

# Contents.

<b>Acknowledgments.</b>	<b>i</b>
<b>Contents.</b>	<b>ii</b>
<b>Illustrations.</b>	<b>vii</b>
<b>Tables.</b>	<b>xi</b>
<b>Chapter 1. Introduction.</b>	<b>1</b>
Dawn stones from the East; investigating the earlier Palaeolithic in Syria	1
Case studies — the Orontes and Euphrates Valleys	1
The people behind the stones; reconstructing early human behaviour	4
<b>Chapter 2. A Few Intrepid Researchers — A History of Palaeolithic Research in Syria.</b>	<b>5</b>
Introduction	5
Pre-war Pioneers — Palaeolithic research in the Ottoman and Mandate Periods	5
Post 1945 — Palaeolithic research in the Syrian Arab Republic	6
Conclusion — Towards a framework for investigating Palaeolithic settlement history, technological variability and landscape-use in Syria	8
<b>Chapter 3. 100 Years of Discovery — The History of Palaeolithic Research in the Orontes and Euphrates Valleys.</b>	<b>9</b>
Introduction	9
The Orontes	9
The Euphrates	10
Conclusion	12
<b>Chapter 4. Terraces and Time; dating the earlier Palaeolithic in the Orontes and Euphrates Valleys.</b>	<b>13</b>
Introduction	13
Developing Pleistocene dating frameworks for Syrian river valleys	13
The Orontes	13
The Euphrates	16
Conclusion	20
<b>Chapter 5. Earliest Occupations (1.50 mya – 0.80 mya).</b>	<b>22</b>
Introduction	22
Early Pleistocene archaeology in the Euphrates Valley	23
Maadan 1 and 5	23
Geological background and dating	23
The lithic assemblages	24
Taphonomy of lithic assemblages	24
Technology of lithic assemblages	25
Raw Material	25
Core Working	25
Handaxes	26
Flakes	26
Retouched Tools	27
Conclusions; technology and human behaviour	27
Ain Abu Jemaa, Ain Tabous and Hamadine	27
Geological background and dating	27
The lithic assemblages	28
Taphonomy of lithic assemblages	28

Technology of lithic assemblages	29
Raw Material	29
Core Working	29
Handaxes	31
Flakes	33
Retouched Tools	35
Conclusions; technology and human behaviour	35
“Out of Africa” or the heartlands of “Savannahstan”? – The Euphrates Valley and the earliest occupation of Syria	35
<b>Chapter 6. The Lower Palaeolithic (800 kya – 350 kya).</b>	<b>44</b>
Introduction	44
Reconstructing brief moments in time; <i>in situ</i> archaeological material from Lower Palaeolithic sites in the Orontes and Euphrates Valleys	44
Latamne “Living floor” Site	44
Geological background and dating	46
Climate & environment	50
The lithic assemblages	50
Taphonomy of lithic assemblages	53
Spatial distribution of lithic assemblages	55
Technology of lithic assemblages	59
Raw Material	59
Core Working	60
Handaxes	61
Flakes	63
Retouched Tools	64
Conclusions; technology and human behaviour	65
Gharmachi I	65
Geological background and dating	67
The lithic assemblages	69
Taphonomy of lithic assemblages	69
Technology of lithic assemblages	72
Raw Material	72
Core Working	72
Handaxes	74
Flakes	77
Retouched Tools	78
Conclusions; technology and human behaviour	79
Halouandji IV	79
Geological background and dating	80
The lithic assemblages	80
Taphonomy of lithic assemblages	80
Technology of lithic assemblages	81
Raw Material	81
Core Working	81
Handaxes	82
Flakes	84
Retouched Tools	84
Conclusions; technology and human behaviour	84
“Dredgers” — fluvially derived Lower Palaeolithic assemblages from the Orontes and Euphrates Valleys	85
Rastan	85
Geological background and dating	85
The lithic assemblages	86
Taphonomy of lithic assemblages	87
Technology of lithic assemblages	87
Raw Material	87
Core Working	87
Flakes	89
Retouched Tools	89
Conclusions; technology and human behaviour	89

Jrabiya 2, 3 and 4	89
Geological background and dating	90
The lithic assemblages	90
Taphonomy of lithic assemblages	90
Technology of lithic assemblages	90
Raw Material	90
Core Working	91
Handaxes	91
Flakes	93
Retouched Tools	94
Conclusions; technology and human behaviour	94
Hammam Kebir II	94
Geological background and dating	95
The lithic assemblages	95
Taphonomy of lithic assemblages	96
Technology of lithic assemblages	96
Raw Material	96
Core Working	97
Handaxes	97
Flakes	99
Retouched Tools	99
Conclusions; technology and human behaviour	99
The age of the handaxe; Lower Palaeolithic technological variability	99
Making tracks; reconstructing Lower Palaeolithic behaviour and landscape-use	106
<b>Chapter 7. The Middle Palaeolithic (350 kya – 50 kya).</b>	<b>111</b>
Introduction	111
Middle Palaeolithic surface scatter scatters in the Orontes and Euphrates Valleys	111
Tahoun Semaan 2 and 3	111
Geological background and dating	111
The lithic assemblages	112
Taphonomy of lithic assemblages	112
Technology of lithic assemblages	113
Raw Material	113
Levallois Cores	114
Simple Prepared Cores	116
Levallois Products	117
Non-Levallois Cores	117
Handaxes	118
Non-Levallois Flakes	120
Retouched Tools	121
Conclusions; technology and human behaviour	122
Tulul Defai	122
Geological background and dating	123
The lithic assemblages	123
Taphonomy of lithic assemblages	123
Technology of lithic assemblages	124
Raw Material	124
Levallois Cores	124
Simple Prepared Cores	126
Levallois Products	128
Non-Levallois Cores	128
Handaxes	130
Non-Levallois Flakes	132
Retouched Tools	133
Conclusions; technology and human behaviour	134
Chnine	134
Geological background and dating	135
Chnine East 1 lithic assemblage	136
Taphonomy of lithic assemblages	136
Technology of lithic assemblages	137

Raw Material	137
Levallois Cores	137
Simple Prepared Cores	139
Levallois Products	141
Non-Levallois Cores	141
Handaxes	143
Non-Levallois Flakes	143
Retouched Tools	145
Conclusions; technology and human behaviour	145
Chnine West 1 lithic assemblage	146
Taphonomy of lithic assemblages	146
Technology of lithic assemblages	147
Raw Material	147
Levallois Cores	147
Simple Prepared Cores	150
Levallois Products	150
Non-Levallois Cores	151
Handaxes	152
Non-Levallois Flakes	152
Retouched Tools	153
Conclusions; technology and human behaviour	153
Qara Yaaqoub	154
Geological background and dating	154
The lithic assemblages	155
Taphonomy of lithic assemblages	155
Technology of lithic assemblages	156
Raw Material	156
Levallois Cores	156
Simple Prepared Cores	158
Levallois Products	158
Handaxes	159
Conclusions; technology and human behaviour	161
Stratified Middle Palaeolithic sites in the Orontes and Euphrates Valley	161
Rhayat 2	161
Geological background and dating	161
The lithic assemblages	161
Taphonomy of lithic assemblages	162
Technology of lithic assemblages	163
Raw Material	163
Levallois Cores	163
Simple Prepared Cores	164
Levallois Products	165
Non-Levallois Cores	165
Handaxes	167
Non-Levallois Flakes	167
Retouched Tools	168
Conclusions; technology and human behaviour	168
Latamne Quarry 1 "Red colluvium"	169
Geological background and dating	170
The lithic assemblages	170
Taphonomy of lithic assemblages	171
Technology of lithic assemblages	172
Raw Material	172
Levallois Cores	172
Levallois Products	172
Non-Levallois Cores	172
Non-Levallois Flakes	173
Retouched Tools	174
Conclusions; technology and human behaviour	174
Tahoun Semaan 1	174
Geological background and dating	175
The lithic assemblages	175

Taphonomy of lithic assemblages	175
Technology of lithic assemblages	176
Raw Material	176
Levallois Cores	176
Simple Prepared Cores	177
Levallois Products	177
Non-Levallois Cores	177
Handaxes	178
Non-Levallois Flakes	178
Retouched Tools	178
Conclusions; technology and human behaviour	178
Handaxe makers and Levallois flakers; Middle Palaeolithic technology in Syria	179
The coming of Neanderthals and Early Modern Humans; the development of Middle Palaeolithic behaviours and landscape-use practices in Syria	193
<b>Chapter 8. Conclusions.</b>	<b>198</b>
Introduction	198
Written in stone; hominin settlement history, technological decision making and landscape-use during the Lower and Middle Palaeolithic in Syria	198
The bigger picture; insights into the earlier Palaeolithic of the Near East	200
The next step? - potential future pathways for investigating the earlier Palaeolithic in Syria	201
<b>Appendix. Lithic Recording.</b>	<b>203</b>
<b>References</b>	<b>216</b>