is no porch, and the entrance to the long chamber is on one of the long sides. The interior niches and the presence of a large podium lend credence to the idea that, unusual as it is, the structure is a shrine or temple.

The sun-dried bricks of this phase measure  $44 \times 22 \times 11$  cm.; sometimes half bricks were used for transverse bonding. The walls and floors were covered with mud plaster. All the interior doorways had brick sills 11 cm. high, an unusual feature. The buildings have their corners oriented to the cardinal points of the compass.

In VIIIB<sup>156</sup> changes are made which seem to connote partial secularization of the acropolis. In general the layout is not as well planned as that of VIIIC. The Western Temple suffered

154. Tobler believes this explanation perfectly plausible, in spite of Müller's objection that no trace of such a staircase survives.

155. See *Tepe Gaura* I, Pl. XI and pp. 24-30.

156. See *ibid.* Pl. X and pp. 30-32.

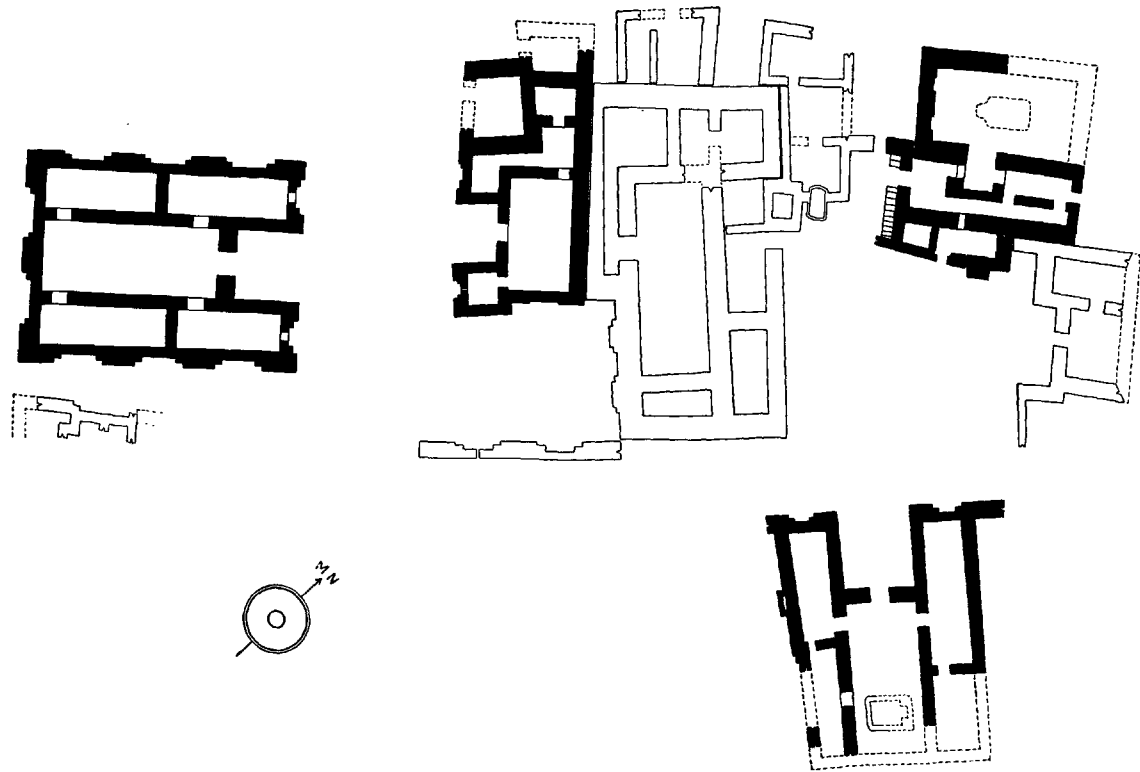


FIG. 20.—Plan of temples of level VIIIc at Tepe Gawra. Scale, 1:467. After *Tepe Gawra I*, Pl. XI

great changes, apparently completely losing its sacred character, the front niches and the entrance were filled in, and small, poorly constructed rooms were erected on three sides of the building. The other shrines are practically unaltered, but the Eastern Temple has a new podium whose long axis parallels the long axis of the building. The large building of unknown function behind the Central Shrine has vanished, but a new complex of small doorless rooms was built to the southeast of the shrine in the space which was probably a court in the preceding phase; these might have served for storage, quantities of sling-pellets having been found in them.

In VIIIA there is even more extensive alteration of the acropolis.<sup>157</sup> The western third of the area was completely filled in and a set of entirely new buildings was erected on the filling, whose level is nearly 2 meters above that of VIIC. The Eastern Temple survives almost unchanged, but abutting against it there is now a series of small rooms, of which the nearest, provided with a basin and paved with bitumen, is clearly an ablution room. The portico of the temple likewise is bitumen-paved, with a coating which slopes away from the building toward the courtyard in front. The Northern Shrine is little disturbed, only its corridor and vestibule being somewhat altered. The Central Shrine is unchanged except for the addition in its portico of a ramp leading up to a court in the new high area; this new court is paved with small stones set in mud plaster. The only other structure surviving from VIIIB is the complex of small rooms southeast of the Central Shrine, one of which now has a pottery kiln.

In the western area is the "New Quarter," which seems to be of purely secular character. It is well laid out with two streets which meet at right angles and are paved in part with potsherds set in lime plaster. The most notable architectural feature is a large vaulted hall built with true arch construction of mud brick. The spring line of the vault is low, nearly at the floor level, and the archivolt consists of wedge-shaped bricks which act as true voussoirs. The hall is calculated to have been a little over 2 meters high. Next to it is a building which has a porch, the only building of this phase so constructed, and in plan rather resembles the Central Shrine, but there are no other features to suggest that it is a temple.

Level VII has practically no architectural remains, merely a few irregularly shaped rooms with no coherent plans.<sup>158</sup>

#### GRAI RESH

Level III is the earliest level for which any information about architecture is given.<sup>159</sup> It has a house (unillustrated) and a mass of brickwork 5 meters thick, which might be a town wall.

Level II has a well preserved building consisting of a long central room, with niches in the end walls, flanked by a pair of smaller rooms on either side.<sup>160</sup> The central room is decorated with white "paint" over mud plaster. The presence of a long central room with niched end walls and smaller rooms on either side suggests our well known tripartite temple type, though the details of the plan are different; but the profusion of storage jars, tools, implements, etc. in the building speaks for a purely domestic use.

Level I shows only scanty remains of walls and foundations of a small building described as "apparently dating from the very beginning of the Early Dynastic period, or a little earlier."<sup>161</sup>

#### TELL BRAK

Perhaps the most interesting building in northern Mesopotamia is the uppermost Eye Temple at Tell Brak, the last of a series of temples on the southern part of the mound. This building stood on a platform over 6 meters high, which incorporated the remains of several earlier

157. See *ibid.* Pl. IX and pp. 32-37.

158. See *ibid.* Pl. VIII b and pp. 21 f.

159. *Iraq* VII 15.

160. *Ibid.* Fig. 2 and pp. 15-17.

161. *Ibid.* p. 13.

temples.<sup>162</sup> The earliest building, which seems to have stood at plain level, is represented by a stratum of red mud bricks, commonly  $42 \times 22 \times 9$  cm. or slightly smaller. This structure (the Red Eye Temple) Mallowan suggests may have belonged to the "Uruk" period because of the red-slipped pottery associated with it (see p. 58, n. 125). Above the red layer is a thin layer of about five courses of gray mud bricks of about the same size as the red ones or somewhat smaller and set with a minimum of 2 cm. of mud mortar between them. In this level (the Gray Eye Temple) was found a great mass of small objects—beads, amulets, etc.—which Mallowan believes to be, in the main, temple offerings left in place when the building was razed and filled in, although some objects were actually imbedded in the bricks.<sup>163</sup> Above this comes a stratum just over 4 meters thick consisting of straw-tempered red bricks, some of which measure  $34 \times 18 \times 8-9$  cm.; one meter above the base of this stratum is a layer of white plaster which may well mark the floor level of another temple (the White Eye Temple). Thus the platform, instead of being a ziggurat-like structure, as was first thought,<sup>164</sup> seems to consist of the remains of three successive temples, each of which was destroyed and then packed solidly with brick to serve as a socle for the next.

The existing remains of the topmost building, the Eye Temple proper, were excavated as completely as possible.<sup>165</sup> Three corners have been destroyed, but the dimensions of the building are assumed to have been some  $25 \times 30$  meters; the walls faced the cardinal compass points. The plan looks like a variant of the tripartite arrangement familiar to us in both North and South. There is a large central shrine,  $18 \times 6$  meters, with an altar set against the south wall; on the west side is a single row of smaller rooms, but on the east side is a more extensive complex of very tiny rooms and at least one court. The little rooms all have disproportionately thick walls and narrow doorways, and one may wonder whether above this side of the temple there was another story, whose weight was borne by the substantial walls. There was a direct entrance to the sanctuary at its north end and some evidence of a second entrance in the same wall, an arrangement similar to that of the Anu temples at Warka; no other entrances are preserved. The outer walls bear simple niching, and on three sides have a revetment of heavy basalt boulders which is built on a projecting stone plinth; apparently these boulders served merely to strengthen the walls, since they were hidden under mud plaster. The sanctuary walls are not niched; but the side court (room 12) and an assumed court (room 11) show buttresses, one of which is niched. Mallowan suggests, partly on this basis, that room 12 may be a subsidiary shrine. All walls are mud-plastered, and those of the central sanctuary are whitewashed and "decorated with coloured stone rosettes, strips of red limestone-inlay, and copper panelling impressed with the design of a human eye." The exterior walls are decorated with clay cones whose heads are painted red and black, and with inlaid stone rosettes—forms of temple decoration used in the South in the Protoliterate period.<sup>166</sup> Perhaps the most distinctive feature of the temple is the decoration of the altar against the south wall of the sanctuary, most of which escaped later plunderers. Each of the three free sides bore a panel (3 ft. long and 8 in. wide), which is bordered at top and bottom with sheet gold; below the top border is a band of blue limestone in which are cut three rows of concentric circles in obvious imitation of cone mosaic.<sup>167</sup> Then comes a narrow band of white marble, and below this is a band of green shale fluted ver-

162. *Iraq* IX, Pl. LVII, shows a section through this platform, as well as a plan of the uppermost building, the Eye Temple proper. For discussion of the stratification see *ibid.* pp. 38 and 55 f.

163. *Ibid.* pp. 36 f., which corrects his earlier belief expressed in *ILN*, May 20, 1939, pp. 883 f., that these were votive deposits made at the time of the foundation of the latest Eye Temple.

164. *ILN*, Oct. 15, 1938, p. 697.

165. *Iraq* IX 56-60 and Pls. VII 2 and LVII.

166. *Ibid.* pp. 32 and 59; cf. *ibid.* Pl. V with *Kleinfunde*, Pl. 32.

167. Imitation of cone mosaic occurs in the South at Warka and Uqair, though there the imitations are in clay (see above p. 132, n. 278).



tically in a pattern duplicated in a small piece found in the "Kleinfunde" hoard at Warka.<sup>168</sup> The gold borders were turned over the ends of the panel and held in place by gold-headed silver nails; the stone pieces were fastened from behind to wooden backing with copper holdfasts.<sup>169</sup>

The platform on which the temple rests extends some 40 meters south of the building. Mallowan believes that the earlier temples were situated in approximately the same position, stating that in the case of the Gray Eye Temple trial trenches showed the terrace extending about 40 meters beyond the southern temple wall, about 10 meters beyond the western wall, and only 3 or 4 meters beyond the northern and eastern walls.<sup>170</sup> If this is the case we have a layout similar to that on the Anu ziggurat in Warka, where the temple always stood near one corner of the platform, and also to that of the Painted Temple of 'Uqair. What was the means of access to the platform we cannot say; Mallowan suggests a ramp or staircase on the south side.

On the basis of plan and, more particularly, of ornamentation we consider this temple contemporary with structures of Warka Eanna III and Protoliterate *d* at Khafajah and therefore with the latter part of the Protoliterate period; it is the only known building in the North which is comparable with temples of the South.

#### TELL SHAGHIR BAZAR

Level 5 in site B.D. yielded some very thick mud-brick walls (maximum, 2.5 m.), some buttressed and one whitewashed.<sup>171</sup> The complex of large rooms suggests a public building of some sort. The bricks are laid with thick mud mortar and are well bonded by alternate use of headers and stretchers. The bricks could not be measured, but in the "prehistoric pit" described in the first Shaghir Bazar report the bricks of level 5 measure  $36.5 \times 32.5 \times 10$  cm. Here only a single room was found.<sup>172</sup>

Level 4 in the pit area has remains of two complexes of private houses separated by a clearly defined street.<sup>173</sup> One little room with a rabbeted doorway is suggested as a shrine. In site B.D. level 4 has thick walls, some buttressed, like those of level 5.<sup>174</sup>

#### BURIALS

##### NINEVEH

The vaulted tombs<sup>175</sup> are frequently considered contemporary with the beveled-rim bowls found near them, but the building material—large square thin bricks—is otherwise unknown in prehistoric times, and the likelihood is that these tombs are considerably later. There is no stratigraphic indication that the bowls actually date from the same time as the tombs; the latter may well have been dug into previously occupied ground. Such vaulted tombs are unknown in the South until Early Dynastic II, and of that period also is a type of amulet like one of a group found near the Nineveh tombs and possibly looted from them.<sup>176</sup>

A "disturbed flexed burial probably of the late Jemdet-Nasr period" was found at the top of the Ninevite 4 stratum in the sounding.<sup>177</sup>

#### TELL BILLA

In the first season level 7 and 6 both yielded graves, the excavated area being apparently a part of the ancient necropolis.<sup>178</sup> They are not described except for one large tomb of level 6.

168. *Kleinfunde*, Pl. 34 h.

169. See *ILN*, May 20, 1939, p. 884; *Iraq* IX, Pls. III–IV.

170. *Iraq* IX 53 f.

171. *Iraq* IV 115 and Fig. 7:2.

172. *Iraq* III 16.

173. *AAA* XVIII (1931) 82 and Pl. XXV 23; cf. *OIC* No. 19, Fig. 24, upper left-hand corner.

174. *AAA* XX 134.

175. *Ibid.* p. 15 and Fig. 4.

176. *Iraq* IV 115 and Fig. 7:2.

177. *AAA* XIX 78–80.

178. *BASOR* No. 42, pp. 12 f.

"The burial place was a square chamber of sun-baked bricks upon a foundation of stone, covered with a 'tent-roof' of mud-brick." The burials of 7 are said to differ from those of the later strata in that the body is in a "crouching" position, which we assume means contracted.

#### TEPE GAURA

One of the features which we attribute to the Gaura period (see Table 1) is a class of tombs of unusual character. Eighty of these structures have been found between levels XIII and IX, and many contain rich collections of objects which are unparalleled in the occupational debris.

The strata from which these tombs were dug cannot be identified with certainty; obviously the level in which each tomb lies is below that from which it was dug, but since the shafts are not preserved, one cannot be sure of the level of origin. Much careful work has been done by Tobler in an effort to assign each tomb to its most probable level of origin, chiefly by investigating the plan of each occupation level to see whether its walls cut into or are cut into by any of the tombs. In this way, aided by some correlations of objects from the tombs with those from the occupation levels, many tombs could be attributed quite definitely to one certain level, or at least to a small range of levels.<sup>179</sup>

There are two main groups of tombs, an early group of only 27, intrusive into levels XIII-XIA, and a late group of 53, intrusive into levels XI-IX. Of the former, 3 seem attributable to level XIA, 24 to level XI. The late tombs occur in a broad crescentic belt across the mound, which leaves only the southern area unoccupied, and seem to be concentrated in groups near certain religious buildings. According to Tobler's attributions they are distributed in the various strata as follows:

Level XA.....	4	Level VIIC.....	22
Level X.....	10	Level VIIB.....	3
Level IX.....	14		

The tombs may have been restricted to only a small class of the population, since they contained only 87 bodies in all. (Other tombs, of course, may lie in areas at present unexcavated.)

The majority are constructed of sun-dried brick; some combine brick and stone (stone roofs on brick walls, one wall of stone and the others of brick, or brick and stone in the same wall), and seven are stone cists. The three types seem to occur contemporaneously. There is a consistent orientation with the corners to the cardinal points, and the long axis is usually northwest-southeast. Almost all are rectangular in plan. Sizes of brick tombs range from  $3.25 \times 2.65$  to  $.70 \times .55$  meters, the larger ones apparently belonging to levels X and IX; size and height of walls seem to be based chiefly on the age and importance of the individual. Stone cists range from  $1.15 \times .80$  to  $1.10 \times .90$  meters. The brick sizes vary widely, but all are comparable with sizes of bricks used in other buildings of these levels. Walls of brick tombs are usually one brick in thickness, with the individual bricks laid in stretchers. An exceptional example of level XI, elliptical in plan, has walls which are two bricks thick and built in herringbone technique. Brick, stone, or wood floors are occasionally used, and often the body rests on matting or textiles. Most tombs of levels XIA-X are covered by brick (usually), matting, stone, or wood. Brick roofs are not practical for the large tombs, but a few of these have interior supports for such a covering; one in level XI has a corbeled brick roof. Matting roofs seem to occur mainly in the late group, but it is difficult to distinguish such roofs from matting which is merely laid over the body; frequently an offset brick course near the top of the wall forms a ledge to hold the mats. Five tombs are completely lined with matting. Of the stone cists, four

179. Tobler emphasizes the fact that all these attributions represent merely the most plausible level of origin and that many are quite questionable. However, since all fall within the Gaura period, any errors do not diminish the value of the evidence for our purpose.

originated in level VIIIC and one each in levels IX, X, and XI. The material is limestone, usually dressed into irregular slabs, but sometimes in the form of rough boulders; all except one have roofs of stone slabs, and one has also a stone floor with matting on it.

Most tombs apparently contain only single burials, but a few have two or three bodies. Of the skeletons which could be examined most are of infants and children; no adults occur in the stone cists. There are no definite rules of orientation; but in the earlier tombs the body is generally placed diagonally, while beginning with level XA it is placed parallel to the tomb walls. Typically the bodies lie on the left side in a contracted position with the arms bent. Some lie on reed mats, and some are wrapped in matting or cloth; the coverings are more common in tombs attributed to levels IX–VIII than in earlier ones. There is no definite evidence of wooden coffins, although traces of wood were found. In a few of the richer tombs of levels X and VIII there are traces of green, blue, or (once) red pigment applied to the body, apparently as a mark of distinction. Barley grains were found in two tombs, wheat in one, and a few animal bones in one—presumably food offerings. The other objects from the tombs are discussed under the various object categories (see pp. 182–93).

One hundred and ninety-nine simple graves<sup>180</sup> are attributed to levels XIA–VIII, distributed as follows:

Level XIA .....	47 (some around the temple)
Level XI .....	73 (most around the temple)
Level XA .....	19
Level X .....	23
Level IX .....	24
Level VIII .....	13 (most around the Western Temple)

Simple inhumations, which are uncommon at the end of the Ubaid period (see p. 71), now increase in popularity; urn burial also is used, but to a lesser extent. A new type is the “side-walled grave,” a peculiar form which has a single wall, usually of brick, along one side of the skeleton; these “walls,” which are oriented northwest-southeast, are generally only one course high. They seem to have no practical function, and their meaning is obscure. Almost none of this type is associated with the temples, and they tend to occur in pairs, close together. A few graves have low pisé walls inclosing the burial; this type, which begins in the Ubaid period, is rare after the close of that age and may be the prototype of the larger built tombs just discussed. A burial of level VIII lies in a U-shaped inclosure of bricks.

As in the Ubaid period, the contracted position of the body is almost constant; one supine burial occurs in level X. The heads are most commonly toward the northwest, and the bodies generally lie on the left side. It is noticeable that pigments are never found on these bodies. Food offerings may occur, but there are few other grave furnishings. However, one grave of level XIA contained a bone pipe, and that of a child in level XI had gold ornaments similar to those found in the tombs.

No graves of level VII were found in the mound.

#### TELL SHAGHIR BAZAR

In the “prehistoric pit”<sup>181</sup> seven graves of level 5 were found; they were dug down into level 6 in spite of the gap of over 2 meters between the two levels. These graves are not beneath house floors, but form part of a cemetery dug in special ground. The burials are usually simple inhumations with an east-west axis, the body being slightly contracted and the head at either end of the grave. In site A.C.<sup>182</sup> there are two level 5 burials, both with heads to the west.

180. Tobler uses the word “tombs” only for the built tombs described above and calls all the simpler burials “graves.” We adhere to his distinction in discussing the Tepe Gaura burials.

181. *Iraq* III 16–18, 54, and 57–59.

182. See *Iraq* IV 116–18 and 124.

The two level 4 burials in site A.C. are beneath house floors. In the "prehistoric pit" in one of the seven burials of level 4 the body lies on fine reed matting and grains of some cereal, probably wheat, are present.

## STONE VESSELS

### NINEVEH

Ninevite 4 has a deep flaring bowl, and a crude shallow granite bowl was found in a level corresponding to Ninevite 5.<sup>183</sup>

### TEPE GAURA

Tiny black steatite bottles, which begin in the late Ubaid period (see p. 62), continue in level XIA, and small mortars for grinding paint, which begin to be common in level XII (see p. 62), continue through IX. Otherwise stone vessels are unknown in the occupational debris of levels XI-IX, although they occur in tombs attributed to those levels. The settlement of VIII yielded one complete and one broken example of a simple flaring bowl on a high, solid, almost cylindrical foot, two heavy flat bowls (possibly mortars), a graceful pear-shaped jar with elongated neck and little beveled rim, and a sharply carinate miniature jar of black stone.<sup>184</sup>

Numerous and beautiful stone vessels occur in the tombs of levels X-VIII. Why stone vessels cease to appear in the occupational debris at just the time they begin in the tombs is an interesting question; a clue to the answer may lie in the fact that in the early levels stone vessels are plain and utilitarian in character, while beginning with level X they are beautifully fashioned and ornamented and hence perhaps come to be considered fit for inclusion in the tombs with other valued objects. Imported stones—alabaster, translucent serpentine, obsidian, oölitic limestone, and variegated marble—are used. Probably the finest are two obsidian vessels from a level X tomb. One is almost spherical, with a little straight neck and a fairly large trough spout just below the neck; and the other is a spherical bowl with inturned rim and a smaller trough spout. Both are thin-walled, and the workmanship is of extraordinary fineness, especially in view of the recalcitrant nature of the material.<sup>185</sup> Other noteworthy vessels include a beautiful steatite bowl with a handle shaped like a lotus blossom (level VIIIC), a marble double vase made of two simple low bowls joined by a bridge, and two small ointment jars.<sup>186</sup> A nicely modeled round-bodied jar in variegated marble,<sup>187</sup> with straight neck and out-rolled rim, comes from a tomb attributed to level X.

### TELL BRAK

Several miniature stone vessels, all said to be well cut and well finished, were found in debris around the Eye Temple area and are attributed to the time of that building.<sup>188</sup> Most noteworthy is a squat limestone vessel engraved with shallow horizontal zigzags, whose short neck and broad splaying rim are reminiscent of our Figure 18:2, but the Brak example is square rather than round. The other vessels are small jars of varying profiles, a plain shallow round-based bowl, a disk-based bowl with a carinate profile and small trough spout, and a flat-based bowl with carination near the rim and a single lug handle.

### TELL SHAGHIR BAZAR

Shaghir Bazar 5 has a rounded shallow alabaster bowl with a very heavy rim.<sup>189</sup>

183. AAA XX, Pls. LI 10 and LXX 15, p. 148.

184. See *Tepe Gaura I*, Pls. LXXVI 17 (cf. Pl. LXV 59), 18-20 and XLIV b 1.

185. See *Univ. Museum Bull.* VI 1 (Oct. 1935) Pl. IX.

186. See *ILN*, Dec. 22, 1934, p. 1050.

187. See *BASOR* No. 57 (Feb. 1935) p. 16, Fig. 4.

188. *Iraq* IX 210 f. and Pl. LII 1-9.

189. *Iraq* III, Fig. 20:14.

## GLYPHTIC

## NINEVEH

Nineveh produced a quantity of jar sealings and a few cylinder seals from level 5 and apparently the upper part of 4.<sup>190</sup> By far the majority of these show Jamdat Nasr type geometric designs—rosettes, zigzags, wavy lines, and ovoid fill motifs—but a few bear animal designs which seem to resemble those typical of the Ubaid period in the North (see pp. 63 f.) rather than the “disintegrated” animal designs of the Jamdat Nasr style seals of the South. In rare instances animals are combined with geometric motifs. Most of these appear to be local imitations of Jamdat Nasr type designs and are not very well done, but their affinities to the South are indubitable. It should be noted that of all the varieties of Jamdat Nasr style designs, only the geometric type, which as Frankfort points out is one of the few new elements in Jamdat Nasr style glyptic,<sup>191</sup> influenced art outside the South. Interestingly enough, none of the Nineveh geometric designs is similar to those of the XIA–VIII range at Tepe Gaura. Only one Nineveh sealing with animal design<sup>192</sup> is at all comparable with any of the Gaura seals.

A frit cylinder seal found high in Nineveh 5 shows two animals rampant with a tree between them;<sup>193</sup> subject and style alike indicate an Early Dynastic III or more probably an Akkadian date.

## NUZI

A stamp-seal impression with a geometric design occurred in level VIII of the L4 pit.<sup>194</sup> A group of stamp seals and a few cylinder seals of Jamdat Nasr style were found in a test pit in G50 below a well of Hurrian times.<sup>195</sup> The stamps include animal shapes, and most of them have drill-hole designs. Three of the cylinders show animals cut in linear technique, and the fourth shows human beings executed in a technique which uses both drill holes and lines. These seals are all of types known in the Protoliterate period in the South (see pp. 141–43).

## TELL BILLA

In Billa 7 cylinder seals are not only present but very common, one usually being placed in each grave. They are made of ivory and “the style is for the most part geometric, but not exclusively so.”<sup>196</sup> This description suggests the Jamdat Nasr type seen at Nineveh. One design consists of a row of ibexes. A later report mentions “several interesting cylinder seals,” apparently from both level 7 and level 6, all with geometric designs, including a “sun-disk that is represented very much like a spoked wheel of a chariot.”<sup>197</sup>

## TEPE GAURA

Stamp seals and impressions are very numerous in levels XIA–XI and then inexplicably decline in popularity. Steatite and serpentine are the most common materials, although most of those used in the Ubaid period (see p. 63) continue. The hemispherical form, which begins in level XII, is the most popular shape. A stamp in the shape of a fish, with crosshatched design, was found in level VIII.<sup>198</sup> Geometric designs continue, and a single animal figure is the most common representational design, though combinations of animals are known; human figures, apparently always male, are rather frequent. We mention briefly the main subjects of the seals

190. AAA XX, Pls. LXV 14–16, 18–19, 21–36 and LXVI, pp. 138–42. Because of contradictory statements it is difficult to say whether any come from level 4.

191. *Cyl. Seals*, pp. 34 f.

192. AAA XX, Pl. LXV 33.

193. *Ibid.* Pl. LXV 18.

194. BASOR No. 46 (April, 1932) p. 6. We suspect that this object is a rosette such as is common on Jamdat Nasr style seals.

195. *Tepe Gaura* I, Pl. LXXXIV 18.

196. *Nuzi*, Pl. 55 O.

197. *Ibid.* Pls. 40 and 41 C–F.

198. BASOR No. 42, p. 13.

level by level (excluding seals found in the tombs), but it must be confessed that no development or noticeable change is discernible from level to level. A few Halaf-type seal pendants (see p. 33) are found in levels XI and X, and there is one in level VII.<sup>199</sup>

LEVEL XI<sup>A</sup>

1. Geometric elements: quartered circle, cross, quatrefoil, design based on central line or point.
2. Animals: horned animal (ibex?), saluki, bison, lion(?), scorpion. Animals may be passant or couchant, alone or in combination; some look back over the shoulder. Separate animal heads, sprigs, and geometric elements may be added as fill.
3. Human beings: man with one arm or both arms lifted, man before horned altar associated with large triangular object and disk (apparently a scene of worship), kneeling man, rows of men (once four little men who seem to be carrying something on their shoulders, associated with triangle and disk), two scenes of sexual intercourse.<sup>200</sup>

## LEVEL XI

1. Geometric elements: quartered circle, design based on central line, design based on triangle or square.
2. Animals: horned animal, saluki, ibex head, scorpion, intertwined snakes, bird(?), fish(?). One seal shows a scene with horned animals chased by salukis, and another has two monsters whose bodies are crossed at right angles.<sup>201</sup>
3. Human beings: man with arms raised, scene of sexual intercourse.<sup>202</sup>

LEVEL XI<sup>A</sup>

1. Geometric elements: quartered circle.
2. Animals: horned animals, saluki.

## LEVEL X

1. Geometric elements: design based on central line.
2. Animals: horned animals, saluki, scorpion, intertwined snakes, bear(?).
3. Human beings: man with arms raised.<sup>203</sup>

## LEVEL IX

1. Geometric elements: quartered circle, design based on central line, drill holes.
2. Animals: horned animals, fish.

LEVEL VIII<sup>204</sup>

1. Geometric elements: crosshatching.
2. Animals: horned animals, other quadrupeds, snakes. A flat plaque is unusual, but impressions of similar plaques occur. The design consists of two standing quadrupeds, each turning its head back toward a bird which stands on its rump and seems to be attacking it.<sup>205</sup> Animals with necks crossed are reminiscent of Uruk and Jamdat Nasr style cylinder designs.<sup>206</sup> One seal seems to show a carnivore attacking a ruminant, a design known in Early Dynastic cylinders.<sup>207</sup>
3. Human beings: scenes of sexual intercourse.

## LEVEL VII

1. Geometric designs: design based on central line, irregular pattern.
2. Animals: horned animals, other quadrupeds, serpent. A seal whose crude design may be intended to represent an animal is distinguished by having the figure outlined with a drill; the use of the drill is a feature of Jamdat Nasr style glyptic, though the Gaura outlining is not the same as the drill-hole style of Jamdat Nasr seals.

199. *Tepe Gawra* II, ornament figs. 21, 37, and 43; *Tepe Gawra* I, Pl. LIII b 5.

200. See *Tepe Gawra* II, seal figs. 82 (= *BASOR* No. 64 [Dec. 1936] p. 4, Fig. 1), 84, 86-87, and 93.

201. *Ibid.* seal figs. 163 and 152 respectively.

202. *Ibid.* seal figs. 81 and 88 respectively.

203. *Ibid.* seal fig. 96.

204. For seals and impressions of levels VIII-VII see *Tepe Gawra* I, Pls. LVI-LIX, Nos. 1-46.

205. *Ibid.* Pl. LVII 29. The motif of bird attacking quadruped appears in Early Dynastic cylinder seals; see e.g. *Cyl. Seals*, Pls. XI g and XIII h.

206. Cf. *Tepe Gawra* I, Pl. LVIII 31-33, with *Cyl. Seals*, Pls. IV h and V h.

207. Cf. *Tepe Gawra* I, Pl. LVIII 38, with *Cyl. Seals*, Pl. X g.

Southern influence is further manifested in level VII by the introduction of the cylinder seal.<sup>208</sup> Of the five cylinders found in this level, two are of Jamdat Nasr style, two are Early Dynastic II seals, and one is almost certainly Early Dynastic, though it cannot be attributed to any one phase of that period.<sup>209</sup>

The most unusual seal from the tombs is an ivory plaque from an VIIIC tomb. It shows a horned animal passant, a man with raised arms behind it, and in front of the animal a much damaged figure. Tobler suggests that this scene may represent a worshiper bringing a sacrificial animal to a divinity. This seal is one of the few which may have some value for dating; we have mentioned above a plaque from the occupational debris of level VIII. The geometric designs on the tomb seals—quartered circle and design based on a central line (both from tombs of level XI)—are paralleled in the occupational debris of levels XIa–IX. Two lapis lazuli seals from level X show respectively a man with arms upraised, done entirely with a drill, and a couchant quadruped. The use of the drill reminds one of a level VII seal mentioned above. The rarity of seals in the tombs is striking, only six having been found there; apparently most of the tombs date from those levels in which the use of stamp seals is waning.

#### GRAI RESH

In level II was found a stamp seal with a circular sealing surface, also an impression with a human figure;<sup>210</sup> the photograph of the latter is not clear, but the subject may have raised arms (cf. Tepe Gaura).

#### TELL BRAK

Stamp seals are very numerous among the finds from the Gray Eye Temple and other parts of the temple platform.<sup>211</sup> Outlines of bases are round, oval, square, rectangular, amygdaloid, kidney-shaped, and animal-shaped; the backs are sometimes ornamented with inlay or incision. Many round-based seals appear to be approximately hemispherical in shape (cf. Gaura; p. 183). The carving of the backs of the animal-shaped seals is frequently very fine; the animals are usually represented couchant, with legs tucked under the body and head turned to look over the shoulder. The kidney-shaped seals are unusual;<sup>212</sup> kidney-shaped inlays are known in the South in late Early Dynastic and Akkadian times, but seals of that shape are not found elsewhere. Seals shaped like a lion's head with rounded back are similar to shapes known in the South.<sup>213</sup> Some Brak seal designs show considerable use of the drill, as in the Jamdat Nasr style seals of the South;<sup>214</sup> in fact, many of the Brak seals are so similar to southern examples that they are almost certainly imported. Other seals have purely linear designs. Many of the simple animal designs are similar to those from Tepe Gaura, but it may be noted that geometric designs, so common at Gaura, are rare at Brak and that no representations of human beings occur at the latter site. One stamp shows two more or less conical objects, with five prongs at the top, placed *tête-bêche*; similar objects occur in seal designs at Warka (see e.g. p. 139).<sup>215</sup>

Cylinder seals also occur in the debris of the Eye Temple platform. An interesting green marble cylinder has a geometric design, unparalleled elsewhere, which may represent a niched

208. *Tepe Gaura* I, pp. 126 f.

209. *Ibid.* Pls. LVIII 42 and LIX 46 (Jamdat Nasr), LIX 43 and 45 (Early Dynastic II), LIX 44 (equivocal). These identifications were kindly verified for me by Professor Frankfort.

210. *Iraq* VII, Pl. II, Fig. 5:19–20, and p. 16.

211. See *Iraq* IX 39–41 and various examples on Pls. XI–XIV, XVI–XX.

212. *Ibid.* Pl. XVII 9–26.

213. *Ibid.* Pls. VIII 2 and XIII 8.

214. It may be noted that Nuzi and Brak are the only sites in the North which have furnished examples of the drill-hole style characteristic of the South, although the drill was used to some extent at Gaura.

215. *Ibid.* Pl. XVIII 1. Cf. *UVB* V, Pl. 22 c; *UVB* IX, Pls. 30 e and 31 a–b; *Kleinfunde*, Pls. 17 d and 18 b–c.

building façade; and two others, one in bone and one in shell, bear geometric designs of types familiar in the Jamdat Nasr style glyptic of the South.<sup>216</sup> An impression of a cylinder seal found in the same debris shows part of a row of pigtailed squatting figures such as are known in the Jamdat Nasr style seals also (see p. 143).<sup>217</sup>

#### TELL SHAGHIR BAZAR

A stamp-seal impression from level 5 shows a crouching hare, quite well drawn.<sup>218</sup> A flat stamp with attached suspension lug and simple crosshatching on the base comes from level 4, and Halaf type seal pendants occur in both levels.<sup>219</sup> No cylinders are found.

### PERSONAL ORNAMENTS

#### NINEVEH

In Ninevite 4 a number of small white steatite beads were found. Some rough clay beads of circular or barrel form are said to be similar to "some of the beads from Ur," but no references are given. Two glass beads found in Ninevite 4 we believe are undoubtedly intrusive.<sup>220</sup>

In Ninevite 5 were found beads of "a slightly larger variety," but none are described in detail, though three shell beads are mentioned. A bronze pin with rounded head occurs in stratum 5, and one of silver may be contemporary with that level.<sup>221</sup>

#### NUZI

Stone beads were found in levels IX–VII. A pendant from IX is more or less leaf-shaped, and a similar one is said to occur in VIII.<sup>222</sup>

#### TELL BILLA

A tomb in stratum 6 yielded a silver hairpin and a finger ring of the same material.<sup>223</sup>

#### TEPE GAURA

Ornaments are not common in the occupational debris but are quite numerous in the tombs and graves. We deal first with those of the settlement and graves and then with those from the tombs.<sup>224</sup>

Beads are easily the most common ornaments in levels XIA–IX. The shapes are simple, with tiny rings being especially favored in levels XIA–X. A few beads with engraved or scratched designs such as occur in late Ubaid levels (see p. 63) are found in levels XIA, XI, and X. White frit, obsidian, carnelian, and limestone are the most common materials; but numerous other stones are used, as well as bone, shell, ivory, and gold. Level XIA has an acorn pendant in stone,<sup>225</sup> a gold rosette, a gold disk with an engraved and punctate design, and a beetle-shaped ornament of gold leaf over bitumen. Level XI yielded a duck and a dog pendant,<sup>226</sup> both in marble, a shell ring with a small suspension ring at the top,<sup>227</sup> and a gold pin. A

216. *Iraq* IX, Pls. VII 1 and XXI 1–4.

217. *Ibid.* Pl. XXIV 18.

218. *Iraq* III, Pl. I 9.

219. *Ibid.* Fig. 7:5, 10, 19, 24.

224. If it seems inconsistent that objects from simple graves are discussed with those of the settlement, while tomb furnishings are treated separately, we can plead only that we are following Tobler's method. Another slight inconsistency which we are following is that, while tombs have been attributed to the level from which they are most likely to have been dug, graves and their contents are discussed with the level into which they were dug.

225. *Tepe Gawra* II, ornament fig. 59.

226. *Ibid.* ornament figs. 64 and 62 respectively.

227. *Ibid.* ornament fig. 42. A similar one in frit was found in level XII (see above p. 63).

220. See AAA XX 179–81.

221. *Ibid.* Pl. LXVIII 6–7 and pp. 145 f.

222. See *Nuzi*, p. 19 and Pl. 55 G.

223. *BASOR* No. 42, p. 12.



gold headband and a very fine pendant of a bird<sup>228</sup> whose lower body is gold and whose upper body is lapis lazuli came from level X, while level IX contained a lapis lazuli bird pendant and a steatite pendant cut in the form of a spirally-grooved shell.<sup>229</sup> Simple pendants, often natural pebbles with a perforation, occur throughout levels XI A-IX.

The beads of level VIII, from occupational debris as well as from graves, are numerous but simple—rings, balls, cylinders, barrels, and bicones of shell, bone, steatite, crystal, agate, amethyst, carnelian, limestone, frit, clay, turquoise, gold, and obsidian.<sup>230</sup> There are a simple drop-shaped pendant, a bottle-shaped pendant perforated through the neck, and an animal-head pendant.<sup>231</sup> A gold pendant and gold ornaments filled with bitumen were found in infant burials.<sup>232</sup> A copper pin with lapis lazuli head, the shaft perforated just below the head, was found in this level; a similarly shaped and perforated pin in ivory has incised decoration on the upper part of the shaft.<sup>233</sup> A flat copper disk, perhaps to be fastened to a garment, has an embossed concentric-circle design.<sup>234</sup>

Level VII is not as rich in ornaments, probably due to the lack of graves.<sup>235</sup> The only unusual bead is of agate with two large flat faces and top and bottom cut into three facets each, forming a cross section of irregular octagonal outline.<sup>236</sup> There is a little clay studlike object,<sup>237</sup> perhaps for nose or ear or, since the shaft is perforated, for a pendant. There are little copper pins, one with the end rolled over to form a head, and several rings.<sup>238</sup>

We turn now to the objects from the tombs. Again beads are the most common ornaments, being worn on the head, neck, hands, wrists, waist, knees, and ankles; once black and white beads, sewed to a cloth in herringbone pattern, seem to have formed a girdle. One tomb in level X yielded the amazing number of 25,192 beads, and several others had numbers into the thousands. Turquoise, jadeite, carnelian, hematite, marble, limestone, quartz, obsidian, steatite, lapis lazuli, and diorite are the stones used; white frit is common, gold and electrum occur occasionally, and shell and ivory are known. Tiny rings are easily the most common type, although larger rings are used. Ball-shaped beads are found only in gold and electrum, and cylindrical beads occur in gold, lapis lazuli, and shell. Tombs of level XI yielded an obsidian pendant of elliptical form with two perforations at the top (probably a Halaf ornament reused) and a copper pendant in the form of a double spiral. Tombs of level X contained a fine wasp in gold and lapis lazuli (reminiscent of the bird from the level X settlement), a hoof-shaped gold pendant, numerous little gold rings with suspension loops (called "racquet pendants" by Tobler) which are apparently part of a bracelet, and a set of flat, bladelike gold pendants from a wristlet. A tomb of IX had a lapis lazuli acorn (cf. the acorn of settlement level XI) and a calf-head amulet of the same material.

Various other gold and electrum ornaments occur in the tombs. There are several kinds of flat rosettes which were hammered out to size, the tips cut to shape, and the petals outlined. One type with four pendent ribbons is unpierced, and its method of attachment is unknown. Other types may have conical centers of gold or stone (not later than level X) or may be plain, flat, and small. Gold "studs" were found in levels XI A and VII C; most seem to have been attached to clothing by bitumen, but flat crescentic ones were provided with holes by which they could be sewed to garments. The most interesting ornament, from a tomb of level X, is a tiny electrum wolf's head,<sup>239</sup> probably a terminal for a scepter or some such object, which indicates

228. *Ibid.* ornament fig. 66.

229. *Ibid.* ornament figs. 65 and 57 respectively.

230. *Tepe Gawra* I 133-35, Pls. LIII a, LIV c, and LXXXIII 2-11.

231. *Ibid.* Pl. LXXXIV 1, 3, 17.

232. *Ibid.* Pl. LXXXIV 22-24 and p. 136.

233. *Ibid.* Pl. LXXXII 12, 15.

234. *Ibid.* Pl. LXXXII 28.

235. *Ibid.* pp. 133-35.

236. *Ibid.* Pl. LXXXIII 13.

237. *Ibid.* Pl. LXXXV 11.

238. *Ibid.* Pl. LXXXII 16 and pp. 114 f.

239. *Univ. Museum Bull.* V, 5 (March, 1935) Pl. II.

an amazing degree of skill in metallurgy. It is a single piece of metal save for the ears, teeth, and lower jaw. The ears are attached by copper pins, and the lower jaw is jointed onto the head and held by an electrum pin; the teeth are of electrum wire. The eye sockets contain bitumen in which presumably colored stones were inlaid for eyes, and the cavity of the head is filled with bitumen also. Double-pointed ivory pins with gold bands and lozenge-shaped inlays of lapis lazuli and turquoise occur in tombs of levels X and VIIIC; they may be hairpins. From the same range of levels came six combs made of ivory from boars' tusks; they may have straight or curved backs. A tomb of VIIIC yielded a bone object consisting of a disk attached to a zigzag handle, which has been suggested as a hair ornament.<sup>240</sup>

#### TELL BRAK

Thousands of beads and many amulets—the latter mainly of black serpentine, frit, and bone—were contained in the Gray Eye Temple and other parts of the Eye Temple platform.<sup>241</sup> Couchant animals with heads turned to the side or looking forward occur occasionally but are rare compared with the numbers of seals in that form. Figures of squatting bears are noteworthy; birds, frogs, leaves, kidneys, and rosettes also occur. Many of these look so like products of the South that we can hardly avoid the conclusion that they are either imports from the South or made by Southern craftsmen in the North. A leaf-shaped amulet with central rib<sup>242</sup> is like one from Protoliterate *d* at Khafajah (see p. 147).

#### TELL SHAGHIR BAZAR

Level 5 produced long silver beads of a sort of double-trumpet shape and double conoids made out of spiral silver wire. Simple ring beads of carnelian and quartz are common in levels 5 and 4, and a flattened double conoid of lapis lazuli was found in level 4.<sup>243</sup>

Several copper pins or hairpins were found in level 5. Usually the shaft is slightly flattened near the top and perforated; the head is sometimes plain, but once carved with two doves.<sup>244</sup> A curved pin has a button head.<sup>245</sup> Bone pins perforated near the top like the metal ones are known in level 4; the heads are usually carved with a series of grooves, but one is hoof-shaped.<sup>246</sup>

A grave found in the last season contained a copper pin with a perforated shaft and a nicely made head in the form of a goat or gazelle head; since it is from an area which had graves containing Ninevite 5 pottery, the pin is assumed to date from that time.<sup>247</sup>

#### TOOLS AND WEAPONS

##### NINEVEH

A clay slingbolt comes from stratum 4.<sup>248</sup> A copper piece which may be a spearhead is attributed to the "Jamdat Nasr" period<sup>249</sup> and thus by implication to Ninevite 4.

Level 5 yielded a pear-shaped stone macehead, and a little copper arrowhead is probably from that level.<sup>250</sup>

##### Nuzi

"A moderate quantity of flints" occurred in level IX, spindle whorls in levels IX–VIII, and a stone drill socket in VIII.<sup>251</sup>

240. See *ILN*, Dec. 22, 1934, p. 1050.

241. See *Iraq* IX 33 and 39–43, and various examples on Pls. VIII–XI, XIII–XIV, XVI–XVII.

242. *Ibid.* Pl. VIII 3.

243. See *Iraq* III, Fig. 8:17 and p. 24.

244. *Iraq* III, Fig. 8:2, 5; *Iraq* IV, Fig. 12:1.

245. *Iraq* III, Fig. 8:8.

250. See *ibid.* Pl. LXX 9 and p. 148, Pl. LXVIII 1 and p. 145.

251. See *Nuzi*, p. 19 and Pl. 56 E.

246. *Iraq* IV, Fig. 12:19, 27; *Iraq* III, Fig. 8:14.

247. *Iraq* IX 190 f. and Pl. XLII 8.

248. AAA XX, Pl. LXX 11.

249. *Ibid.* Pl. LXVIII 2 and p. 145.

## TELL BILLA

Five clay "stamps" were found in level 6 and are assumed by Speiser to be implements used in decorating incised pottery.<sup>252</sup> However, their designs include a female figure, a human hand, and a geometric pattern, the first two being motifs which never appear on Ninevite 5 type incised ware. It seems probable that the "stamps" with female figures and that with a human hand are molds for making figurines or amulets. The one with geometric design may perhaps be compared with two stamps found in Gaura VI, which have geometric designs.<sup>253</sup>

## TEPE GAURA

Clay spindle whorls continue to be common; in levels XIA and XI they are usually in ring form and generally decorated with incision or punctation as in level XII (see p. 61). In levels XA-IX whorls are few and crude; in level VIII they are still not very common, but are frequently decorated with scalloped edges. Level VII sees a considerable increase in number.<sup>254</sup> Stone whorls, usually conical in shape and occasionally decorated, are always relatively rare. Pottery-smoothers or burnishers of clay are known in most of these levels, and stone smoothers are found in level VIII.<sup>255</sup> Clay bobbins or toggles which sometimes have both ends pointed and may have incised or punctate marks occur in levels VIII and VII.<sup>256</sup>

Flakes of flint and obsidian, more commonly the latter, occur all through these levels, and there are a fair number of cores as late as level IX. Some blades are hafted with bitumen. In XIA was found a limestone razor handle, not unlike that of a present-day straight razor, containing a slit to receive a blade (presumably of flint or obsidian) set in bitumen.<sup>257</sup> Stone celts diminish in number from level XIA to IX but are more common in VIII-VII.<sup>258</sup> Perforated hammerstones reach their peak of popularity in levels XI and IX, but are still known in VIII; they are most commonly double-pointed, but more or less rectangular ones occur.<sup>259</sup> Conical stone grinders or pestles occur all through these levels. Flat stone hones or whetstones, usually perforated at one end, are found in levels VIII-VII.<sup>260</sup> There are a few heavy stone disks which might be loom weights, also a few objects which it is possible to consider scale weights; the first certain example of the latter is a hematite duck weight from level VII.<sup>261</sup>

Copper objects are very rare in levels XIA-IX, but level XI yielded a blade with splayed end and a point. Copper tools begin to appear more frequently in level VIII, which has chisels, needles, hooks, awls, a nail, and possibly a sickle; level VII also has chisels, needles, hooks, and a nail, plus tweezers and blades of knives or daggers.<sup>262</sup> Bone awls and spatulas continue in levels XIA-IX.

Weapons are not very common. There are numerous groups of clay sling-missiles in levels XIA and XI and one stone example in XI; in level XI the clay pellets are usually long and almost cigar-shaped. Maceheads are fairly common in level XIA and occur through level VIII; none has been found in VII, but that is probably accidental since they recur in VI. The pyriform shape is usual, and level VIII also has squat examples and one which is knobbed all over.<sup>263</sup> Ovate flint arrowheads begin in level VIII and are common in VII; and in VII there is one long slim double-pointed arrowhead, a type which is said to be common in level VI.<sup>264</sup>

As might be expected, the tombs yielded few purely utilitarian objects. There are a few maceheads, mostly pyriform or barrel-shaped; a hematite one from a tomb of level X is three-

252. *BASOR* No. 42, pp. 12 f.

253. *Tepe Gaura* I 81 and Pl. XXXVII b.

254. *Tepe Gaura* I 78.

255. *Ibid.* p. 81.

256. *Ibid.* Pl. LXXIX 5, 7, 11, 15 and pp. 78-80.

257. *BASOR* No. 64, p. 8 and Fig. 4.

264. *Ibid.* p. 85, Pl. XXXVIII a 12-17 (ovate) and 18 (double-pointed). The double-pointed variety is found during the Akkadian period in the South.

258. *Tepe Gaura* I 85 f.

259. *Ibid.* p. 88, Pls. XL b 8-11 and XLII 5.

260. *Ibid.* pp. 88 f. and Pl. XLI a 5-6, b 1.

261. *Ibid.* Pl. XLIII a 1.

262. *Ibid.* pp. 106 ff. and Pl. LXXXII 10.

263. *Ibid.* pp. 86 f., Pls. XL a 1-4, 6-7 and XLII 3.

sided with a projecting knob on each corner. A few obsidian blades and cores occur, the blades possibly being from razors, and there is one whetstone. Six bone spatulas were found; their function is unknown and, since one is encircled by a gold band, they might be ornaments. A tomb attributed to level VIIIC provided two copper awls.

#### GRAI RESH

In the house of level II were found ovoid sling-missiles of clay, a pear-shaped macehead, bone implements (probably awls), a copper blade, a copper "bit" of a drill, and numerous obsidian and flint implements.<sup>265</sup>

#### TELL BRAK

Close to the south wall of the Eye Temple were found six pear-shaped maceheads. Five are decorated with fluting formed by groups of vertical incisions, which in two cases are "tied together" by a group of horizontal incisions around the middle. The upper part of the sixth bears an eight-petaled rosette in low relief, with the shaft-hole as its center.<sup>266</sup>

#### TELL SHAGHIR BAZAR

Level 5 yielded two extraordinary copper weapons, a sickle-shaped blade and a dagger.<sup>267</sup>

Level 4's only implement is a little ground stone celt.<sup>268</sup>

### SCULPTURE

#### NUZI

"A small copper animal figurine" occurred below the floor of level VIII. It is only 12 mm. long and badly corroded but is especially interesting because it bears impressions of coarsely woven cloth.<sup>269</sup>

#### TEPE GAURA

A few fragments of Halaf type female figurines found in levels XIA, XI, and IX are almost assuredly out of place. A fragmentary male figurine of clay, found near the temple of level X, is ithyphallic and has a spot of paint at the end of the phallus. A spout from a zoomorphic pottery vessel from level XI is in the form of an animal's head with holes for inlaid eyes and horns, and in the same level there was a clay figure of a sheep with tiny shells inlaid in the body to represent locks of wool. Little animal figurines of clay, usually of sheep when the genus can be identified, are popular throughout levels XIA-IX, but are always quite crude.

Clay figurines of horned bulls and sheep occur in Gaura VIII, sheep being said to be especially common.<sup>270</sup> "Virtually the same animals" are found in level VII, and the dog appears there also.<sup>271</sup> Plastic decoration on pottery vessels of level VII has been mentioned (see p. 169). Clay models of horns occur in both VIII and VII, one actually in the Eastern Temple of VIII, indicating the probable ritual character of these objects.<sup>272</sup> A broken figure of a nude female holding her breasts was found in level VII, and two copper snakes also were found in this level.<sup>273</sup>

265. See *Iraq* VII 15 f. and 18, Pl. II, Fig. 5.

266. *Iraq* IX 211 and Pls. VI 1-2 and LII 11-12, 14-15.

267. *Iraq* III, Fig. 8:3 and 1 respectively. The former resembles sickle-shaped objects, usually found in pairs, from the latter part of the Early Dynastic period in the South (see e.g. S. Langdon, *Excavations at Kish* I [Paris, 1934] Pl. XIX 4).

268. *Iraq* III, Fig. 6:13.

269. *Nuzi*, p. 19.

270. *Tepe Gaura* I 67 and Pl. LXXVII 3, 8-9.

271. *Ibid.* p. 68.

272. *Ibid.* p. 73.

273. *Ibid.* Pl. LXXVII 6 and pp. 111 f.

## TELL BRAK

The most interesting pieces of sculpture come from the Gray Eye Temple at Tell Brak and are the sole pieces of monumental sculpture in the North. They are four human heads,<sup>274</sup> or rather masks, of alabaster and calcite, consisting only of face and neck as in the case of the famous head from Warka Eanna III (see p. 150). Like the latter piece, one of the Brak heads also apparently was intended to wear a headdress or wig, for only the outline of the hair is represented and there are holes to receive a headdress of some other material. Here, however, the resemblance to the Warka head ceases. The Brak example is carved with geometric rigidity—the nose a large triangular protuberance from whose root wing out the two heavy eyebrows, the eyelids marked with ridges, the mouth merely two contiguous ridges, the line of the lower face one continuous curve from ear to ear. The eyes are not inlaid, but there are small holes to indicate the pupils. The other Brak heads are similar in style, but each has a conical protuberance on top. One might dismiss these strange pieces as merely primitive attempts at sculpture in the round, but the first-mentioned head in particular seems to exemplify a definite style; it may be noted that this area through most of its history produced very stylized “geometric” sculptures, for example Tell al-Halaf statues of much later date.<sup>275</sup>

A fragment of a life-size eye socket in black steatite was found near the altar of the Eye Temple and quite possibly belonged to a statue of the deity which originally stood on the altar.<sup>276</sup>

## MISCELLANEOUS OBJECTS

A set of crude little clay objects which seem to be game pieces was found at Tepe Gaura in the Round House of level XIA; six are roughly bottle-shaped, two pyramidal, and two hemispherical. With level XI clay pieces cease to be used, and stone ones become common. The shapes of the stone pieces are simple, mainly spheres, hemispheres, and disks; they are usually found in sets. Marble and alabaster spheres, once combined in a set with conical pieces and plain pebbles, occur in tombs attributed to level X.<sup>277</sup> A small ovoid serpentine object from Gaura VII<sup>278</sup> is similar to objects considered as game pieces in the South (see p. 153).

One of the most interesting and provocative classes of objects is the so-called “hut symbol” or “eye symbol.” At Tepe Gaura twenty-five clay and three stone ones occurred in levels XIA to IX, three clay ones in XII, and two marble examples in a tomb of level VIIIC. Most of these objects are hollow with bell-shaped bases and two rings or volutes at the top.<sup>279</sup> A similar object in clay occurred at Grai Resh in levels IV–II.<sup>280</sup> At Tell Brak “eye symbols” were very common in the Gray Eye Temple, in which so many other objects were found, and occur in numerous ornamental variants unknown elsewhere.<sup>281</sup> A few resemble the Gaura examples, but most instead of having open loops at the top are solid with incised eyes and eyebrows.<sup>282</sup> The little figures may be double or triple and occasionally show a small figure carved on the front of a larger one, suggesting mother and child. Some have pointed headdresses of various kinds. No other features, either facial or bodily, are represented, but some have lines

274. *Iraq* IX 43 and Pls. I–II.

275. See *Tell Halaf*, Pls. XI and XIII.

276. *Iraq* IX 97 and Pl. VII 3; cf. the animal eye found in the “Kleinfunde” hoard at Warka (see above p. 151).

277. Tobler suggests that, instead of being game pieces, such little objects might have been used for divination, since in one case they form the entire equipment of a tomb.

278. *Tepe Gaura* I, Pl. LXXXV 3.

279. See *BASOR* No. 62, p. 6, Fig. 1, and *ILN*, Dec. 22, 1934, p. 1050, for various shapes.

280. *Iraq* VII, Pl. III, Fig. 7:1, and p. 19.

281. *Iraq* IX 33–35 and Pls. XXV–XXVI, LI.

282. It is noteworthy that the type with open loops (Mallowan’s “spectacle-topped idols”) seems to be the older form at Brak, since examples of this type were found beneath the level in which the majority of “eye symbols” occurred (*ibid.* p. 34).

or dots which may indicate clothing. Those with solid tops are apparently always of stone, while the open-topped specimens may be of stone or clay.

The meaning and use of such objects has excited much speculation. The name "hut symbol" was originated by Andrae, who believed that they represented a hut with rounded roof, surmounted by a double reed-bundle.<sup>283</sup> This explanation is very plausible in connection with the other monuments which he describes, especially the peculiar "Hausymbol" in Berlin and the depictions of a cattle byre on a Jamdat Nasr style cylinder.<sup>284</sup> However, the Gaura pieces, probably the earliest "eye symbols" known, look less like Andrae's assumed prototypes than does the Jamdat Nasr style seal just cited, and Andrae's hypothesis does not explain the examples from Tell Brak which have anthropomorphic details. Tobler, discussing the Gaura examples, also objects to Andrae's theory. He says that there seem to be too many examples to allow a ritual use for all, that they are never found in temples or shrines and at least once occur with rubbing-stones and other pieces of indubitable household equipment, that they are always very coarsely made, and that there is no evolution or standardization of form in the course of time. Therefore he suggests a utilitarian function<sup>285</sup> for the Gaura objects, possibly that of loom weight, and to the writer this prosaic explanation seems more plausible than the more elaborate theory. The Brak "eye symbols" Tobler would put into a different category, believing that the small and carefully ornamented objects are unrelated to the Gaura objects, although superficially similar. "It is possible that there is a connection between the two types, but such a relationship cannot explain the size, choice of material, lack of craftsmanship, and circumstances of discovery of the Gaura terracotta objects. . . ." Mallowan has suggested that the Brak examples represent a deity or deities and speaks of the "Eye god."<sup>286</sup> That is perhaps an overbold assumption; but the small size, careful workmanship, and—above all—the fact that they were temple furnishings suggest that the Brak "eyes" had an amuletic or ritual function and were somehow connected with the power or powers worshiped in the temple.

Other strange terra cottas from Gaura have been labeled "cult objects" by Tobler, although they too are crude in execution and not found in temples. They begin in level XII and continue through levels XI–IX. They are frequently double-horned pieces with a triple piercing on one face and a double piercing at both ends; another type has a single projecting knob in place of the two horns and three groups of diagonal piercings. A crude clay two-horned object, apparently without perforations, was found at Brak "in debris from the south end of the Eye-Temple platform, and was possibly contemporary with its foundation"; it is considered by Mallowan to have sacred significance.<sup>287</sup>

A peculiar ribbed copper object, which appears to be cast, was found under a wall of the temple of Gaura XI.

Four bone tubes usually with bell-shaped "mouthpieces," which may be successors to the bone playing-pipes of the Ubaid period (see p. 65), occur in Gaura XI to IX.<sup>288</sup> The example from level IX is decorated at the base with an incised rectangle and a triangle above, a motif which Tobler believes represents temple architecture (see p. 50). Levels IX and VIII each yielded a bone object of irregular shape and unknown use, decorated with turquoise inlays.<sup>289</sup>

A large phallic object in stone found in the Eastern Temple of Gaura VIII perhaps indicates that the deity worshiped there was a fertility god.<sup>290</sup>

283. W. Andrae, *Die ionische Säule; Bauform oder Symbol?* ("Studien zur Bauforschung" V [Berlin, 1933]), pp. 32–34.

284. See *ibid.* Pls. III and II, top.

285. Suggested by Bache also; see *BASOR* No. 62, p. 7.

286. See *Iraq* IX 202–10, where he discusses in detail the significance of the eye in ancient iconography as a symbol of divinity or magical power.

287. *Iraq* IX 184 and Pl. XXXIX 2.

288. One was found in level XII (see above p. 65).

289. See *Tepe Gawra* I 117 and Pl. LII a for the level VIII example.

290. *Ibid.* Pl. XLVI b and p. 99.

Unusual in prehistoric times are little clay models of vehicles from Gaura VIII and VII.<sup>291</sup> Level VIII has a broken model of a two-wheeled chariot with a little "back step" such as carried a man in Babylonian chariots, also a four-wheeled "wagon" type, and level VII has two two-wheeled chariots, one with the axle directly under the dashboard.

At Tell Billa a bronze bowl, the only metal vessel known in the North, is said to have been found in a grave of level 6.<sup>292</sup>

### COMPARATIVE STRATIGRAPHY

The most useful feature for establishing the comparative stratigraphy (see Table 1) is the occurrence of Ninevite 5 type pottery, either painted or incised, at all the sites; to a lesser degree the forms characteristic of the plain pottery found at the end of Ninevite 4 and in Ninevite 5 can be traced at other sites. Not much can be done with earlier material.

Tepe Gaura has two features which are paralleled in Ninevite 3 pottery: deep, nearly vertical-sided vessels in levels XIIA–XII and XI–IX; rolled, grooved, and ledged rims in levels XI–IX (see p. 57).

In Gaura VIII carinate bowls with inturned rims are frequently pierced for suspension (see p. 169); suspension holes are known in Ninevite 5 (see p. 163).

Gaura VIIIB has a sharply carinate hole-mouth pot which is paralleled at Nineveh, apparently in level 4.<sup>293</sup> The same Gaura stratum, however, has a little flaring cup which is somewhat similar to a plain vessel of Ninevite 5.<sup>294</sup>

Gaura VIIIA has bowls of form 23b, which occur in Ninevite 5 also; other features found in both strata (see pp. 163 f. and 168 f.) include horizontal ribbing on the upper bodies of vessels, especially form 23, fine incision on gray ware, and painted chalices. On the basis of this evidence Gaura VIIIA seems to fall within the span of time covered by Ninevite 5.

Gaura VII (see pp. 169 f.) seems clearly within the same span. A complete chalice and a sherd are painted in Ninevite 5 style, and there are carinate bowls of form 22, which are paralleled at Nineveh by a plain bowl apparently contemporary with Ninevite 5 painted ware.<sup>295</sup> Aside from ceramics, we have the evidence provided by cylinder seals, those of Gaura VII ranging from Jamdat Nasr to Early Dynastic II types and those of Ninevite 5 from Jamdat Nasr to Early Dynastic III or Akkadian (see pp. 185 and 183).

Nuzi levels IX–VIII seem to be contemporaneous with Ninevite 4 and possibly 3, while VII has connections with Ninevite 5 (see p. 165). The restricted area of excavation and the very small amount of material from Nuzi should be kept in mind when assessing the validity of the dating of the Nuzi levels.

Tell Billa 7 and 6 on the basis of their pottery are both within the range of Ninevite 5, but Billa differs from Nineveh in that the painted and incised wares are stratigraphically separated (see pp. 165 f.). The cylinder seals of Billa 7 with their predominantly geometric designs (see p. 183) suggest the Jamdat Nasr type of Nineveh, but lack of illustrations leaves the connection tenuous.

Grai Resh (see p. 170) does not fit closely into the picture, but level I is said to contain buff pottery of Ninevite 5 type, and on the basis of that statement we equate the two levels. Rough beveled-rim bowls connect Grai Resh IV–II with Ninevite 3–4, and a hole-mouth pot and chal-

291. *Ibid.* pp. 74 f., Pls. XXXIV c 1, 3–4 and XXXVI 1.

292. *BASOR* No. 42, p. 12.

293. *Tepe Gaura* I, Pl. LXIV 46; cf. *AAA* XIX, Pl. LXI 9. It should be noted that the stratum of the latter is not certain; it is said (*ibid.* p. 88) to "belong to a period probably anterior to the painted pottery," which would seem to imply that it precedes Ninevite 5 and therefore belongs to level 4. Its find-spot, 8–10 feet below the lowest occurrence of painted pottery (*ibid.* p. 84), corroborates the assumption.

294. *Tepe Gaura* I, Pl. LXIII 35; cf. *AAA* XX, Pl. LIII 8.

295. *AAA* XIX, Pl. LXI 7 and p. 88.

ices connect these Grai Resh levels with Gaura XI-IX. Gray burnished ware is common to Grai Resh IV-II and Ninevite 3 (see p. 57).

Tell Brak seems to have no close connections with the other sites, except the occurrence of Ninevite 5 type pottery (see p. 171). The occurrence of "eye symbols" is paralleled at Gaura and Grai Resh, but many Brak specimens are much more elaborate (see p. 191). The numerous features which Brak has in common with Warka Eanna III and the Protoliterate *d* phase at Khafajah (see e.g. pp. 179 and 188) suggest contemporaneity with the end of the Protoliterate period, which seems to fall within the range of Ninevite 5 (see p. 196).

Shaghir Bazar 5 is contemporaneous with Ninevite 5 on the basis of numerous specimens of incised ware, a few painted vessels, and forms 23-24 in plain pottery (see p. 171). Metal pins occur in both levels and in Gaura VIII-VII but are not of closely allied types. Shaghir Bazar 4, which is said to carry on the culture of 5 (see p. 171), may belong in the same range, since it has form 23.

In all of this material two culture phases seem to be involved, but no good names for them exist. They have been designated "Uruk" and "Jamdat Nasr," the terminology long applied to the South, but as far as present evidence indicates the North and the South have too few cultural elements in common to allow use of the same terminology for both; therefore we cannot now simply label these two phases of the North "Warka" and "Protoliterate." But, having distinguished them, we are faced with the necessity of finding names to fit them. Naming a culture phase after a type site has disadvantages, not the least of which is the likelihood that future discoveries may prove the chosen site not typical of the culture as a whole, as has already happened in the cases of the Halaf and Ubaid periods. However, no better alternative seems available in the present instances, and, since the sites of Tepe Gaura and Nineveh are so far the best representatives of the two culture phases under discussion, we have chosen them for our terminology. The "Gaura period"<sup>296</sup> comprises levels XIA-VIIIB at Tepe Gaura and those levels at other sites which have analogous material or which come between levels representing the Ubaid period and those which contain Ninevite 5 types of pottery. The "Ninevite period" comprises most or all of Ninevite 5 and levels at other sites containing analogous prehistoric material. On the basis of cylinder seals Ninevite 5 probably and Gaura VII certainly continue into historic times.

The Gaura period, then, would include the following levels:

Nineveh: part of level 3 (which begins in the Ubaid period) and all of level 4.

Nuzi: levels IX-VIII.

Tepe Gaura: levels XIA-VIIIB.

Grai Resh: part of level V (which is transitional from the Ubaid period) and levels IV-II.

The Ninevite period comprises the following:

Nineveh: most or all of level 5 (which probably continues into historic times).

Nuzi: level VII.

Tell Billa: levels 7-6.

Tepe Gaura: level VIIIA and part of level VII (which continues into historic times).

Grai Resh: level I.

Tell Brak: most or all of the Eye Temples.

Tell Shaghir Bazar: level 5 and possibly level 4.

### CORRELATION WITH THE SOUTH

In correlating the North and South during late prehistoric times (see Table 3) we are in the most dubious portion of our inquiry. We have seen that after the *floruit* of the Ubaid culture the two areas follow quite different lines of development and there are few evidences of con-

296. This terminology has been suggested by Speiser also; see *BASOR* No. 58 (April, 1935), pp. 4 f.



tact between them. In the South we are handicapped by having very little information about the culture which existed between the Ubaid and Protoliterate periods. In the North the new material from Tepe Gaura has given substance to the Gaura period, which before seemed equally tenuous, but it is difficult to fit material from other sites into the Gaura sequence.

It may be said that there is not enough published material to enable us to fix the bounds of culture periods in late prehistoric times, an objection which must be acknowledged insofar as precise delimiting of the periods is concerned. In the South we have found that Warka levels formerly ascribed to the "Uruk" period contain material so similar to that of the "Jamdat Nasr" period that it cannot be separated from the latter, and have therefore combined part of the "Uruk" period with the "Jamdat Nasr" period to form the "Protoliterate" period. The writer feels that Eanna level VIII is the point at which this material begins and therefore considers that it represents the beginning of the Protoliterate period. In the North the Ninevite period is considered to begin whenever pottery characteristic of Ninevite 5 makes its appearance. The rather sporadic evidence which we possess allows only identification of similar types of culture elements in various levels at various sites, and does not suffice for any definitive statements of the precise chronological connections between sites or between culture phases, or for the collection of good assemblages of materials belonging to these phases. However, before any progress can be made it seems necessary to gather together the material now available, to make some attempt to organize it chronologically, with tentative equations of levels, and to suggest what the culture phases seem to comprise and how they seem to fit together. This requires considerable temerity on the part of the scholar, for any conclusion made is based on slight evidence and can be quite fairly attacked as tenuous and questionable. But in our mind the necessity for some kind of ordering of the material outweighs the risk involved, and we are therefore presenting our views regarding the comparative stratigraphy here, as we have done for the earlier periods of Mesopotamian prehistory, although the material is even less satisfactory than in the former cases.

With this apology, we proceed to list the elements of material culture which South and North share at this time.

In pottery we have the following parallelisms:

1. Carinate bowls (see pp. 166 f.): Warka Eanna XIV, Ninevite 3, Gaura XI A.
2. Gray ware:<sup>297</sup> Warka Eanna XIV-III/II, Shahrain, "Jamdat Nasr" cemetery at Ur, Telloh, Farah I, Jamdat Nasr, 'Uqair Painted Temple (one sherd), Ninevite 3, Gaura XI-XA, Grai Resh IV-II.
3. Red ware: Warka Eanna XIV-III/II, Shahrain, al-'Ubaid surface, kiln stratum and "Jamdat Nasr" cemetery at Ur, Raidau Sharqi, Telloh, Farah I, 'Uqair Painted Temple (one sherd), Ninevite 4.
4. Beveled-rim bowls (Fig. 12, form 4): Warka Eanna XII-IV, Shahrain, kiln stratum at Ur, Telloh, Jamdat Nasr, Protoliterate c at Khafajah, Ninevite 3-4, Nuzi IX-VIII, Grai Resh IV-II, Brak Eye Temples.
5. Handled cups (form 8): Warka Eanna VIII-VI, Telloh, Jamdat Nasr (variant), Protoliterate c at Khafajah (not very close in shape), Ninevite 4, Nuzi IX or VIII.
6. Sinuous-sided bowls (form 7): Warka Eanna VIII(?) - V, Telloh, Gaura XI-IX.
7. Sharply carinate hole-mouth pots: Warka Eanna VII, Shahrain (similar), probably Ninevite 4 (see p. 193, n. 293), Gaura VIIIB. (The Warka and Gaura examples are both of gray ware.)
8. Deep flaring bowls (form 12): Warka Eanna VI-III/II, Shahrain, Telloh, Jamdat Nasr, "Jamdat Nasr" chapel at 'Uqair, Protoliterate c at Khafajah, Protoliterate d at Asmar, Ninevite 4.
9. Four-lugged carinate jars (form 13, 18, or 19): Warka Eanna VI, Shahrain, Telloh, Farah I, Jamdat Nasr, "Jamdat Nasr" chapel at 'Uqair, Protoliterate c-d at Khafajah, Protoliterate d at Asmar, Ninevite 4.
10. Ladles: Warka Eanna VI, Gaura XI-VIII.
11. Spouted jars with rounded bodies: Protoliterate c at Khafajah, Ninevite 4.

297. Exclusive of the light gray burnished ware of Ninevite 5, which is quite different.

12. Reserved slip: Protoliterate *c* and probably *d* at Khafajah, "Jamdat Nasr" cemetery at Ur, Ninevite 4.
13. Bulging jars (form 20): Shahrain, Protoliterate *c-d* at Khafajah, Protoliterate *d* at Asmar (somewhat similar), Ninevite 4-5, Nuzi VIII (somewhat similar), Gaura XIA-VII, Grai Resh IV-II, Brak Eye Temples (similar), Shaghir Bazar 5.
14. Deep carinate bowls (form 23a): Telloh (rather similar), Protoliterate *c* at Khafajah, Ninevite 5, Nuzi VII, Billa 7 (similar), Shaghir Bazar 5-4.
15. Spouted jars (form 9): Warka VII-V, al-Ubaid, Telloh, Jamat Nasr, Brak Eye Temples.

Other features found in both South and North include the following:

1. Tripartite temple plan: Warka all levels of the Anu ziggurat in which there are temple remains, Mosaic Temple, Eanna VI(?)–IV, Uqair Painted Temple, Protoliterate *c-d* at Khafajah, Gaura XIA-VIII, Brak Eye Temples.
2. Cone mosaic: Warka Eanna VII-III, Ur, Uqair Painted Temple, Brak Eye Temples.
3. Inlaid friezes: Warka Eanna III, Shahrain Temples V-I(?), Brak Eye Temples.
4. Animal-shaped stamp seals: Warka level *B* of the Anu ziggurat, Telloh, Protoliterate *c* at Khafajah, Nuzi (unstratified), Gaura VIII, Brak Eye Temples.
5. Jamdat Nasr type cylinder seals: Warka Eanna III and "Kleinfunde" hoard, Ur, Telloh, Farah (unstratified), Jamdat Nasr, Protoliterate *c-d* at Khafajah, Ninevite 4 (apparently) and 5, Nuzi (unstratified), possibly Billa 7 (not illustrated), Gaura VII, Brak Eye Temples.
6. Couchant-animal amulets: Warka Eanna III and "Kleinfunde" hoard, Telloh, Jamdat Nasr, Protoliterate *c-d* at Khafajah, Brak Eye Temples.
7. Frog amulets: Telloh, Protoliterate *c-d* at Khafajah, Brak Eye Temples.
8. Pig amulets: Jamdat Nasr, Telloh, Farah I, Protoliterate *c* at Khafajah, Brak Eye Temples.
9. Bear amulets: Jamdat Nasr(?), Brak Eye Temples.
10. Leaf-shaped amulets with central rib: Protoliterate *d* at Khafajah, Brak Eye Temples.
11. Pear-shaped maceheads: Warka intermediate layers between levels *C* and *D* of the Anu ziggurat and Eanna III, Ur-Ubaid III, Telloh, Farah (unstratified), Ninevite 5, Gaura XIA-VIII, Grai Resh II, Brak Eye Temples.
12. "Eye symbols": Warka "Kleinfunde" hoard, Protoliterate *d* at Khafajah, Gaura XII-VIIIC, Grai Resh IV-II, Brak Eye Temples.

The presence of the same type of carinate bowl in Warka Eanna XIV and Gaura XIA may connect the beginning of the Warka period with the beginning of the Gaura period. The occurrence of beveled-rim bowls and handled cups in early Protoliterate levels at Warka and in Ninevite 4 suggests the possibility of chronological equation between the earlier part of the Protoliterate period and the Gaura period. The occurrences of gray ware may connect both the Warka and the Protoliterate period with the Gaura period. Red ware, which in the South characterizes the Warka period and continues into the Protoliterate period, begins in the Ubaid period in the North and continues through the Gaura period. Bowl form 23a is the single important ceramic feature connecting the Protoliterate and Ninevite periods, but Jamdat Nasr style cylinders also connect them. The evidence provided by other types of objects is even less conclusive, because most of them either cover too long a range of time to be useful or connect sites which do not yield sufficient stratigraphic information for our use. Protoliterate *c* at Khafajah has elements in common with both the Gaura and the Ninevite period, and we therefore suggest that the latter begins during Protoliterate *c*. Obviously this is a most insecure foundation for dating; and the writer is quite ready to discard her interpretation as soon as contradictory evidence is available and would not insist upon its acceptance even now in the absence of any clear evidence against it.

We may now ask whether we can say that North and South show variants of the same cultures during late prehistoric times, as they do in the Ubaid period? The answer seems clearly to be in the negative. Some evidence of contact does exist, as we have pointed out, but the com-

mon features are isolated phenomena in cultural milieux which are in their totality very different. To take the most striking factor, painted pottery—no Jamdat Nasr polychrome ware has appeared in the North and only two sherds of Ninevite 5 type pottery are known in the South.<sup>298</sup> The same thing is true of most of the characteristic pottery forms and fabrics as well as of other objects. Animal figures, drill-hole stamp seals, inlaid stone vessels, and amulet forms—all common in the South—appear in the North, except for isolated specimens, only at Brak, a site whose culture is practically Southern in type and has very few connections with the other Northern sites,<sup>299</sup> and at Nuzi, which is located closer to the Southern sites and which shows both Northern and Southern affinities throughout its history.

Our uncertainty as to the origin of the Ninevite culture has been alluded to above (p. 164) in the discussion of the pottery. There is also little to offer on the origin of the Gaura-period culture beyond the fact that it shows a significant, but not complete, break with that of the preceding period. Like the Warka and Protoliterate cultures, these may be indigenous to Mesopotamia, but we still know too little about the surrounding areas to be in any way sure. The Northern cultures seem not to have spread their influence abroad as did that of the South in the late Protoliterate period (see p. 161).

298. One was found at Tell Asmar in Early Dynastic I context (*OIP* LXIII, Pl. 64:16). It has some peculiarities but in the writer's opinion is close enough to the known repertoire of Ninevite 5 to be accepted as such. The second (*ibid.* Pl. 133 i) Ninevite 5 sherd comes from Tell Agrab in a context which seems to be Protoliterate.

299. For a statement of a different opinion see Mallowan in *Iraq* IX 31. "During this [i.e., the 'Jamdat Nasr'] period, seals, amulets, pot forms, architecture and applied decoration conform to a single plan, on the Khabur, in Ninevite Assyria, in the Kirkuk plains, in the Diyala district, at Jamdat Nasr itself, at Kish, and throughout Sumer. The material remains discovered in contemporary levels at Ur, Uruk, Lagash, Kish, Jamdat Nasr, Khafajah, Nuzu, and Brak are astonishingly similar." We would agree with Professor Mallowan in respect to the remains from southern Mesopotamia, including the Diyala region, and Brak, but not with regard to the other regions. Apparently Brak, like Mari in the Early Dynastic period, was directly connected with the South by Euphrates traffic, which may explain the marked Southern character of its material. We know that in the time of Naramsin Brak was an Akkadian colony, and it seems likely that in the late prehistoric age it played a similar role in respect to southern Mesopotamia. The preceding pages of text should be sufficient demonstration of our view of the differences between North and South.

## VI

### EPILOGUE

**W**E HAVE seen the growth of the various cultures of Mesopotamia from earliest times to the beginning of the historic age. The general conclusions drawn from the facts in our possession may be briefly recapitulated here, without any attempt to penetrate deeply the many fascinating problems still awaiting solution.

The Hassunah culture shows at its peak a Neolithic settlement whose people build permanent dwellings, make and use a variety of pottery fabrics, work flint, obsidian, and bone, weave cloth, wear ornaments, and bury their dead with objects. In the earliest phase the people seem still seminomadic and have very coarse and crude pottery, plus a small amount of burnished ware which may be related to the burnished wares of the Syro-Cilician area. But soon technical proficiency increases, pisé buildings are constructed, pottery-painting begins, and the "standard" Hassunah wares are developed. To this culture, which seems to reflect western influences, is soon added influence from an eastern source, represented by Samarran style painted pottery.<sup>1</sup> Somewhat later another new element, Halaf painted pottery, appears, and, if we judge by the relative amounts of the various types of pottery found, this Halaf element increases until it achieves dominance. Hassunah pottery and Samarran pottery continue for a while along with Halaf, but eventually die out, while the Halaf pottery develops and forms the distinctive mark of a new culture period.

The Halaf style of pottery-painting begins, at least at Arpachiyyah, in a very simple way, forms, designs, and technique all being fairly crude. It soon develops into a very competent style, however, at its best being characterized by fine draftsmanship, excellent sense of symmetry and balance in design, polychromy, nicely proportioned shapes, and a well levigated, fine-grained, hard-fired fabric. Along with this pottery go other elements of material culture, notably certain types of female figurines and incised seal pendants. The Halaf culture, or cultures influenced by it, spread over a very wide area, extending from the Zagros Mountains to the Mediterranean coast, from the Kurdish mountains to the site of Samarra<sup>2</sup>, not far from Baghdad. Its source has not been determined, but it seems most likely to be indigenous to northern Mesopotamia; it cannot possibly have come from Iran, Syria, or southern Mesopotamia.

This culture reaches its peak at the time of Arpachiyyah 6; the site was sacked and burned at this culminating point, but the Halaf culture continues elsewhere, as evidenced at Tepe Gaura. New (Ubaid) influences begin to enter as the Halaf culture degenerates in vitality, and Gaura XX shows their coexistence. By the time of Gaura XIX the Ubaid culture seems to be dominant, but elements of the Halaf culture continue for some time, only gradually dying out.

Sometime during the period in which the Halaf culture flourished in the North, people bearing an Iranian culture settle in the alluvium of South Mesopotamia, founding the Ubaid culture. These people seem to know something of the Halaf style of pottery-painting, and the North in turn soon begins to feel the impact of the Ubaid style. After the onset of the

1. For Braidwood's suggestion that the Samarran pottery possibly is not "part of an autonomous assemblage of its own" but represents a "luxury ware," perhaps produced by traveling craftsmen, see *JNES* IV 258 f.

Northern Ubaid period, North and South pursue their own courses of development without a great deal of interinfluencing. The people of the Ubaid period make use of painting on light-colored pottery, but this painting shows significant differences from the Halaf style. In the first place the paint is generally mat, whereas lustrous paint is preferred in the Halaf style; the painting is usually monochrome; its motifs tend to be larger, less finely drawn, and more often characterized by bold contrast than those of the Halaf pottery; at least in its mature style rather open composition is favored, but sometimes quite small motifs are used as fill within reserved areas. Designs and vessel shapes alike are very different from those of the Halaf period, although in the North the Ubaid painters take over a few Halaf motifs.

The North has a well developed glyptic style, the seals being exclusively of the stamp type and the designs usually portraying animals; in technique and composition alike the glyptic seems to be well advanced. This trait may begin in the Halaf period but certainly is characteristic of the Ubaid culture. A comparable style is not known in the South, although a few instances of the use of stamp seals of some kind are cited. Metal is used in the North, but none has been found in the South, quite possibly because of the proximity of all Ubaid deposits to water level. In the North the culture seems to be on a generally higher level because of the presence of these two important elements for which the South has furnished no counterparts. In the South, however, certain other elements—notably baked clay sickles, “bent nails” of clay, clay cones, and distinctive types of human figurines—are characteristic, and these are found only sporadically in the North. A significant cultural advance is the beginning of monumental architecture in both areas.

At the end of the Ubaid period new elements again enter the picture, although the Ubaid culture does not seem to undergo a degeneration like that of the Halaf; the transition is very gradual in the South but more abrupt in the North. Ubaid elements carry over into the new period in both North and South. At this time the two areas split culturally, never again coalescing in one culture complex. In the South dark-faced burnished pottery makes its first appearance as a typical culture element, red and gray burnished pottery occurring in considerable quantity in Warka Eanna XIV, at which point we would see the beginning of the Warka period. This period is relatively insignificant in artifacts and limited in geographical range, having been identified at present only at Warka and Ur. The most important ceramic feature is the appearance of rough beveled-rim bowls, which continue to be an important factor until the onset of the Protoliterate *d* phase. A few examples of glyptic comparable with that of the North occur, but virtually no other artifacts of this period are known. The source of the dark pottery is unknown; the Anatolian origin usually suggested is possible, but there is no substantiating evidence.

In the corresponding phase of the North, the Gaura period, gray and red burnished pottery are known, and at Nineveh, Nuzi, and Grai Resh there are beveled-rim bowls; however, the bulk of the pottery is quite different in the two areas. The glyptic style of the Ubaid period carries on without noticeable change; the architecture at Gaura shows a type of temple plan similar to that used in the Ubaid period in both North and South. The Gaura period apparently lasts considerably longer than the Warka period.

The dividing line between the Protoliterate and Warka periods is not established beyond dispute, but the characteristics of the Protoliterate period are manifest. The earliest written records yet found come from Eanna IV at Warka. Since these are considered paleographically beyond the very beginnings of writing, Delougaz, who conceived the name “Protoliterate” for the period representing the earliest stages of writing, allows a phase (*a*) for the invention of this important means of communication and attributes the Eanna IV tablets to the second Protoliterate phase (*b*). Eanna IV is characterized also by a magnificent glyptic style and very highly developed architecture. Sometime in the Protoliterate period, exactly when cannot as yet be

specified, metallurgy makes a considerable advance, which results in the very nicely made parts of animal figures from the Warka "Kleinfunde" hoard, a few copper weapons, the use of precious metals, and the utilization of large amounts of metal for sizable vessels. In Protoliterate *c* and *d* the Jamdat Nasr style painted pottery extends from the Diyala area to Ur and occurs at a majority of the sites. This type of pottery is unknown in Syria, Anatolia, Iran, and even in northern Iraq. It would seem, as Delougaz points out in a forthcoming study, to be most probably an indigenous creation in the South. A notable community of architecture exists in the Protoliterate period, Warka, Ur, and Khafajah having temples with plans and other features almost identical. One interesting point, in view of the distinction which has sometimes been made between "Hochtempel" and "Tieftempel," is that the temple of 'Uqair and some at Warka are on terraces, while others at Warka and those of Khafajah are on the ground.

In the North the fairly homogeneous Ninevite culture, extending from the east bank of the Tigris to the Khabur, is characterized by distinctive painted and incised pottery. During this period connections with the South become somewhat more apparent; the cylinder seal was certainly borrowed from the South, and the pottery forms and other elements held in common indicate a certain amount of intercommunication. The decoration of the latest Eye Temple at Brak and the objects found therein are clearly of southern Mesopotamian origin, and arguably represent a Southern "colony" in the North.

This in brief is the summation of our reconstruction of the comparative archeology of prehistoric Mesopotamia, which is expressed graphically in Tables 1-3.

## EXPLANATION OF TABLES 1-3

The vertical space allotted to a period or level is not indicative of the length of time which it is supposed to cover. For example Shaghir Bazar 10 (see Table 1) is not necessarily contemporaneous with Arpachiyyah 6, but we believe that both levels belong to the Late Halaf phase. The positions of level numbers are intended to indicate cultural rather than time relationships. Thus levels at various sites which we attribute to the same period or phase are shown side by side, but a given period or phase at one site may not cover the same span of years at another site. An arrow indicates that a level extends into another period or phase; question marks at arrowheads imply uncertainty of such extension. A group of levels not separated in the excavator's report (e.g. Grai Resh IX-VI and IV-II) is treated as a unit. An  $\times$  indicates the presence of unstratified material. The extremely tentative character of the correlation in Table 3 is emphasized on pages 195-97.

TABLE 1  
NORTHERN MESOPOTAMIA

PERIOD		SAMARRA?	NUZI Pit L4	TELL HASSUNAH	NINE- VEH ↑?	TELL ARPACHIYYAH			TELL BILLA	TEPE GAURA ↑	GRAI RESH	TELL BRAK	TELL SHAGHIR BAZAR	TELL AL- HALAF	TELL ASWAD	TELL MEFESH
						TT	Outlying area	Graves								
Ninevite			VII		5				6 7	VII VIII A	I	Eye Temples ↓?	4 5			
Gaura			VIII IX		4					VIII B VIII C IX X X A XI XI A	II-IV					
Ubaid	II		X		3 ↑ ?	1 2 3 4 5	Surface to ca. 1 m. below surface	Late		XII XII A XIII XIV?	V VI-IX					
	I		X A XI XII	XIII-XI		?	?	Early ?		XV XV A XVI XVII XVIII XIX		×		×		Between 5 m. and 14 m. contour
Halaf	Late					6 ↑ ?	Ca. 1-1.5 m. below surface						6 7 8 9 10 11 ↑?	×		
	Middle			X-VI	?	7 8 9 10	Ca. 1.5- 2.5 m. below surface			XX and Area A and northeast base cut		×	12	×	×	×
	Early	×			2c		More than 2.5 m. below surface (at least 5 bldg. levels)						13 14 15	×		
Hassunah		×		V IV III II Ic Ib Ia	2b  2a 1		×						Unpainted pottery in 15	×		

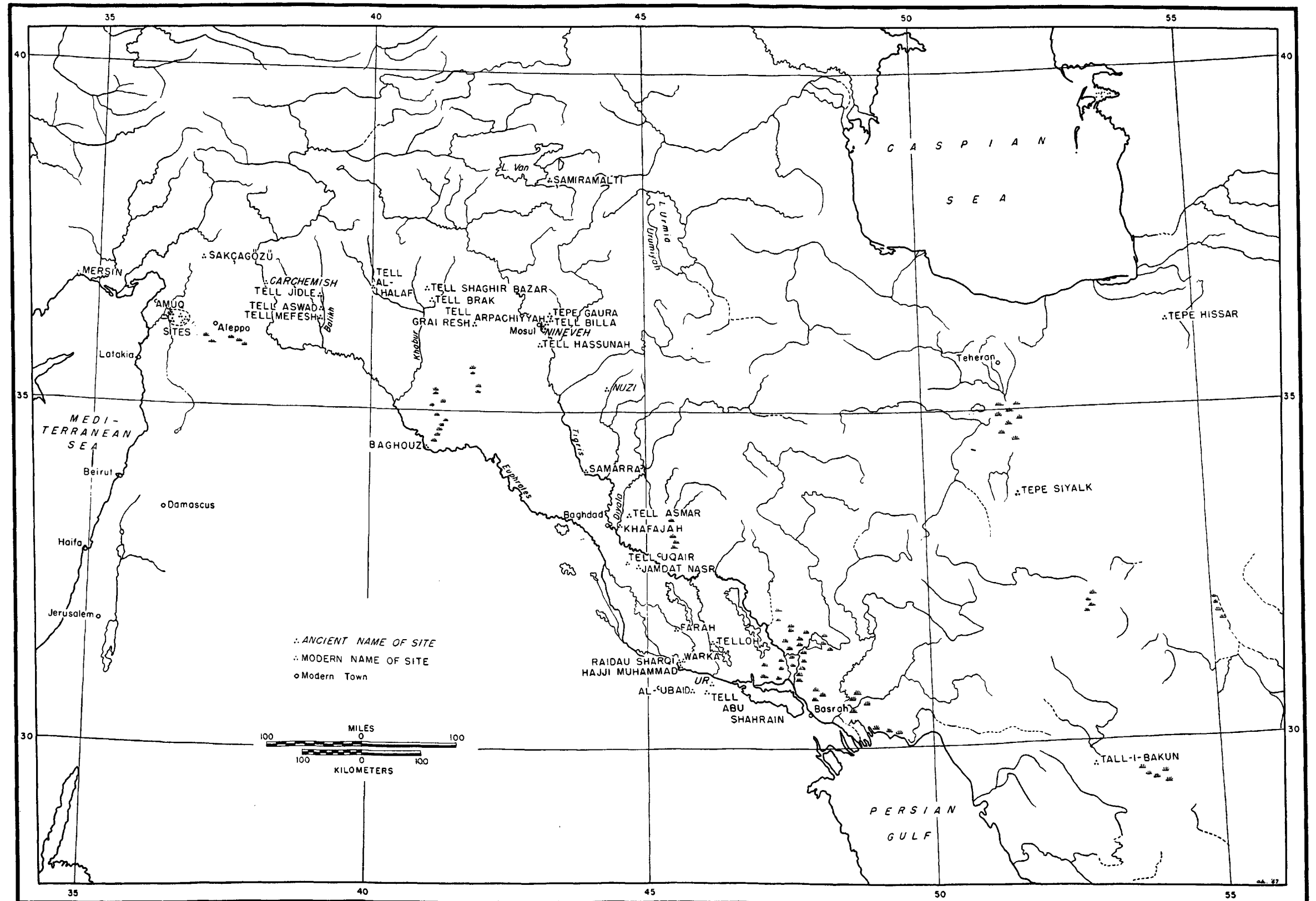


TABLE 2  
SOUTHERN MESOPOTAMIA

PERIOD		TELL ABU SHAHRAIN	AL-UBAID	UR ↑	WARKA			RAIDAU SHARQI	HAJJI MUHAM- MAD	TELLOH	FARAH	JAMDAT NASR	TELL UQAIR	KHAF- JAH ↑	TELL ASMAR
					Anu	Eanna	Mosaic Temple								
Protoliterate	d	↑ ?	Part of later cemetery	↑ "Jamdat Nasr" cemetery and "Archaic III-IV" strata	A	III ↓ ? ↑ ?	II	× ?		×	I	×	"Jamdat Nasr" chapel	Sin V Sin IV	Earliest Shrine of Abu Tem- ple and 2 soundings
	c									×		×		Sin III Sin II Sin I	
	b					IV V				×		×	Painted Temple?		
	a					VI VII VIII	I			×		×			
Warka		↑ Temples I-V		Part of kiln stratum and Ur-Ubaid III	B C D E F G · · · · X	IX X XI XII XIII XIV		×							
Ubaid	II	Temples VI-VII and cemetery	×	Ur-Ubaid II		XV XVI XVII XVIII		×		×			2 build- ings and deep sound- ing (lev- els VII- I)		
	I	Temples VIII-XVIII	×	Ur-Ubaid I					×	×					

TABLE 3  
TENTATIVE CORRELATION OF  
NORTH AND SOUTH

SOUTH		NORTH
Protoliterate	<i>d</i>	Ninevite
	<i>c</i>	Gaura
	<i>b</i>	
	<i>a</i>	
Warka		Ubaid
Ubaid		
		Halaf
		Hassunah



MAP SHOWING LOCATIONS OF MESOPOTAMIAN SITES WITH PREHISTORIC REMAINS