Neolithic society in Northern Greece: the evidence of ground stone artefacts

Volume II

Tables, Figures, Plates

Christina Tsoraki

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Department of Archaeology,
University of Sheffield

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List of Tables

List of Figures

List of Plates

TABLES

ARCHAEOLOGICAL PHASES	YEARS B.C. CALENDRICAL
Early Neolithic (EN)	6700/6500-5800/5600
Middle Neolithic (MN)	5800/5600-5400/5300
Late Neolithic (LN)	5400/5300-4700/4500
Final Neolithic (FN)	4700/4500-3300/3100

Table 2.1 Chronological framework for the Neolithic period of Northern Greece (after Andreou *et al*).

Table 3.1 Recorded variables.

VARIABLES	ALTERNATIVE STATES	DEFINITION
Object Category & Secondary Object Category	**Edge Tools:**	Tools with a working edge manufactured deliberately mainly via abrasion
	• Axes	See Stroulia 2003
	• Adzes	See Stroulia 2003
	• Chisels	See Stroulia 2003
	• Indeterminate	
	Percussive Tools:	
	• Hammer	See Adams 2002
	• Mace-head	See Moundrea-Agrafioti 1996
	• Indeterminate	
	Perforators:	
	• 'Drill bases'	See Adams 2002 & Wright 1992
	• Drills	
	• Indeterminate	
	Grinding/Abrasive Tools:	
	• Abrader	See Adams 2002
	• Polisher/Smoothed Stone	See Adams 2002
	• Grooved Abrader	Abraders with use faces in the form of grooves
	• Pestle	See Adams 2002
	• Grinder	See Wright 1992
	• Grinding Slab	See Wright 1992
	• Mortar	See Adams 2002
	• Indeterminate	
	Miscellaneous Category:	
	• Weights	
	• Retouched tools/flakes	
	• Flaked Core with ground platforms	
	• Unworked nodule	
	• Ground stone tool core	
	• Rocks with natural holes	
	• Pitted/cupped stones	See Adams 2002
	• Waste by-products/flakes	
	Multiple Use Tools:	
	• Polisher/hammer	
	• Pestle/hammer	
	• Grinder/hammer	
	• Grooved abrader/Grinding Slab	
	• Abrader/hammer	
	• Mortar/grinding slab	
	Ornaments:	
	• Beads	
	• Pendants	

	• Rings • Indeterminate	
No. of Use-faces	• None (unused) • One • Two adjacent • Two opposed • More than two • Indeterminate	
Surface Condition	• Burnt • Good • Altered • Indeterminate	
Bit/Butt Damage	• Absent	
	• Undamaged	Used for all tool categories
	• Damaged	Used to record damaged tools; in the case of edged tools, when the working edge has obvious damage but the bit/butt survives to some extent
	• Crushed/destroyed	Used only for edged tools when bit/butt is completely destroyed
	• Indeterminate	
Shape in Plan	• Irregular • Triangular • Trapezoid • Rectangular • Obovate • Spherical • Sub-rectangular • Bell shaped • Indeterminate	
Shape in Section	• Irregular • Plano-irregular • Plano-convex • Triangular • Wedge-shaped • Oval-spherical • Tapered • Lens • Flat • Indeterminate	See Wright 1992
Shape of Use Surface	• Irregular • Flat • Concave • Straight • Convex • Lopsided • Flat & Convex • Flat & Concave • Concave & Convex	

	• Indeterminate	
% of cortical/weathered surface	• 0-25% • 25-50% • 50-75% • 75-100% • Indeterminate	
Visible Manufacturing techniques (bit, body, margins, butt)	• None/natural shape • Pecked • Ground • Flaked • Polished • Ground & Polished • Pecked & Polished • Pecked & Ground • Drilled • Indeterminate	
Degree of Wear (primary and secondary use)	• None • Light • Moderate • Heavy • Worn out • Indeterminate	See Adams 2002: 25
Degree of Polishing	• Not applicable	
	• Not well polished	not very smooth surface
	• Well polished	smooth surfaces with spots of sheen
	• Highly polished	extremely smooth surfaces which reflects light
	• Indeterminate	
Modification of tool & working surface	• No modification/not applicable	
	• Resharpening	*Edge-rejuvenation*, see Wright 1992
	• Repecking	See Wright 1992
	• Sawing	See Moundrea-Agrafioti 1996
	• Resharpening & sawing	
	• Sawing & indeterminate (re resharpening)	
	• Indeterminate	

Table 3.1 (cont.).

Phase	No.	Percent
Surface Finds/Indeterminate	297	3.4
Phase I	5330	60.3
Phase II	3165	35.8
Historical Period	50	.6
Total	8842	100.0

Table 4.1 The distribution of the Makriyalos ground stone assemblage by phase.

General Object Category	No.	Percent
Edge Tools	1893	24.0
Percussive tools	155	2.0
Perforators	42	.5
Grinding/Abrasive Tools	5197	65.9
Miscellaneous	178	2.3
Multiple-Use Tools	293	3.7
Ornaments	125	1.6
Total	7883	100.0

Table 4.2 Object categories (excluding indeterminate cases n=959).

Cortex/Weathered Surface	No.	Percent
0-25%	7568	85.6
25-50%	409	4.6
50-75%	438	5.0
75-100%	418	4.7
Indeterminate	9	.1
Total	8842	100.0

Table 4.3 The frequency of cortical/weathered surfaces on objects.

Raw Material		Cortex/Weathered Surface				Total
		0-25%	25-50%	50-75%	75-100%	
Sedimentary	Count	2836	134	116	30	3116
	% within Raw Material	91.0%	4.3%	3.7%	1.0%	100.0%
Metamorphic	Count	2721	210	272	211	3414
	% within Raw Material	79.7%	6.2%	8.0%	6.2%	100.0%
Igneous	Count	1448	9	10	36	1503
	% within Raw Material	96.3%	.6%	.7%	2.4%	100.0%
Quartz	Count	89	42	32	114	277
	% within Raw Material	32.1%	15.2%	11.6%	41.2%	100.0%
Fossilised Material	Count	3	0	0	0	3
	% within Raw Material	100.0%	.0%	.0%	.0%	100.0%
'Talc'	Count	20	0	0	0	20
	% within Raw Material	100.0%	.0%	.0%	.0%	100.0%
Total	Count	7117	395	430	391	8333
	% within Raw Material	85.4%	4.7%	5.2%	4.7%	100.0%

Table 4.4 The distribution of cortical/weathered surfaces within geological categories (excluding indet. cases).

Raw Materials	Debitage					
	Unworked Nodule		Gst Core		Nodule?	
	No.	%	No.	%	No.	%
Indeterminate	21	22.1%	1	33.3%	3	11.5%
Limestone	0	.0%	0	.0%	1	3.8%
Mudstone (Red Coloured)	3	3.2%	0	.0%	0	.0%
Mudstone (Brown Coloured)	1	1.1%	0	.0%	0	.0%
Well Cemented Sandstone	4	4.2%	0	.0%	7	26.9%
Serpentinite	25	26.3%	0	.0%	1	3.8%
Schist	3	3.2%	0	.0%	0	.0%
Gneiss	0	.0%	1	33.3%	2	7.7%
Marble	0	.0%	0	.0%	1	3.8%
Indet. Metamorphic	5	5.3%	0	.0%	0	.0%
Gabbro	5	5.3%	0	.0%	1	3.8%
Dolerite	2	2.1%	0	.0%	3	11.5%
Basalt	8	8.4%	0	.0%	2	7.7%
Andesite	5	5.3%	0	.0%	0	.0%
Andesite-Basalt	0	.0%	1	33.3%	0	.0%
Indet. Igneous	10	10.5%	0	.0%	4	15.4%
Quartz	3	3.2%	0	.0%	1	3.8%
Total	95	100.0%	3	100.0%	26	100.0%

Table 4.5 Raw material distributions for unworked material.

Raw Material		Cortex/Weathered Surface				Total
		0-25%	25-50%	50-75%	75-100%	
Well Cemented Sandstone	Count	6	1	1	3	11
	% within Raw Material	54.5%	9.1%	9.1%	27.3%	100.0%
Limestone	Count	0	0	0	1	1
	% within Raw Material	.0%	.0%	.0%	100.0%	100.0%
Brown Mudstone	Count	0	0	0	1	1
	% within Raw Material	.0%	.0%	.0%	100.0%	100.0%
Mudstone (Red Coloured)	Count	2	0	0	1	3
	% within Raw Material	66.7%	.0%	.0%	33.3%	100.0%
Serpentinite	Count	4	2	0	20	26
	% within Raw Material	15.4%	7.7%	.0%	76.9%	100.0%
Schist	Count	0	0	0	3	3
	% within Raw Material	.0%	.0%	.0%	100.0%	100.0%
Gneiss	Count	2	0	0	1	3
	% within Raw Material	66.7%	.0%	.0%	33.3%	100.0%
Marble	Count	1	0	0	0	1
	% within Raw Material	100.0%	.0%	.0%	.0%	100.0%
Indet. Metamorphic	Count	1	1	0	3	5
	% within Raw Material	20.0%	20.0%	.0%	60.0%	100.0%
Gabbro	Count	1	0	0	5	6
	% within Raw Material	16.7%	.0%	.0%	83.3%	100.0%
Dolerite	Count	3	0	0	2	5
	% within Raw Material	60.0%	.0%	.0%	40.0%	100.0%
Basalt	Count	3	0	0	7	10
	% within Raw Material	30.0%	.0%	.0%	70.0%	100.0%
Andesite	Count	1	1	0	3	5
	% within Raw Material	20.0%	20.0%	.0%	60.0%	100.0%
Andesite-Basalt	Count	0	0	0	1	1
	% within Raw Material	.0%	.0%	.0%	100.0%	100.0%
Indet. Igneous	Count	4	0	0	10	14
	% within Raw Material	28.6%	.0%	.0%	71.4%	100.0%
Quartz	Count	0	0	0	4	4
	% within Raw Material	.0%	.0%	.0%	100.0%	100.0%
Total	Count	28	5	1	65	99
	% within Raw Material	28.3%	5.1%	1.0%	65.7%	100.0%

Table 4.6 Raw material distribution for nodules per cortical/weathered category (excluding indet. cases).

Shape In Plan	No.	Percent
Irregular	14	14.7
Obovate	1	1.1
Ovate	2	2.1
Spherical	1	1.1
Sub-Rectangular	2	2.1
Indeterminate	75	78.9
Total	95	100.0

Shape In Section	No.	Percent
Irregular	17	17.9
Plano-Convex	2	2.1
Wedge-Shaped	1	1.1
Oval/Spherical	12	12.6
Indeterminate	63	66.3
Total	95	100.0

Table 4.7 The morphology of nodules.

Raw Material		No.	Percent
Sedimentary	Well cemented sandstone	17	1.0
	Dolomite	1	.1
	Flint	1	.1
	Total	19	1.2
Metamorphic	Serpentinite	686	40.9
	Schist	41	2.4
	Gneiss	1	.1
	Marble	7	.4
	Slate	1	.1
	Granulite	1	.1
	Indet. Metamorphic	99	5.9
	Total	836	49.8
Igneous	Granite	1	.1
	Gabbro	59	3.5
	Granodiorite	1	.1
	Diorite	71	4.2
	Dolerite	215	12.8
	Basalt	115	6.8
	Andesite	79	4.7
	Andesite-Basalt	56	3.3
	Lydite	1	.1
	Indet. Igneous	226	13.5
	Total	824	49.1
	Total	1679	100.0

Table 4.8 Raw material selection for edge tools (excluding indet. raw materials n=214).

Raw Material		Edge Tool Category			Total
		Edge-Axe	Edge-Adze	Edge-Chisel	
Flint	Count	0	1	0	1
	% within Edge Tool Category	.0%	.2%	.0%	.1%
Well Cemented Sandstone	Count	0	11	0	11
	% within Edge Tool Category	.0%	1.7%	.0%	1.3%
Serpentinite	Count	25	290	71	386
	% within Edge Tool Category	28.1%	45.7%	70.3%	46.8%
Schist	Count	1	17	8	26
	% within Edge Tool Category	1.1%	2.7%	7.9%	3.2%
Gneiss	Count	0	1	0	1
	% within Edge Tool Category	.0%	.2%	.0%	.1%
Marble	Count	0	3	1	4
	% within Edge Tool Category	.0%	.5%	1.0%	.5%
Granulite	Count	0	1	0	1
	% within Edge Tool Category	.0%	.2%	.0%	.1%
Indet. Metamorphic	Count	3	34	7	44
	% within Edge Tool Category	3.4%	5.4%	6.9%	5.3%
Granite	Count	0	1	0	1
	% within Edge Tool Category	.0%	.2%	.0%	.1%
Gabbro	Count	9	20	1	30
	% within Edge Tool Category	10.1%	3.1%	1.0%	3.6%
Dolerite	Count	17	58	2	77
	% within Edge Tool Category	19.1%	9.1%	2.0%	9.3%
Diorite	Count	7	21	2	30
	% within Edge Tool Category	7.9%	3.3%	2.0%	3.6%
Basalt	Count	6	52	3	61
	% within Edge Tool Category	6.7%	8.2%	3.0%	7.4%
Andesite	Count	2	25	2	29
	% within Edge Tool Category	2.2%	3.9%	2.0%	3.5%
Indet. Igneous	Count	19	77	4	100
	% within Edge Tool Category	21.3%	12.1%	4.0%	12.1%
Andesite-Basalt	Count	0	22	0	22
	% within Edge Tool Category	.0%	3.5%	.0%	2.7%
Lydite	Count	0	1	0	1
	% within Edge Tool Category	.0%	.2%	.0%	.1%
Total	Count	89	635	101	825
	% within Edge Tool Category	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	90.518(a)	32	.000(b)
N of Valid Cases	825		

a 31 cells (60.8%) have expected count less than 5. The minimum expected count is .11.
b Based on 825 sampled tables with starting seed 1993510611.

Table 4.9 Raw material distribution per edge tool subcategory (excluding indet. cases) and the result of the chi-square test..

Raw Material		Phase			
		MK I		MK II	
		No.	%	No.	%
Sedimentary	Well Cemented Sandstone	10	1.2%	7	1.0%
	Dolomite	0	.0%	1	.1%
	Flint	0	.0%	1	.1%
	Total	10	1.2	9	1.2%
Metamorphic	Serpentinite	301	36.1%	348	48.3%
	Schist	28	3.4%	10	1.4%
	Marble	2	.2%	4	.6%
	Slate	1	.1%	0	.0%
	Granulite	1	.1%	0	.0%
	Indet. Metamorphic	52	6.2%	36	5.0%
	Total	385	46.2%	398	55.2%
Igneous	Granite	0	.0%	1	.1%
	Gabbro	23	2.8%	28	3.9%
	Granodiorite	0	.0%	1	.1%
	Diorite	32	3.8%	33	4.6%
	Dolerite	109	13.1%	89	12.3%
	Basalt	84	10.1%	28	3.9%
	Andesite	41	4.9%	30	4.2%
	Andesite-Basalt	31	3.7%	20	2.8%
	Lydite	1	.1%	0	.0%
	Indet. Igneous	117	14.0%	84	11.7%
	Total	438	52.6%	314	43.6%
	Total	833	100.0%	721	100.0%

Table 4.10 Chronological distribution of geological categories fir edge tools (excluding indet. cases).

Raw Material		Phase			
		MK I		MK II	
		No.	%	No.	%
Sedimentary	Flint	0	.0%	1	.4%
	Well cemented sandstone	6	1.8%	5	1.9%
Metamorphic	Serpentinite	128	39.4%	147	54.6%
	Schist	14	4.3%	1	.4%
	Marble	1	.3%	2	.7%
	Granulite	1	.3%	0	.0%
	Indet. Metamorphic	17	5.2%	12	4.5%
Igneous	Granite	0	.0%	1	.4%
	Gabbro	9	2.8%	9	3.3%
	Dolerite	34	10.5%	21	7.8%
	Diorite	11	3.4%	9	3.3%
	Basalt	35	10.8%	15	5.6%
	Andesite	14	4.3%	10	3.7%
	Andesite-Basalt	13	4.0%	8	3.0%
	Lydite	1	.3%	0	.0%
	Indet. Igneous	41	12.6%	28	10.4%
	Total	325	100.0%	269	100.0%

Table 4.11 Chronological distribution of geological categories for adzes.

Raw Material		Edge Tool Category			Total
		Edge-Axe	Edge-Adze	Edge-Chisel	
Well Cemented Sandstone	Count	0	6	0	6
	% within Edge Tool Category	.0%	1.8%	.0%	1.5%
Serpentinite	Count	7	128	23	158
	% within Edge Tool Category	17.9%	39.4%	59.0%	39.2%
Schist	Count	1	14	3	18
	% within Edge Tool Category	2.6%	4.3%	7.7%	4.5%
Marble	Count	0	1	0	1
	% within Edge Tool Category	.0%	.3%	.0%	.2%
Granulite	Count	0	1	0	1
	% within Edge Tool Category	.0%	.3%	.0%	.2%
Indet. Metamorphic	Count	2	17	5	24
	% within Edge Tool Category	5.1%	5.2%	12.8%	6.0%
Gabbro	Count	0	9	0	9
	% within Edge Tool Category	.0%	2.8%	.0%	2.2%
Dolerite	Count	12	34	1	47
	% within Edge Tool Category	30.8%	10.5%	2.6%	11.7%
Diorite	Count	0	11	1	12
	% within Edge Tool Category	.0%	3.4%	2.6%	3.0%
Basalt	Count	5	35	3	43
	% within Edge Tool Category	12.8%	10.8%	7.7%	10.7%
Andesite	Count	0	14	1	15
	% within Edge Tool Category	.0%	4.3%	2.6%	3.7%
Andesite-Basalt	Count	0	13	0	13
	% within Edge Tool Category	.0%	4.0%	.0%	3.2%
Lydite	Count	0	1	0	1
	% within Edge Tool Category	.0%	.3%	.0%	.2%
Indet. Igneous	Count	12	41	2	55
	% within Edge Tool Category	30.8%	12.6%	5.1%	13.6%
Total	Count	39	325	39	403
	% within Edge Tool Category	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	50.321(a)	26	.007(b)
N of Valid Cases	403		

a 28 cells (66.7%) have expected count less than 5. The minimum expected count is .10.
b Based on 403 sampled tables with starting seed 79654295.

Table 4.12 Raw material selection for MKI edge tools (excluding indeterminate cases) and the result of the chi-square test.

Raw Material		Edge Tool Category			Total
		Axe	Adze	Chisel	
Well Cemented Sandstone	Count	0	5	0	5
	% within Edge Tool Category	.0%	1.9%	.0%	1.4%
Flint	Count	0	1	0	1
	% within Edge Tool Category	.0%	.4%	.0%	.3%
Serpentinite	Count	16	147	47	210
	% within Edge Tool Category	38.1%	54.6%	79.7%	56.8%
Schist	Count	0	1	4	5
	% within Edge Tool Category	.0%	.4%	6.8%	1.4%
Marble	Count	0	2	0	2
	% within Edge Tool Category	.0%	.7%	.0%	.5%
Indet. Metamorphic	Count	1	12	2	15
	% within Edge Tool Category	2.4%	4.5%	3.4%	4.1%
Granite	Count	0	1	0	1
	% within Edge Tool Category	.0%	.4%	.0%	.3%
Gabbro	Count	8	9	1	18
	% within Edge Tool Category	19.0%	3.3%	1.7%	4.9%
Dolerite	Count	5	21	1	27
	% within Edge Tool Category	11.9%	7.8%	1.7%	7.3%
Diorite	Count	6	9	1	16
	% within Edge Tool Category	14.3%	3.3%	1.7%	4.3%
Basalt	Count	1	15	0	16
	% within Edge Tool Category	2.4%	5.6%	.0%	4.3%
Andesite	Count	1	10	1	12
	% within Edge Tool Category	2.4%	3.7%	1.7%	3.2%
Andesite-Basalt	Count	0	8	0	8
	% within Edge Tool Category	.0%	3.0%	.0%	2.2%
Indet. Igneous	Count	4	28	2	34
	% within Edge Tool Category	9.5%	10.4%	3.4%	9.2%
Total	Count	42	269	59	370
	% within Edge Tool Category	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	72.536(a)	26	.000(b)
N of Valid Cases	370		

a 30 cells (71.4%) have expected count less than 5. The minimum expected count is .11.
b Based on 370 sampled tables with starting seed 92208573.

Table 4.13 Raw material selection for MKII edge tools (exlc. indet. cases) and the results of the chi-square test.

Raw Material		No.	%
Sedimentary	Fine Sandstone	328	6.5
	Medium Sandstone	28	.6
	Coarse Sandstone	20	.4
	Well cemented sandstone	2433	48.0
	Limestone	47	.9
	brown mudstone	12	.2
	mudstone (red coloured)	12	.2
	Indet Sedimentary	37	.7
	Total	2917	57.6
Metamorphic	Serpentinite	20	.4
	Schist	188	3.7
	Gneiss	388	7.7
	Marble	1163	23.0
	Indet. Metamorphic	66	1.3
	Total	1825	36.0
Igneous	Granite	2	.0
	Gabbro	27	.5
	Granodiorite	1	.0
	Pyroxenite	19	.4
	Diorite	5	.1
	Dolerite	60	1.2
	Basalt	14	.3
	Andesite	5	.1
	Andesite-Basalt	4	.1
	Indet. Igneous	61	1.2
	Total	198	3.9
	Quartz	122	2.4
	Fossilised Bone	2	.0
	Total	5064	100.0

Table 4.14 Raw material selection for grinding/abrasive tools (excluding indet. cases).

Raw Material		Grinding/Abrasive Tool Category							Total
		Abrader	Polisher	Grooved Abrader	Pestle	Grinder	Grinding Slab	Mortar	
Fine Sandstone	Count	9	1	1	0	2	247	1	261
	% within Tool Cat	20.5%	.3%	14.3%	.0%	.2%	10.3%	2.0%	7.0%
Medium Sandstone	Count	0	0	0	0	0	24	0	24
	% within Tool Cat	.0%	.0%	.0%	.0%	.0%	1.0%	.0%	.6%
Coarse Sandstone	Count	0	0	0	0	0	13	0	13
	% within Tool Cat	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.3%
Well Cemented Sandstone	Count	32	0	2	0	23	1399	0	1456
	% within Tool Cat	72.7%	.0%	28.6%	.0%	2.6%	58.3%	.0%	38.9%
Limestone	Count	0	1	1	0	1	35	1	39
	% within Tool Cat	.0%	.3%	14.3%	.0%	.1%	1.5%	2.0%	1.0%
Mudstone (Red Colour)	Count	0	11	0	0	1	0	0	12
	% within Tool Cat	.0%	3.7%	.0%	.0%	.1%	.0%	.0%	.3%
Mudstone (Brown Colour)	Count	0	12	0	0	0	0	0	12
	% within Tool Cat	.0%	4.0%	.0%	.0%	.0%	.0%	.0%	.3%
Indet Sedimentary	Count	0	9	2	0	1	14	0	26
	% within Tool Cat	.0%	3.0%	28.6%	.0%	.1%	.6%	.0%	.7%
Serpentinite	Count	1	3	0	0	8	3	0	15
	% within Tool Cat	2.3%	1.0%	.0%	.0%	.9%	.1%	.0%	.4%
Schist	Count	2	1	0	0	0	162	0	165
	% within Tool Cat	4.5%	.3%	.0%	.0%	.0%	6.7%	.0%	4.4%
Gneiss	Count	0	2	0	0	3	369	0	374
	% within Tool Cat	.0%	.7%	.0%	.0%	.3%	15.4%	.0%	10.0%
Marble	Count	0	253	0	0	733	10	48	1044
	% within Tool Cat	.0%	84.3%	.0%	.0%	82.2%	.4%	96.0%	27.9%
Indet. Metamorphic	Count	0	0	0	0	1	52	0	53
	% within Tool Cat	.0%	.0%	.0%	.0%	.1%	2.2%	.0%	1.4%
Granite	Count	0	0	0	0	0	2	0	2
	% within Tool Cat	.0%	.0%	.0%	.0%	.0%	.1%	.0%	.1%
Gabbro	Count	0	1	0	1	0	10	0	12
	% within Tool Cat	.0%	.3%	.0%	2.0%	.0%	.4%	.0%	.3%
Diorite	Count	0	0	0	2	2	1	0	5
	% within Tool Cat	.0%	.0%	.0%	3.9%	.2%	.0%	.0%	.1%
Granodiorite	Count	0	0	0	0	0	1	0	1
	% within Tool Cat	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Pyroxenite	Count	0	0	0	0	0	13	0	13
	% within Tool Cat	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.3%
Dolerite	Count	0	0	0	22	7	19	0	48
	% within Tool Cat	.0%	.0%	.0%	43.1%	.8%	.8%	.0%	1.3%
Basalt	Count	0	1	1	4	1	7	0	14
	% within Tool Cat	.0%	.3%	14.3%	7.8%	.1%	.3%	.0%	.4%
Andesite	Count	0	0	0	2	1	1	0	4
	% within Tool Cat	.0%	.0%	.0%	3.9%	.1%	.0%	.0%	.1%
Andesite-Basalt	Count	0	0	0	3	0	0	0	3
	% within Tool Cat	.0%	.0%	.0%	5.9%	.0%	.0%	.0%	.1%
Indet. Igneous	Count	0	1	0	17	6	19	0	43
	% within Tool Cat	.0%	.3%	.0%	33.3%	.7%	.8%	.0%	1.1%
Quartz	Count	0	4	0	0	102	0	0	106
	% within Tool Cat	.0%	1.3%	.0%	.0%	11.4%	.0%	.0%	2.8%

Total	Count	44	300	7	51	892	2401	50	3745
	% within Tool Cat	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	5573.743(a)	138	.000(b)
N of Valid Cases	3745		

a 124 cells (73.8%) have expected count less than 5. The minimum expected count is .00.
b Based on 3745 sampled tables with starting seed 726961337.

Table 4.15 Raw material selection for grinding/abrasive tool types and the result of the chi-square tests (excluding indeterminate cases).

Raw Material		Phase		Total
		MK I	Mk II	
Fine Sandstone	Count	179	148	327
	% within Phase	5.3%	9.3%	6.6%
Medium Sandstone	Count	12	16	28
	% within Phase	.4%	1.0%	.6%
Coarse Sandstone	Count	12	7	19
	% within Phase	.4%	.4%	.4%
Well Cemented Sandstone	Count	1948	464	2412
	% within Phase	57.3%	29.2%	48.4%
Limestone	Count	28	18	46
	% within Phase	.8%	1.1%	.9%
Mudstone (Red Coloured)	Count	10	2	12
	% within Phase	.3%	.1%	.2%
Mudstone (Brown Coloured)	Count	9	2	11
	% within Phase	.3%	.1%	.2%
Indet Sedimentary	Count	21	16	37
	% within Phase	.6%	1.0%	.7%
Serpentinite	Count	9	11	20
	% within Phase	.3%	.7%	.4%
Schist	Count	138	47	185
	% within Phase	4.1%	3.0%	3.7%
Gneiss	Count	174	210	384
	% within Phase	5.1%	13.2%	7.7%
Marble	Count	625	504	1129
	% within Phase	18.4%	31.7%	22.6%
Indet. Metamorphic	Count	36	30	66
	% within Phase	1.1%	1.9%	1.3%
Granite	Count	0	2	2
	% within Phase	.0%	.1%	.0%
Gabbro	Count	15	11	26
	% within Phase	.4%	.7%	.5%
Granodiorite	Count	0	1	1
	% within Phase	.0%	.1%	.0%
Diorite	Count	2	2	4
	% within Phase	.1%	.1%	.1%
Pyroxenite	Count	18	1	19
	% within Phase	.5%	.1%	.4%
Dolerite	Count	38	20	58
	% within Phase	1.1%	1.3%	1.2%
Basalt	Count	9	5	14
	% within Phase	.3%	.3%	.3%
Andesite	Count	1	3	4
	% within Phase	.0%	.2%	.1%
Andesite-Basalt	Count	4	0	4
	% within Phase	.1%	.0%	.1%
Indet. Igneous	Count	40	16	56
	% within Phase	1.2%	1.0%	1.1%

Quartz		Count	67	53	120
		% within Phase	2.0%	3.3%	2.4%
Fossilised Bone		Count	2	0	2
		% within Phase	.1%	.0%	.0%
	Total	Count	3397	1589	4986
		% within Phase	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	438.937(a)	24	.000(b)
N of Valid Cases	4986		

a 15 cells (30.0%) have expected count less than 5. The minimum expected count is .32.
b Based on 4986 sampled tables with starting seed 126474071.

Table 4.16 Raw material distribution for grinding/abrasive tools per chronological phase and the chi-square test (excluding indet. cases).

Raw Material	Phase			
	MK I		MK II	
	No.	%	No.	%
Fine Sandstone	125	7.8%	122	15.7%
Medium Sandstone	10	.6%	14	1.8%
Coarse Sandstone	7	.4%	5	.6%
Well Cemented Sandstone	1074	66.8%	319	40.9%
Limestone	19	1.2%	15	1.9%
Indet Sedimentary	6	.4%	8	1.0%
Serpentinite	3	.2%	0	.0%
Schist	116	7.2%	43	5.5%
Gneiss	163	10.1%	204	26.2%
Marble	4	.2%	6	.8%
Indet. Metamorphic	31	1.9%	21	2.7%
Granite	0	.0%	2	.3%
Gabbro	7	.4%	3	.4%
Granodiorite	0	.0%	1	.1%
Diorite	0	.0%	1	.1%
Pyroxenite	12	.7%	1	.1%
Dolerite	14	.9%	5	.6%
Basalt	4	.2%	3	.4%
Andesite	0	.0%	1	.1%
Indet. Igneous	13	.8%	5	.6%
Total	1608	100.0%	779	100.0%

Table 4.17 The distribution of raw materials for grinding slabs by phase (excluding indet.cases).

Raw Material		Object Category		
		Percussive -Hammer	Percussive -Macehead	Total
Well Cemented Sandstone	Count	2	2	4
	% within Primary tool Category	1.7%	6.1%	2.6%
Flint	Count	1	0	1
	% within Primary tool Category	.8%	.0%	.7%
Indet Sedimentary	Count	1	0	1
	% within Primary tool Category	.8%	.0%	.7%
Serpentinite	Count	8	2	10
	% within Primary tool Category	6.7%	6.1%	6.5%
Schist	Count	0	2	2
	% within Primary tool Category	.0%	6.1%	1.3%
Marble	Count	36	0	36
	% within Primary tool Category	30.0%	.0%	23.5%
Indet. Metamorphic	Count	1	0	1
	% within Primary tool Category	.8%	.0%	.7%
Granite	Count	0	1	1
	% within Primary tool Category	.0%	3.0%	.7%
Granodiorite	Count	0	1	1
	% within Primary tool Category	.0%	3.0%	.7%
Diorite	Count	1	1	2
	% within Primary tool Category	.8%	3.0%	1.3%
Dolerite	Count	3	1	4
	% within Primary tool Category	2.5%	3.0%	2.6%
Andesite	Count	0	1	1
	% within Primary tool Category	.0%	3.0%	.7%
Andesite-Basalt	Count	1	0	1
	% within Primary tool Category	.8%	.0%	.7%
Indet. Igneous	Count	2	1	3
	% within Primary tool Category	1.7%	3.0%	2.0%
Quartz	Count	64	0	64
	% within Primary tool Category	53.3%	.0%	41.8%
Fossilised Shell	Count	0	1	1
	% within Primary tool Category	.0%	3.0%	.7%
'Talc'	Count	0	20	20
	% within Primary tool Category	.0%	60.6%	13.1%
Total	Count	120	33	153
	% within Primary tool Category	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	126.300(a)	16	.000(b)
N of Valid Cases	153		

a 28 cells (82.4%) have expected count less than 5. The minimum expected count is .22.
b Based on 153 sampled tables with starting seed 2110151063.

Table 4.18 Raw material selection per percussive tool type and the chi-square test (excluding indet. cases).

Raw Material		Phase		Total
		MK I	MK II	
Indet	Count	0	1	1
	% within Phase	.0%	1.2%	.9%
Flint	Count	0	1	1
	% within Phase	.0%	1.2%	.9%
Well Cemented Sandstone	Count	0	2	2
	% within Phase	.0%	2.5%	1.7%
Indet Sedimentary	Count	0	1	1
	% within Phase	.0%	1.2%	.9%
Serpentinite	Count	2	6	8
	% within Phase	5.9%	7.4%	7.0%
Marble	Count	10	26	36
	% within Phase	29.4%	32.1%	31.3%
Indet. Metamorphic	Count	1	0	1
	% within Phase	2.9%	.0%	.9%
Dolerite	Count	1	2	3
	% within Phase	2.9%	2.5%	2.6%
Diorite	Count	0	1	1
	% within Phase	.0%	1.2%	.9%
Indet. Igneous	Count	1	1	2
	% within Phase	2.9%	1.2%	1.7%
Quartz	Count	19	40	59
	% within Phase	55.9%	49.4%	51.3%
Total	Count	34	81	115
	% within Phase	100.0%	100.0%	100.0%

Table 4.19 Temporal distribution of raw materials for hammers.

Raw Material		Phase		Total
		MK I	MK II	
Serpentinite	Count	0	2	2
	% within Phase	.0%	9.1%	6.9%
Schist	Count	0	2	2
	% within Phase	.0%	9.1%	6.9%
Dolerite	Count	0	1	1
	% within Phase	.0%	4.5%	3.4%
Diorite	Count	0	1	1
	% within Phase	.0%	4.5%	3.4%
Andesite	Count	0	1	1
	% within Phase	.0%	4.5%	3.4%
Indet. Igneous	Count	0	1	1
	% within Phase	.0%	4.5%	3.4%
Well Cemented Sandstone	Count	2	0	2
	% within Phase	28.6%	.0%	6.9%
Fossilised Shell	Count	0	1	1
	% within Phase	.0%	4.5%	3.4%
'Talc'	Count	5	13	18
	% within Phase	71.4%	59.1%	62.1%
Total	Count	7	22	29
	% within Phase	100.0%	100.0%	100.0%

Table 4.20 The distribution of raw materials for mace heads by phase.

Raw Material		Object Category			Total
		Perforator-Indet.	Perforator-Drill Base	Perforator-Drill	
Indet	Count	0	1	0	1
	% within Object Category	.0%	3.3%	.0%	2.4%
Schist	Count	0	3	0	3
	% within Object Category	.0%	10.0%	.0%	7.1%
Marble	Count	7	26	0	33
	% within Object Category	100.0%	86.7%	.0%	78.6%
Gabbro	Count	0	0	1	1
	% within Object Category	.0%	.0%	20.0%	2.4%
Well cemented sandstone	Count	0	0	4	4
	% within Object Category	.0%	.0%	80.0%	9.5%
Total	Count	7	30	5	42
	% within Object Category	100.0%	100.0%	100.0%	100.0%

Table 4.21 Raw material use for perforators.

Raw Material	Ornament Type							
	Indet.		Beads		Pendants		Rings	
	No.	%	No.	%	No.	%	No.	%
Serpentinite	1	16.7%	19	57.6%	0	.0%	1	1.8%
Marble	5	83.3%	8	24.2%	14	87.5%	54	94.7%
Indet. Metamorphic	0	.0%	1	3.0%	0	.0%	2	3.5%
Indet. Igneous	0	.0%	1	3.0%	0	.0%	0	.0%
Quartz	0	.0%	3	9.1%	0	.0%	0	.0%
Mudstone (Red Coloured)	0	.0%	1	3.0%	1	6.3%	0	.0%
Well Cemented Sandstone	0	.0%	0	.0%	1	6.3%	0	.0%
Total	6	100.0%	33	100.0%	16	100.0%	57	100.0%

Table 4.22 Raw material use for ornaments (excluding indet. raw materials).

Raw Material	Tool Type							
	Other-Weights		Other-Retouched Tool		Other-Rocks With Natural Holes		Other-Pitted/ Cupped Stone	
	No.	%	No.	%	No.	%	No.	%
Indet	0	.0%	1	20.0%	0	.0%	0	.0%
Limestone	1	2.6%	0	.0%	0	.0%	0	.0%
Serpentinite	0	.0%	4	80.0%	0	.0%	0	.0%
Schist	11	28.9%	0	.0%	0	.0%	0	.0%
Marble	26	68.4%	0	.0%	1	100.0%	16	100.0%
Total	38	100.0%	5	100.0%	1	100.0%	16	100.0%

Table 4.23 Raw material use for weights, retouch tools, rocks with natural holes, pitted/cupped stones.

	Multiple-Use Tool Category											
	Polisher /Hammer		Pestle/ Hammer		Drillbase/ Hammer		Grinder/ Hammer		Grooved Abrader/ Grind. Slab		Abrader/ Hammer	
Raw Material	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Fine Sandstone	0	.0%	0	.0%	0	.0%	0	.0%	1	33.3%	0	.0%
Serpentinite	2	6.5%	2	6.5%	0	.0%	5	2.4%	0	.0%	0	.0%
Marble	28	90.3%	0	.0%	3	100.0%	148	71.2%	0	.0%	0	.0%
Gabbro	0	.0%	3	9.7%	0	.0%	0	.0%	0	.0%	0	.0%
Dolerite	0	.0%	11	35.5%	0	.0%	1	.5%	0	.0%	0	.0%
Diorite	0	.0%	3	9.7%	0	.0%	0	.0%	0	.0%	0	.0%
Basalt	0	.0%	2	6.5%	0	.0%	1	.5%	0	.0%	0	.0%
Indet. Igneous	1	3.2%	7	22.6%	0	.0%	1	.5%	0	.0%	0	.0%
Quartz	0	.0%	0	.0%	0	.0%	52	25.0%	0	.0%	0	.0%
Well Cemented Sandstone	0	.0%	1	3.2%	0	.0%	0	.0%	2	66.7%	1	100.0%
Andesite-Basalt	0	.0%	2	6.5%	0	.0%	0	.0%	0	.0%	0	.0%
Total	31	100.0%	31	100.0%	3	100.0%	208	100.0%	3	100.0%	1	100.0%

Table 4.24 Raw material use for multiple-use tools (excluding indet. cases)

Strength Classification System	Value Range (Mpa)	Rock Types
Very weak	5-20	Weathered and weakly–compacted sedimentary rocks
Weak	20-40	Weakly-cemented sedimentary rocks; schists
Medium	40-80	Competent sedimentary rocks; some low density coarse grained rocks
Strong	80-160	Competent igneous, metamorphic rocks and some fine grained sandstones
Very Strong	160-320	Quartzites dense fine grained igneous rocks

Table 4.25 Strength Classification System (values are given in megapascal (MPa) (from Attewell and Farmer 1976).

Bit	No.	%
Pecked	1	.1
Ground	31	3.7
Flaked	1	.1
Polished	803	95.4
Ground & Polished	3	.4
Pecked & Polished	3	.4
Total	842	100.0

Body	No.	%
Pecked	5	.3
Ground	56	3.3
Flaked	1	.1
Polished	1467	87.3
Ground & Polished	16	1.0
Pecked & Polished	127	7.6
Pecked & Ground	7	.4
Drilled	2	.1
Total	1681	100.0

Margins	No.	%
None/Natural	1	.1
Pecked	23	1.4
Ground	57	3.5
Polished	1414	86.5
Ground & Polished	9	.6
Pecked & Polished	129	7.9
Pecked & Ground	2	.1
Total	1635	100.0

Butt	No.	%
None/Natural	3	.4
Pecked	96	13.0
Ground	89	12.0
Polished	530	71.6
Ground & Polished	1	.1
Pecked & Polished	11	1.5
Pecked & Ground	9	1.2
Drilled	1	.1
Total	740	100.0

Table 4.26 Edge tools: Frequency of manufacturing techniques for bit, body, margins and butt (excluding indeterminate cases and reused tools).

Bit	Object Category							
	Edge-Indet.		Edge-Axe		Edge-Adze		Edge-Chisel	
	No.	%	No.	%	No.	%	No.	%
Pecked	1	1.0%	0	.0%	0	.0%	0	.0%
Ground	8	7.9%	3	3.4%	17	3.1%	3	3.1%
Flaked	0	.0%	0	.0%	1	.2%	0	.0%
Polished	90	89.1%	83	95.4%	534	96.2%	95	96.9%
Ground & Polished	0	.0%	0	.0%	3	.5%	0	.0%
Pecked & Polished	2	2.0%	1	1.1%	0	.0%	0	.0%
Total	101	100.0%	87	100.0%	555	100.0%	98	100.0%

Body	Object Category							
	Edge-Indet.		Edge-Axe		Edge-Adze		Edge-Chisel	
	No.	%	No.	%	No.	%	No.	%
Pecked	3	.4%	1	1.1%	1	.2%	0	.0%
Ground	29	3.5%	3	3.3%	21	3.2%	3	2.9%
Flaked	1	.1%	0	.0%	0	.0%	0	.0%
Polished	731	87.5%	83	92.2%	560	85.9%	93	89.4%
Ground & Polished	8	1.0%	0	.0%	7	1.1%	1	1.0%
Pecked & Polished	59	7.1%	2	2.2%	60	9.2%	6	5.8%
Pecked & Ground	3	.4%	1	1.1%	3	.5%	0	.0%
Drilled	1	.1%	0	.0%	0	.0%	1	1.0%
Total	835	100.0%	90	100.0%	652	100.0%	104	100.0%

Margins	Object Category							
	Edge-Indet.		Edge-Axe		Edge-Adze		Edge-Chisel	
	No.	%	No.	%	No.	%	No.	%
None/Natural	1	.1%	0	.0%	0	.0%	0	.0%
Pecked	15	1.9%	4	4.5%	2	.3%	2	1.9%
Ground	30	3.8%	3	3.4%	21	3.2%	3	2.9%
Polished	679	85.5%	71	79.8%	572	88.3%	92	88.5%
Ground & Polished	4	.5%	0	.0%	5	.8%	0	.0%
Pecked & Polished	63	7.9%	11	12.4%	48	7.4%	7	6.7%
Pecked & Ground	2	.3%	0	.0%	0	.0%	0	.0%
Total	794	100.0%	89	100.0%	648	100.0%	104	100.0%

Butt	Object Category							
	Edge-Indet.		Edge-Axe		Edge-Adze		Edge-Chisel	
	No.	%	No.	%	No.	%	No.	%
None/Natural	3	.8%	0	.0%	0	.0%	0	.0%
Pecked	64	17.9%	5	18.5%	27	9.1%	0	.0%
Ground	61	17.0%	1	3.7%	25	8.4%	2	3.4%
Polished	217	60.6%	20	74.1%	236	79.5%	56	96.6%
Ground & Polished	0	.0%	0	.0%	1	.3%	0	.0%
Pecked & Polished	7	2.0%	0	.0%	4	1.3%	0	.0%
Pecked & Ground	6	1.7%	1	3.7%	3	1.0%	0	.0%
Drilled	0	.0%	0	.0%	1	.3%	0	.0%
Total	358	100.0%	27	100.0%	297	100.0%	58	100.0%

Table 4.27 Frequency of manufacturing techniques per edge tool subtype (excluding indet. cases and reused tools).

Bit	Phase			
	MK I		MK II	
	No.	%	No.	%
Pecked	0	.0%	1	.3%
Ground	12	3.0%	15	3.8%
Flaked	1	.3%	0	.0%
Polished	384	96.0%	373	95.2%
Ground & Polished	1	.3%	2	.5%
Pecked & Polished	2	.5%	1	.3%
Total	400	100.0%	392	100.0%

Body	Phase			
	MK I		MK II	
	No.	%	No.	%
Pecked	4	.5%	1	.1%
Ground	19	2.3%	25	3.5%
Flaked	1	.1%	0	.0%
Polished	743	88.5%	615	86.6%
Ground & Polished	7	.8%	6	.8%
Pecked & Polished	62	7.4%	58	8.2%
Pecked & Ground	4	.5%	3	.4%
Drilled	0	.0%	2	.3%
Total	840	100.0%	710	100.0%

Margins	Phase			
	MK I		MK II	
	No.	%	No.	%
None/Natural	0	.0%	1	.1%
Pecked	15	1.8%	7	1.0%
Ground	21	2.6%	25	3.6%
Polished	715	87.7%	592	85.7%
Ground & Polished	2	.2%	5	.7%
Pecked & Polished	61	7.5%	60	8.7%
Pecked & Ground	1	.1%	1	.1%
Total	815	100.0%	691	100.0%

Butt	Phase			
	MK I		MK II	
	No.	%	No.	%
None/Natural	2	.6%	0	.0%
Pecked	44	13.1%	40	11.7%
Ground	45	13.4%	29	8.5%
Polished	234	69.6%	261	76.5%
Ground & Polished	0	.0%	1	.3%
Pecked & Polished	4	1.2%	7	2.1%
Pecked & Ground	6	1.8%	3	.9%
Drilled	1	.3%	0	.0%
Total	336	100.0%	341	100.0%

Table 4.28 The frequency of manufacturing techniques of edge tools by phase.

Shape In Plan		Object Category			Total
		Edge-Axe	Edge-Adze	Edge-Chisel	
Irregular	Count	1	31	5	37
	% within Object Category	3.2%	10.3%	7.1%	9.2%
Triangular	Count	0	3	2	5
	% within Object Category	.0%	1.0%	2.9%	1.2%
Trapezoid	Count	26	192	9	227
	% within Object Category	83.9%	63.8%	12.9%	56.5%
Rectangular	Count	2	27	31	60
	% within Object Category	6.5%	9.0%	44.3%	14.9%
Sub-Rectangular	Count	2	48	23	73
	% within Object Category	6.5%	15.9%	32.9%	18.2%
Total	Count	31	301	70	402
	% within Object Category	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	95.024(a)	8	.000(b)
N of Valid Cases	402		

a 5 cells (33.3%) have expected count less than 5. The minimum expected count is .39.
b Based on 10000 sampled tables with starting seed 303130861.

Shape In Section		Object Category			Total
		Edge-Axe	Edge-Adze	Edge-Chisel	
Irregular	Count	12	127	14	153
	% within Object Category	15.6%	22.5%	15.2%	20.8%
Plano-Irregular	Count	0	9	2	11
	% within Object Category	.0%	1.6%	2.2%	1.5%
Plano-Convex	Count	10	266	16	292
	% within Object Category	13.0%	47.1%	17.4%	39.8%
Triangular	Count	0	1	0	1
	% within Object Category	.0%	.2%	.0%	.1%
Wedge-Shaped	Count	0	1	4	5
	% within Object Category	.0%	.2%	4.3%	.7%
Oval/Spherical	Count	36	51	12	99
	% within Object Category	46.8%	9.0%	13.0%	13.5%
Tapered	Count	1	0	0	1
	% within Object Category	1.3%	.0%	.0%	.1%
Flat	Count	18	110	44	172
	% within Object Category	23.4%	19.5%	47.8%	23.4%
Total	Count	77	565	92	734
	% within Object Category	100%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided).
	Value	df	Sig
Pearson Chi-Square	165.961(a)	14	000(b)
N of Valid Cases	734		

a 11 cells (45.8%) have expected count less than 5. The minimum expected count is .10.
b Based on 10000 sampled tables with starting seed 484067124.

Table 4.29 Correlation of morphological characteristics and edge tool sub type and the results of the chi-square tests (excl, indeterminate cases and reused tools).

Bit		Geological Category			Total
		Sedimentary	Metamorphic	Igneous	
Pecked	Count	0	0	1	1
	% within Geo Cat	.0%	.0%	.3%	.1%
Ground	Count	3	16	6	25
	% within Geo Cat	23.1%	3.5%	2.0%	3.2%
Flaked	Count	0	1	0	1
	% within Geo Cat	.0%	.2%	.0%	.1%
Polished	Count	10	441	287	738
	% within Geo Cat	76.9%	95.7%	96.6%	95.7%
Ground & Polished	Count	0	1	2	3
	% within Geo Cat	.0%	.2%	.7%	.4%
Pecked & Polished	Count	0	2	1	3
	% within Geo Cat	.0%	.4%	.3%	.4%
Total	Count	13	461	297	771
	% within Geo Cat	100.0%	100.0%	100.0%	100.0%

Body		Geological Category			Total
		Sedimentary	Metamorphic	Igneous	
Pecked	Count	0	2	3	5
	% within Geo Cat	.0%	.3%	.4%	.3%
Ground	Count	4	18	17	39
	% within Geo Cat	23.5%	2.3%	2.3%	2.6%
Flaked	Count	0	0	1	1
	% within Geo Cat	.0%	.0%	.1%	.1%
Polished	Count	11	679	649	1339
	% within Geo Cat	64.7%	88.3%	87.7%	87.7%
Ground & Polished	Count	1	4	11	16
	% within Geo Cat	5.9%	.5%	1.5%	1.0%
Pecked & Polished	Count	1	62	56	119
	% within Geo Cat	5.9%	8.1%	7.6%	7.8%
Pecked & Ground	Count	0	3	2	5
	% within Geo Cat	.0%	.4%	.3%	.3%
Drilled	Count	0	1	1	2
	% within Geo Cat	.0%	.1%	.1%	.1%
Total	Count	17	769	740	1526
	% within Geo Cat	100.0%	100.0%	100.0%	100.0%

Table 4.30 Edge tools: Crosstabulation of manufacturing techniques for bit, body, and margins and geological categories (excluding indet. cases and reused tools).

Margins		Geological Category			Total
		Sedimentary	Metamorphic	Igneous	
None/Natural	Count	0	1	0	1
	% within Geo Cat	.0%	.1%	.0%	.1%
Pecked	Count	0	2	18	20
	% within Geo Cat	.0%	.3%	2.5%	1.3%
Ground	Count	5	17	20	42
	% within Geo Cat	29.4%	2.3%	2.8%	2.8%
Polished	Count	9	680	601	1290
	% within Geo Cat	52.9%	91.2%	83.4%	86.9%
Ground & Polished	Count	0	3	6	9
	% within Geo Cat	.0%	.4%	.8%	.6%
Pecked & Polished	Count	3	43	74	120
	% within Geo Cat	17.6%	5.8%	10.3%	8.1%
Pecked & Ground	Count	0	0	2	2
	% within Geo Cat	.0%	.0%	.3%	.1%
Total	Count	17	746	721	1484
	% within Geo Cat	100.0%	100.0%	100.0%	100.0%

Table 4.30 (Cont.) Edge tools: Crosstabulation of manufacturing techniques for bit, body, and margins and geological categories (excluding indet. cases and reused tools).

Butt		Geological Category			Total
		Sedimentary	Metamorphic	Igneous	
None/Natural	Count	0	0	3	3
	% within Geo Cat	.0%	.0%	.9%	.4%
Pecked	Count	1	23	60	84
	% within Geo Cat	14.3%	6.7%	18.9%	12.6%
Ground	Count	3	12	65	80
	% within Geo Cat	42.9%	3.5%	20.4%	12.0%
Polished	Count	1	305	178	484
	% within Geo Cat	14.3%	88.7%	56.0%	72.3%
Ground & Polished	Count	0	1	0	1
	% within Geo Cat	.0%	.3%	.0%	.1%
Pecked & Polished	Count	1	2	7	10
	% within Geo Cat	14.3%	.6%	2.2%	1.5%
Pecked & Ground	Count	1	1	4	6
	% within Geo Cat	14.3%	.3%	1.3%	.9%
Drilled	Count	0	0	1	1
	% within Geo Cat	.0%	.0%	.3%	.1%
Total	Count	7	344	318	669
	% within Geo Cat	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	124.472(a)	14	.001(b)
N of Valid Cases	669		

a 16 cells (66.7%) have expected count less than 5. The minimum expected count is .01.
b Based on 10000 sampled tables with starting seed 1573343031.

Table 4.31 Edge tools: Crosstabulation of manufacturing techniques for proximal area (butt) and geological categories (excluding indeterminate cases and reused tools) and the result of the chi-square test.

Geological Category		Degree Of Polishing				Total
		Not Applicable	Not Well Polished	Well Polished	Highly Polished	
Sedimentary	Count	5	7	3	2	17
	% within Geo Cat	29.4%	41.2%	17.6%	11.8%	100.0%
Metamorphic	Count	18	138	264	364	784
	% within Geo Cat	2.3%	17.6%	33.7%	46.4%	100.0%
Igneous	Count	24	134	312	304	774
	% within Geo Cat	3.1%	17.3%	40.3%	39.3%	100.0%
Total	Count	47	279	579	670	1575
	% within Geo Cat	3.0%	17.7%	36.8%	42.5%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	61.310(a)	6	.000(b)
N of Valid Cases	1575		

a 2 cells (16.7%) have expected count less than 5. The minimum expected count is .51.
b Based on 10000 sampled tables with starting seed 624387341.

Table 4.32 Edge tools: Crosstabulation of geological categories and degree of polish (excluding indet. cases) and the result of the chi-square test.

Raw Material		Degree Of Polishing				Total
		Not Applicable	Not Well Polished	Well Polished	Highly Polished	
Flint	Count	1	0	0	0	1
	% within RM	100.0%	.0%	.0%	.0%	100.0%
Serpentinite	Count	10	90	226	320	646
	% within RM	1.5%	13.9%	35.0%	49.5%	100.0%
Schist	Count	1	13	10	10	34
	% within RM	2.9%	38.2%	29.4%	29.4%	100.0%
Gneiss	Count	0	0	0	1	1
	% within RM	.0%	.0%	.0%	100.0%	100.0%
Marble	Count	2	3	1	0	6
	% within RM	33.3%	50.0%	16.7%	.0%	100.0%
Slate	Count	0	0	1	0	1
	% within RM	.0%	.0%	100.0%	.0%	100.0%
Granulite	Count	0	0	0	1	1
	% within RM	.0%	.0%	.0%	100.0%	100.0%
Indet. Metamorphic	Count	5	32	26	32	95
	% within RM	5.3%	33.7%	27.4%	33.7%	100.0%
Granite	Count	0	0	0	1	1
	% within RM	.0%	.0%	.0%	100.0%	100.0%
Gabbro	Count	2	8	16	30	56
	% within RM	3.6%	14.3%	28.6%	53.6%	100.0%
Dolerite	Count	8	38	74	69	189
	% within RM	4.2%	20.1%	39.2%	36.5%	100.0%
Diorite	Count	2	16	30	18	66
	% within RM	3.0%	24.2%	45.5%	27.3%	100.0%
Basalt	Count	2	12	51	48	113
	% within RM	1.8%	10.6%	45.1%	42.5%	100.0%
Andesite	Count	1	5	27	46	79
	% within RM	1.3%	6.3%	34.2%	58.2%	100.0%
Granodiorite	Count	0	0	0	1	1
	% within RM	.0%	.0%	.0%	100.0%	100.0%
Indet. Igneous	Count	9	53	88	62	212
	% within RM	4.2%	25.0%	41.5%	29.2%	100.0%
Well Cemented Sandstone	Count	4	7	3	2	16
	% within RM	25.0%	43.8%	18.8%	12.5%	100.0%
Andesite-Basalt	Count	0	1	26	29	56
	% within RM	.0%	1.8%	46.4%	51.8%	100.0%
Lydite	Count	0	1	0	0	1
	% within RM	.0%	100.0%	.0%	.0%	100.0%
Total	Count	47	279	579	670	1575
	% within RM	3.0%	17.7%	36.8%	42.5%	100.0%

Table 4.33 Edge tools: Crosstabulation of rock categories and degrees of polishing (excluding indet. cases).

Modification Technique	No.	%
No Modification	297	31.4
Resharpening	534	56.4
Sawing	16	1.7
Resharpening/Sawing	45	4.8
Sawing/Indet. Resharpening	55	5.8
Total	947	100.0

Table 4.34 Edge tools: The frequency of modification techniques (excluding indet. cases).

Raw Material		Other (No Modif/ Resharpening	Sawing	Total
Flint	Count	1	0	1
	% within Raw Material	100.0%	.0%	100.0%
Well Cemented Sandstone	Count	9	1	10
	% within Raw Material	90.0%	10.0%	100.0%
Serpentinite	Count	337	61	398
	% within Raw Material	84.7%	15.3%	100.0%
Schist	Count	31	2	33
	% within Raw Material	93.9%	6.1%	100.0%
Gneiss	Count	1	0	1
	% within Raw Material	100.0%	.0%	100.0%
Marble	Count	5	0	5
	% within Raw Material	100.0%	.0%	100.0%
Granulite	Count	1	0	1
	% within Raw Material	100.0%	.0%	100.0%
Indet. Metamorphic	Count	38	13	51
	% within Raw Material	74.5%	25.5%	100.0%
Granite	Count	0	1	1
	% within Raw Material	.0%	100.0%	100.0%
Gabbro	Count	24	0	24
	% within Raw Material	100.0%	.0%	100.0%
Dolerite	Count	89	4	93
	% within Raw Material	95.7%	4.3%	100.0%
Diorite	Count	25	2	27
	% within Raw Material	92.6%	7.4%	100.0%
Basalt	Count	60	7	67
	% within Raw Material	89.6%	10.4%	100.0%
Andesite	Count	28	1	29
	% within Raw Material	96.6%	3.4%	100.0%
Andesite-Basalt	Count	17	3	20
	% within Raw Material	85.0%	15.0%	100.0%
Lydite	Count	1	0	1
	% within Raw Material	100.0%	.0%	100.0%
Indet. Igneous	Count	89	6	95
	% within Raw Material	93.7%	6.3%	100.0%
Total	Count	756	101	857
	% within Raw Material	88.2%	11.8%	100.0%

Table 4.35 Edge tools: The frequency of raw materials with evidence for sawing (excluding indet. cases).

Body	No.	%
None/Natural	2810	89.2
Pecked	110	3.5
Ground	152	4.8
Flaked	3	.1
Polished	46	1.5
Ground & Polished	3	.1
Pecked & Polished	10	.3
Pecked & Ground	18	.6
Total	3152	100.0

Margins	No.	%
None/Natural	2063	67.9
Pecked	234	7.7
Ground	639	21.0
Flaked	14	.5
Polished	30	1.0
Pecked & Polished	13	.4
Pecked & Ground	44	1.4
Total	3037	100.0

Table 4.36 Grinding/Abrasive Tools: Frequency of manufacturing techniques (excluding indet. cases).

Body	Abrader		Polisher/Smoothed Stone		Grooved Abrader		Grinder	
	No.	%	No.	%	No.	%	No.	%
None/Natural	37	100.0%	304	100.0%	5	100.0%	805	99.1%
Pecked	0	.0%	0	.0%	0	.0%	5	.6%
Ground	0	.0%	0	.0%	0	.0%	0	.0%
Flaked	0	.0%	0	.0%	0	.0%	2	.2%
Polished	0	.0%	0	.0%	0	.0%	0	.0%
Ground & Polished	0	.0%	0	.0%	0	.0%	0	.0%
Pecked & Polished	0	.0%	0	.0%	0	.0%	0	.0%
Pecked & Ground	0	.0%	0	.0%	0	.0%	0	.0%
Total	37	100.0%	304	100.0%	5	100.0%	812	100.0%

Margins	Abrader		Polisher/Smoothed Stone		Grooved Abrader		Grinder	
	No.	%	No.	%	No.	%	No.	%
None/Natural	36	94.7%	304	99.7%	4	100.0%	804	98.4%
Pecked	2	5.3%	1	.3%	0	.0%	10	1.2%
Ground	0	.0%	0	.0%	0	.0%	1	.1%
Flaked	0	.0%	0	.0%	0	.0%	2	.2%
Polished	0	.0%	0	.0%	0	.0%	0	.0%
Pecked & Polished	0	.0%	0	.0%	0	.0%	0	.0%
Pecked & Ground	0	.0%	0	.0%	0	.0%	0	.0%
Total	38	100.0%	305	100.0%	4	100.0%	817	100.0%

Table 4.37 Grinding/Abrasive Tools: Frequency of manufacturing techniques for body and margins for abraders, polishers, grooved abraders, grinders (excluding indet. cases).

Body	Pestle		Grinding Slab		Mortar	
	No.	%	No.	%	No.	%
None/Natural	0	.0%	1222	87.3%	3	6.7%
Pecked	5	9.6%	78	5.6%	2	4.4%
Ground	9	17.3%	83	5.9%	21	46.7%
Flaked	0	.0%	1	.1%	0	.0%
Polished	23	44.2%	3	.2%	18	40.0%
Ground & Polished	0	.0%	1	.1%	1	2.2%
Pecked & Polished	9	17.3%	1	.1%	0	.0%
Pecked & Ground	6	11.5%	10	.7%	0	.0%
Total	52	100.0%	1398	100.0%	45	100.0%

Margins	Pestle		Grinding Slab		Mortar	
	No.	%	No.	%	No.	%
None/Natural	3	5.9%	576	47.9%	5	12.8%
Pecked	6	11.8%	161	13.4%	2	5.1%
Ground	9	17.6%	425	35.3%	16	41.0%
Flaked	0	.0%	10	.8%	0	.0%
Polished	14	27.5%	2	.2%	14	35.9%
Pecked & Polished	12	23.5%	0	.0%	1	2.6%
Pecked & Ground	7	13.7%	29	2.4%	1	2.6%
Total	51	100.0%	1203	100.0%	39	100.0%

Table 4.38 Grinding/Abrasive Tools: Frequency of manufacturing techniques for body and margins for pestles, grinding slabs and mortars (excluding indet. cases).

Shape In Plan	No.	%
Irregular	36	52.2%
Triangular	2	2.9%
Rectangular	2	2.9%
Obovate	2	2.9%
Ovate	9	13.0%
Spherical	4	5.8%
Sub-Rectangular	14	20.3%
Total	69	100.0%

Shape In Section	No.	%
Irregular	178	36.5%
Plano-Irregular	42	8.6%
Plano-Convex	90	18.4%
Triangular	2	.4%
Wedge-Shaped	46	9.4%
Oval/Spherical	14	2.9%
Tapered	1	.2%
Flat	115	23.6%
Total	488	100.0%

Shape of Use-Face	No.	%
Irregular	7	.3%
Flat	2058	87.4%
Concave	176	7.5%
Convex	4	.2%
Flat & Convex	13	.6%
Flat & Concave	97	4.1%
Concave & Convex	1	.0%
Total	2356	100.0%

Table 4.39 The morphology of grinding slabs (excluding indet. cases).

Shape Of Use-Face	Sedimentary		Metamorphic		Igneous	
	No.	%	No.	%	No.	%
Irregular	6	.4%	0	.0%	0	.0%
Flat	1356	83.5%	559	96.2%	67	94.4%
Concave	163	10.0%	10	1.7%	0	.0%
Convex	2	.1%	2	.3%	0	.0%
Flat & Convex	7	.4%	4	.7%	2	2.8%
Flat & Concave	88	5.4%	6	1.0%	2	2.8%
Concave & Convex	1	.1%	0	.0%	0	.0%
Total	1623	100.0%	581	100.0%	71	100.0%

Shape Of Use-Face	Fine Sandstone		Medium Sandstone		Coarse Sandstone		Limestone		Indet Sedimentary		Well Cemented Sandstone	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Irregular	2	.9%	1	5.3%	0	.0%	1	2.9%	0	.0%	2	.2%
Flat	111	50.0%	16	84.2%	11	91.7%	27	79.4%	10	71.4%	1181	89.3%
Concave	67	30.2%	0	.0%	1	8.3%	6	17.6%	4	28.6%	85	6.4%
Convex	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	2	.2%
Flat & Convex	1	.5%	1	5.3%	0	.0%	0	.0%	0	.0%	5	.4%
Flat & Concave	41	18.5%	1	5.3%	0	.0%	0	.0%	0	.0%	46	3.5%
Concave & Convex	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	.1%
Total	222	100.0%	19	100.0%	12	100.0%	34	100.0%	14	100.0%	1322	100.0%

Table 4.40 Grinding slabs: Cross-tabulation of shape of use-face and geological categories (excluding indet. cases).

Body	No.	%
Pecked	10	11.4%
Ground	13	14.8%
Polished	37	42.0%
Ground & Polished	1	1.1%
Pecked & Polished	12	13.6%
Pecked & Ground	15	17.0%
Total	88	100.0%

Margins	No.	%
None/Natural	4	4.7%
Pecked	16	18.6%
Ground	12	14.0%
Polished	22	25.6%
Ground & Polished	1	1.2%
Pecked & Polished	15	17.4%
Pecked & Ground	16	18.6%
Total	86	100.0%

Table 4.41 Frequency of manufacturing techniques for pestles and pestle/hammers (excluding indet. cases).

Shape in Plan	No.	%
Irregular	2	5.9%
Obovate	2	5.9%
Ovate	2	5.9%
Spherical	3	8.8%
Sub-Rectangular	15	44.1%
Bell Shaped	10	29.4%
Total	34	100.0%

Shape In Section	No.	%
Irregular	1	1.4%
Plano-Convex	5	7.0%
Oval/Spherical	64	90.1%
Flat	1	1.4%
Total	71	100.0%

Shape Of Use Surface	No.	%
Irregular	7	9.5%
Flat	2	2.7%
Concave	1	1.4%
Convex	61	82.4%
Flat & Convex	3	4.1%
Total	74	100.0%

Table 4.42 The morphology of pestles and pestles/hammers (excluding indet. cases).

Body	Tool Type			
	Hammer		Mace-head	
	No.	%	No.	%
None/Natural	108	92.3%	0	.0%
Ground	3	2.6%	0	.0%
Polished	5	4.3%	0	.0%
Pecked & Ground	1	.9%	0	.0%
Drilled	0	.0%	33	100.0%
Total	117	100.0%	33	100.0%

Margins	Tool Type			
	Hammer		Mace-head	
	No.	%	No.	%
None/Natural	108	93.1%	0	.0%
Pecked	0	.0%	1	3.3%
Ground	3	2.6%	19	63.3%
Polished	4	3.4%	9	30.0%
Ground & Polished	0	.0%	1	3.3%
Pecked & Ground	1	.9%	0	.0%
Total	116	100.0%	30	100.0%

Table 4.43 Percussive tools: Frequency of manufacturing techniques for body and margins of hammers and mace-heads (excluding indet. cases).

Shape in Plan	Tool Type			
	Hammer		Mace-head	
	No.	%	No.	%
Irregular	4	6.1%	2	7.4%
Ovate	8	12.1%	1	3.7%
Spherical	50	75.8%	24	88.9%
Sub-Rectangular	4	6.1%	0	.0%
Total	66	100.0%	27	100.0%

Shape in Section	Tool Type			
	Hammer		Mace-head	
	No.	%	No.	%
Irregular	8	8.8%	0	.0%
Plano-Convex	4	4.4%	0	.0%
Oval/Spherical	79	86.8%	26	96.3%
Tapered	0	.0%	1	3.7%
Total	91	100.0%	27	100.0%

Table 4.44 Percussive tools: Morphological characteristics (excluding indet. cases).

Margins	Sedimentary		Metamorphic		Igneous		Fossilised Material		'Talc'	
	No.	%	No.	%	No.	%	No.	%	No.	%
Pecked	0	.0%	0	.0%	0	.0%	0	.0%	1	5.0%
Ground	0	.0%	2	50.0%	0	.0%	1	100.0%	16	80.0%
Polished	2	100.0%	1	25.0%	6	100.0%	0	.0%	0	.0%
Ground & Polished	0	.0%	1	25.0%	0	.0%	0	.0%	0	.0%
Indet.	0	.0%	0	.0%	0	.0%	0	.0%	3	15.0%
Total	2	100.0%	4	100.0%	6	100.0%	1	100.0%	20	100.0%

Table 4.45 The frequency of manufacturing techniques per geological category for mace-heads (excluding indet. cases).

Degree of Polishing	No.	%
Not Applicable	22	73.3
Not Well Polished	2	6.7
Well Polished	5	16.7
Highly Polished	1	3.3
Total	30	100.0

Table 4.46 The degree of polish on mace-heads (excluding indet. cases).

Body	No.	%
None/Natural	14	51.9
Pecked	1	3.7
Ground	6	22.2
Polished	1	3.7
Ground & Polished	1	3.7
Pecked & Polished	1	3.7
Drilled	3	11.1
Total	27	100.0

Margins	No.	%
None/Natural	28	73.7
Ground	7	18.4
Polished	2	5.3
Pecked & Polished	1	2.6
Total	38	100.0

Table 4.47 The frequency of manufacturing techniques for body and margins for perforators (excluding indet. cases).

Body	No.	%
Pecked	5	5.1
Ground	26	26.5
Polished	15	15.3
Ground & Polished	6	6.1
Pecked & Ground	5	5.1
Drilled	41	41.8
Total	98	100.0

Margins	No.	%
None/Natural	2	1.8
Pecked	1	.9
Ground	51	45.1
Polished	52	46.0
Ground & Polished	3	2.7
Drilled	4	3.5
Total	113	100.0

Table 4.48 Ornaments: Frequency of manufacturing techniques (excluding indet. cases).

	Ornament Type							
	Indet.		Beads		Pendants		Rings	
Body	No.	%	No.	%	No.	%	No.	%
Pecked	1	16.7%	0	.0%	0	.0%	4	7.7%
Ground	2	33.3%	0	.0%	1	8.3%	23	44.2%
Polished	2	33.3%	2	7.1%	1	8.3%	10	19.2%
Ground & Polished	0	.0%	0	.0%	0	.0%	6	11.5%
Pecked & Ground	0	.0%	0	.0%	0	.0%	5	9.6%
Drilled	1	16.7%	26	92.9%	10	83.3%	4	7.7%
Total	6	100.0%	28	100.0%	12	100.0%	52	100.0%

	Ornament Type							
	Indet.		Beads		Pendants		Rings	
Margins	No.	%	No.	%	No.	%	No.	%
None/Natural	0	.0%	0	.0%	2	14.3%	0	.0%
Pecked	0	.0%	0	.0%	0	.0%	1	1.8%
Ground	3	60.0%	5	13.2%	2	14.3%	41	73.2%
Polished	2	40.0%	33	86.8%	6	42.9%	11	19.6%
Ground & Polished	0	.0%	0	.0%	1	7.1%	2	3.6%
Drilled	0	.0%	0	.0%	3	21.4%	1	1.8%
Total	5	100.0%	38	100.0%	14	100.0%	56	100.0%

Table 4.49 The frequency of manufacturing techniques per ornament type (excluding indet. cases).

Body	No.	%
None/Natural	31	83.8
Ground	4	10.8
Drilled	2	5.4
Total	37	100.0

Margins	No.	%
None/Natural	1	2.7
Pecked	24	64.9
Ground	2	5.4
Flaked	7	18.9
Pecked & Ground	3	8.1
Total	37	100.0

Table 4.50 The frequency of manufacturing techniques for body and margins for weights (excluding indet. cases).

Geological Category	Edge Tools		Debitage	
	No.	%	No.	%
Sedimentary	19	1.1%	16	14.4%
Metamorphic	836	49.8%	47	42.3%
Igneous	824	49.1%	44	39.6%
Quartz	0	.0%	4	3.6%
Total	1679	100.0%	111	100.0%

Raw Material	Edge Tools		Debitage	
	No.	%	No.	%
Dolomite	1	.1%	0	.0%
Limestone	0	.0%	1	.9%
Flint	1	.1%	0	.0%
Mudstone (Brown Coloured)	0	.0%	1	.9%
Mudstone (Red Coloured)	0	.0%	3	2.7%
Well Cemented Sandstone	17	1.0%	11	9.9%
Serpentinite	686	40.9%	35	31.5%
Schist	41	2.4%	3	2.7%
Gneiss	1	.1%	3	2.7%
Marble	7	.4%	1	.9%
Slate	1	.1%	0	.0%
Granulite	1	.1%	0	.0%
Indet. Metamorphic	99	5.9%	5	4.5%
Granite	1	.1%	0	.0%
Gabbro	59	3.5%	6	5.4%
Granodiorite	1	.1%	0	.0%
Diorite	71	4.2%	0	.0%
Dolerite	215	12.8%	6	5.4%
Basalt	115	6.8%	11	9.9%
Andesite	79	4.7%	5	4.5%
Andesite-Basalt	56	3.3%	1	.9%
Lydite	1	.1%	0	.0%
Indet. Igneous	226	13.5%	15	13.5%
Quartz	0	.0%	4	3.6%
Total	1679	100.0%	111	100.0%

Table 4.51 The frequency of rock categories in edge tools and debitage (excluding indet. cases).

Mean	Nodules (N=14)	Edge Tools (N= 147)	Axes (N=10)	Adzes (N=108)	Chisels (N=27)
Max. Length	5.364	4.533	4.630	4.676	3.848
St Deviation	1.7323	1.8596	1.6289	1.9310	1.4527
Max. Breadth	3.786	2.580	3.040	2.818	1.341
St Deviation	1.5276	1.1313	.9778	1.0291	.4610
Max. Depth	2.229	1.261	1.480	1.319	.911
St Deviation	.9965	.6071	.5922	.6162	.4058
Weight	73.93	43.84	49.50	49.63	14.81
St. Deviation	56.473	58.769	47.108	63.800	14.626

Mann-Whitney Test

Ranks

	Object Category	No.	Mean Rank	Sum of Ranks
Weight	Edge Tools	147	78.37	11520.00
	Debitage	14	108.64	1521.00
	Total	161		

Test Statistics(a)

	Weight
Mann-Whitney U	642.000
Wilcoxon W	11520.000
Z	-2.330
Exact Sig. (2-tailed)	.019

a Grouping Variable: Object Category

Table 4.52 The mean length, breadth, depth and weight of nodules and edge tools (excluding indet. edge tool category, when the specific tool types are considered) and the result of the Mann-Whitney test comparing the mean weight of nodules and edge tools.

Mean	Nodules (N=3)	Edge Tools (N= 76)	Axes (N=4)	Adzes (N=53)	Chisels (N=18)
Max. Length	6.433	3.951	3.525	4.060	3.761
St Deviation	1.6503	1.4873	.7588	1.6725	1.4026
Max. Breadth	4.600	2.192	2.425	2.492	1.233
St Deviation	1.1533	1.0083	.7805	.9819	.3896
Max. Depth	2.367	1.041	1.050	1.106	.850
St Deviation	.5508	.5182	.4435	.5440	.4396
Weight	81.67	28.42	23.75	34.00	13.50
St. Deviation	38.188	44.036	19.311	50.882	15.105

Table 4.53 The mean length, breadth, depth and weight of complete serpentinite edge tools and nodules (only complete edge tools included).

Raw Material	Ornaments		Debitage	
	No.	%	No.	%
Mudstone (Red Coloured)	2	1.8%	3	3.0%
Mudstone (Brown Coloured)	0	.0%	1	1.0%
Well Cemented Sandstone	1	.9%	11	11.1%
Limestone	0	.0%	1	1.0%
Serpentinite	21	18.8%	26	26.3%
Schist	0	.0%	3	3.0%
Gneiss	0	.0%	3	3.0%
Marble	81	72.3%	1	1.0%
Indet. Metamorphic	3	2.7%	5	5.1%
Gabbro	0	.0%	6	6.1%
Dolerite	0	.0%	5	5.1%
Basalt	0	.0%	10	10.1%
Andesite	0	.0%	5	5.1%
Andesite-Basalt	0	.0%	1	1.0%
Indet. Igneous	1	.9%	14	14.1%
Quartz	3	2.7%	4	4.0%
Total	112	100.0%	99	100.0%

Table 4.54 The frequency of rock categories in ornaments and debitage (excluding indet. cases).

Raw Material	Pestles		Nodules/Cores	
	No.	%	No.	%
Mudstone (Red Coloured)	0	.0%	3	3.0%
Mudstone (Brown Coloured)	0	.0%	1	1.0%
Well Cemented Sandstone	1	1.2%	11	11.1%
Limestone	0	.0%	1	1.0%
Serpentinite	2	2.4%	26	26.3%
Schist	0	.0%	3	3.0%
Gneiss	0	.0%	3	3.0%
Marble	0	.0%	1	1.0%
Indet. Metamorphic	0	.0%	5	5.1%
Gabbro	4	4.8%	6	6.1%
Dolerite	33	39.8%	5	5.1%
Diorite	5	6.0%	0	.0%
Basalt	6	7.2%	10	10.1%
Andesite	3	3.6%	5	5.1%
Andesite-Basalt	5	6.0%	1	1.0%
Indet. Igneous	24	28.9%	14	14.1%
Quartz	0	.0%	4	4.0%
Total	83	100.0%	99	100.0%

Table 4.55 The frequency of rock categories for pestles (pestle/hammers included) and debitage (excluding indet. cases).

	Pestles			Nodules/Cores		
	No.	Mean	Std. Deviation	No.	Mean	Std. Deviation
Weight	14	197.14	68.968	5	229.00	320.437
Max. Length	17	6.900	3.8986	5	7.080	3.4709
Max. Breadth	40	4.638	.7870	20	4.630	2.5171
Max. Depth	40	3.983	.6539	24	3.400	1.7141

Table 4.56 The mean weight, length, breadth and depth of pestles (including pestle/hammers) and nodules/cores with complete dimensions.

Object Category		Max. Length	Max. Breadth	Max. Depth	Weight
Pestles	N	20	52	55	15
	Minimum	4.5	2.7	2.3	100
	Maximum	8.7	6.5	6.0	370
	Mean	6.210	4.627	4.055	208.00
	Std. Deviation	1.1634	.8020	.7200	78.440
Nodules/Cores	N	3	16	17	3
	Minimum	3.6	2.4	.8	40
	Maximum	5.8	8.4	6.1	100
	Mean	4.433	4.513	3.276	70.00
	Std. Deviation	1.1930	1.6685	1.4281	30.000

Table 4.57 The mean length, breadth, depth and weight of pestles and nodules/cores made of igneous rocks (only complete dimensions are compared; from length measurements outlier AG 4562 (pestle/hammer) was excluded).

Object Category		Max. Length	Max. Breadth	Max. Depth	Weight
Pestles	N	79	79	77	79
	Minimum	1.8	2.6	2.3	30
	Maximum	9.0	6.5	5.8	370
	Mean	5.403	4.449	3.951	153.61
	Std. Deviation	1.5047	.8784	.6849	78.552
Nodules/Cores	N	41	41	41	40
	Minimum	1.8	1.3	.8	10
	Maximum	11.0	8.4	6.2	450
	Mean	5.493	4.537	3.212	124.50
	Std. Deviation	2.4053	1.6188	1.4831	104.359

Table 4.58 The mean length, breadth, depth and weight of pestles and nodules/cores made of igneous rocks (both complete and incomplete cases are considered, excluding outliers).

Raw Material		Grinding Slabs		Nodules/Cores	
		No.	%	No.	%
SEDIMENTARY	Fine Sandstone	247	10.3%	0	.0%
	Medium Sandstone	24	1.0%	0	.0%
	Coarse Sandstone	13	.5%	0	.0%
	Well Cemented Sandstone	1399	58.3%	11	11.1%
	Mudstone (Brown Coloured)	0	.0%	1	1.0%
	Mudstone (Red Coloured)	0	.0%	3	3.0%
	Limestone	35	1.5%	1	1.0%
	Indet Sedimentary	14	.6%	0	.0%
	Total	1732	72.1%	16	16.2%
METAMORPHIC	Serpentinite	3	.1%	26	26.3%
	Schist	162	6.7%	3	3.0%
	Gneiss	369	15.4%	3	3.0%
	Marble	10	.4%	1	1.0%
	Indet. Metamorphic	52	2.2%	5	5.1%
	Total	596	24.8%	38	38.4%
IGNEOUS	Granite	2	.1%	0	.0%
	Gabbro	10	.4%	6	6.1%
	Pyroxenite	13	.5%	0	.0%
	Diorite	1	.0%	0	.0%
	Granodiorite	1	.0%	0	.0%
	Dolerite	19	.8%	5	5.1%
	Basalt	7	.3%	10	10.1%
	Andesite	1	.0%	5	5.1%
	Andesite-Basalt	0	.0%	1	1.0%
	Indet. Igneous	19	.8%	14	14.1%
	Total	73	3.0%	41	41.4%
	Quartz	0	.0%	4	4.0%
	Total	2401	100.0%	99	100.0%

Table 4.59 The frequency of rock categories in grinding slabs and debitage (excluding indeterminate cases).

	Length				
	No.	Minimum	Maximum	Mean	Std. Deviation
Grinding Slabs	11	15.3	32.0	24.718	5.2402
Debitage	8	3.3	12.5	6.550	2.9418

	Breadth				
	No.	Minimum	Maximum	Mean	Std. Deviation
Grinding Slabs	135	5.7	23.5	12.128	3.6817
Debitage	25	1.1	11.3	4.720	2.4642

	Depth				
	No.	Minimum	Maximum	Mean	Std. Deviation
Grinding Slabs	1116	.7	11.7	4.664	1.5310
Debitage	29	.8	7.0	3.248	1.6498

Table 4.60 The mean length, breadth, depth of grinding slabs and nodules/cores (only complete dimensions are compared).

Raw Material	Mace-Heads		Nodules/Cores	
	No.	%	No.	%
Mudstone (Brown Coloured)	0	.0%	1	1.0%
Mudstone (Red Coloured)	0	.0%	3	3.0%
Well Cemented Sandstone	2	6.1%	11	11.1%
Limestone	0	.0%	1	1.0%
Serpentinite	2	6.1%	26	26.3%
Schist	2	6.1%	3	3.0%
Gneiss	0	.0%	3	3.0%
Marble	0	.0%	1	1.0%
Indet. Metamorphic	0	.0%	5	5.1%
Granite	1	3.0%	0	.0%
Gabbro	0	.0%	6	6.1%
Diorite	1	3.0%	0	.0%
Granodiorite	1	3.0%	0	.0%
Dolerite	1	3.0%	5	5.1%
Basalt	0	.0%	10	10.1%
Andesite	1	3.0%	5	5.1%
Andesite-Basalt	0	.0%	1	1.0%
Indet. Igneous	1	3.0%	14	14.1%
Quartz	0	.0%	4	4.0%
Fossilised Shell	1	3.0%	0	.0%
'Talc'	20	60.6%	0	.0%
Total	33	100.0%	99	100.0%

Table 4.61 The frequency of rock categories in mace-heads and nodules/cores (excluding indeterminate cases).

	Breadth				
	No.	Minimum	Maximum	Mean	Std. Deviation
Mace-heads	4	6.0	6.5	6.200	.2160
Debitage	18	1.1	11.3	4.917	2.5757

	Depth				
	N	Minimum	Maximum	Mean	Std. Deviation
Mace-heads	8	2.6	5.0	3.338	.7210
Debitage	51	.6	7.5	3.053	1.7451

Table 4.62 The mean breadth of mace-heads and nodules/cores (for mace-heads only complete cases included) and the mean depth of mace-heads and nodules/cores (both complete and incomplete cases included).

Shape Of Use-Face		Tool Category			Total
		Edge-Axe	Edge-Adze	Edge-Chisel	
Irregular	Count	0	13	3	16
	% Tool Cat.	.0%	3.4%	3.7%	3.1%
Straight	Count	21	115	35	171
	% Tool Cat.	39.6%	30.3%	43.2%	33.3%
Convex	Count	22	142	12	176
	% Tool Cat.	41.5%	37.4%	14.8%	34.2%
Lopsided	Count	10	110	31	151
	% Tool Cat.	18.9%	28.9%	38.3%	29.4%
Total	Count	53	380	81	514
	% Tool Cat.	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	20.966(a)	6	.002(b)
N of Valid Cases	514		

a 2 cells (16.7%) have expected count less than 5. The minimum expected count is 1.65.
b Based on 10000 sampled tables with starting seed 508741944.

Table 5.1 Cross tabulation of shape of use–face and edge tool type for edge tools and the result of the chi-square test (excluding indet. cases and reused tools, and indet. edge tools).

Degree of Wear	No.	%
Light	35	4.2
Moderate	199	23.8
Heavy	424	50.7
Worn Out	178	21.3
Total	836	100.0

Table 5.2 Edge tools: Degree of wear (only cases with damaged or complete use face (bit) are included).

Bit damage	No.	%
Undamaged	418	23.9
Damaged	452	25.8
Crushed/Destroyed	881	50.3
Total	1751	100.0

Table 5.3 The preservation state of the use-face for edge tools (excluding reused tools and indet. cases).

Degree of Wear		Tool Category			Total
		Edge-Axe	Edge-Adze	Edge-Chisel	
Light	Count	3	16	14	33
	% within Tool Cat	3.3%	2.6%	13.6%	4.0%
Moderate	Count	12	137	30	179
	% within Tool Cat	13.0%	22.0%	29.1%	21.9%
Heavy	Count	43	292	43	378
	% within Tool Cat	46.7%	46.9%	41.7%	46.3%
Worn Out	Count	34	177	16	227
	% within Tool Cat	37.0%	28.5%	15.5%	27.8%
Total	Count	92	622	103	817
	% within Tool Cat	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	41.447(a)	6	.000(b)
N of Valid Cases	817		

a 2 cells (16.7%) have expected count less than 5. The minimum expected count is 3.72.
b Based on 10000 sampled tables with starting seed 2000000.

Table 5.4 Crosstabulation of degree of wear and tool type for edge tools and the result of the chi- square test (excluding reused tools and indet. cases).

Bit Damage		Tool Category				Total
		Edge-Indet.	Edge-Axe	Edge-Adze	Edge-Chisel	
Undamaged	Count	18	33	291	76	418
	% within Tool Cat	2.1%	34.0%	42.8%	71.7%	23.9%
Damaged	Count	90	56	284	22	452
	% within Tool Cat	10.4%	57.7%	41.8%	20.8%	25.8%
Crushed/Destroyed	Count	760	8	105	8	881
	% within Tool Cat	87.6%	8.2%	15.4%	7.5%	50.3%
Total	Count	868	97	680	106	1751
	% within Tool Cat	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5.5 Crosstabulation of bit damage and tool type for edge tools (excluding reused tools and indet. cases).

Site	No.	Length Cm	Mean Length	Width Cm	Mean Width	Thickness	M. Th.	Reference
Thessalian celts		63% 4-8 13% >8			4.0-4.5	41% <=1.5		Moundrea-Agrafioti 1981: 199-201
Servia	72		>7.5cm					Mould, *et al.* 2000: 129-136
Sitagroi	52	Large: 14% 9-15 cm Medium: 65% 5-8 Small: 21% >4cm						Elster 2003: 179, Table 5.3
Kitsos	8	88%= 2.8-3.8 22%=6.6						Perlès 1981: 198
Franchthi	59	2.0-9.6 (67% =2.0-4.6) (29%= 5.3-7.6) (5% =8.4-9.6)	4.54 (σ= 1.95)	0.8-4.9 (59%= 2.2-4.0)	3.01 (σ= 1.15)	0.4-3.7 (64%= 0.4-1.5)	1.67 (σ= 0.85)	Stroulia 2003: 16
Makriyalos	337	1.8-14.4 54% <=4.6 36%<4.0 57% 4-8 7%>=8	4.916cm (σ = 1.88)	0.6 to 6.9cm	3.48cm (σ = 1.12)	0.3 to 5.2	2.05cm (σ = 0.88)	

Table 5.6 The dimensions of Aegean edge tools (compared to the Makriyalos assemblage). Only complete dimensions/tools are examined.

Degree of Wear		Length						Total
		<1.9	2-4	4-6	6-8	8-10	>10	
Light	Count	0	10	8	0	2	0	20
	% within Length	.0%	8.4%	6.6%	.0%	10.5%	.0%	6.1%
Moderate	Count	0	44	30	9	1	1	85
	% within Length	.0%	37.0%	24.8%	13.8%	5.3%	33.3%	25.9%
Heavy	Count	1	59	64	35	11	2	172
	% within Length	100.0%	49.6%	52.9%	53.8%	57.9%	66.7%	52.4%
Worn Out	Count	0	6	19	21	5	0	51
	% within Length	.0%	5.0%	15.7%	32.3%	26.3%	.0%	15.5%
Total	Count	1	119	121	65	19	3	328
	% within Length	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5.7 Crosstabulation of degree of wear and length group for edge tools (excluding cases with incomplete length and indet. wear).

Degree of Wear		Degree of Polishing				Total
		Not Applic	Not Well Polished	Well Polished	Highly Polished	
Light	Count	1	4	13	17	35
	% Within Degree of Polishing	4.3%	2.4%	3.8%	4.7%	3.9%
Moderate	Count	4	25	84	74	187
	% Within Degree of Polishing	17.4%	14.9%	24.9%	20.6%	21.0%
Heavy	Count	7	76	147	170	400
	% Within Degree of Polishing	30.4%	45.2%	43.5%	47.2%	45.0%
Worn Out	Count	11	63	94	99	267
	% Within Degree of Polishing	47.8%	37.5%	27.8%	27.5%	30.0%
Total	Count	23	168	338	360	889
	% Within Degree of Polishing	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5.8 Crosstabulation of degree of wear and degree of polishing for edge tools (excluding reused tools and indet. cases).

	Geological Category	No.	Mean	Std. Deviation	Std. Error Mean
Max. Length	Metamorphic	144	4.537	1.6089	.1341
	Igneous	66	6.200	2.0358	.2506

Mann-Whitney Test

	Geological Category	No.	Mean Rank	Sum of Ranks
Max. Length	Metamorphic	144	88.45	12737.50
	Igneous	66	142.69	9417.50

Test Statistics(a)

	Max. Length
Mann-Whitney U	2297.500
Wilcoxon W	12737.500
Z	-6.006
Exact Sig. (2-tailed)	.000

a Grouping Variable: Raw Material

Table 5.9 The mean length of metamorphic and igneous adzes and the results of the Mann-Whitney Test.

Degree of Wear		Geological Category			Total
		Sedimentary	Metamorphic	Igneous	
Light	Count	0	12	3	15
	% within Geo Cat	.0%	3.7%	1.3%	2.7%
Moderate	Count	2	91	35	128
	% within Geo Cat	18.2%	27.9%	15.6%	22.8%
Heavy	Count	4	153	107	264
	% within Geo Cat	36.4%	46.9%	47.6%	47.0%
Worn Out	Count	5	70	80	155
	% within Geo Cat	45.5%	21.5%	35.6%	27.6%
Total	Count	11	326	225	562
	% within Geo Cat	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	23.232(a)	6	.002(b)
N of Valid Cases	562		

a 3 cells (25.0%) have expected count less than 5. The minimum expected count is .29.
b Based on 10000 sampled tables with starting seed 1993510611.

Table 5.10 The relation of degree of wear and geological categories and the result of the chi-square test for adzes (excluding reused tools and indet. cases).

Bit Damage		Geological Category			Total
		Sedimentary	Metamorphic	Igneous	
Undamaged	Count	6	156	95	257
	% within Geo Cat	50.0%	46.3%	37.5%	42.7%
Damaged	Count	3	146	109	258
	% within Geo Cat	25.0%	43.3%	43.1%	42.9%
Crushed/Destroyed	Count	3	35	49	87
	% within Geo Cat	25.0%	10.4%	19.4%	14.5%
Total	Count	12	337	253	602
	% within Geo Cat	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	12.662(a)	4	.013(b)
N of Valid Cases	602		

a 1 cells (11.1%) have expected count less than 5. The minimum expected count is 1.73.
b Based on 10000 sampled tables with starting seed 475497203.

Table 5.11 Crosstabulation of bit damage and geological category and the results of the chi-square for adzes (excluding reused tools and indet. cases).

Degree of Wear		Phase		Total
		MK I	MK II	
Light	Count	13	21	34
	% within Phase	2.8%	4.8%	3.8%
Moderate	Count	78	112	190
	% within Phase	16.8%	25.8%	21.2%
Heavy	Count	207	186	393
	% within Phase	44.6%	42.9%	43.8%
Worn Out	Count	166	115	281
	% within Phase	35.8%	26.5%	31.3%
Total	Count	464	434	898
	% within Phase	100.0%	100.0%	100.0%

Table 5.12 Crosstabulation of degree of wear and chronological phase for edge tools (excluding reused tools and indet. cases).

			Max. Length	Max. Width	Max. Thickness	L/W Ratio	W/Th Ratio	L/Th Ratio
Spearman's rho	Max. Length	Correlation Coefficient	1.000	.757(**)	.825(**)	.364(**)	-.353(**)	-.006
		Sig. (2-tailed)	.	.000	.000	.000	.000	.924
		N	232	232	232	232	232	232
	Max. Width	Correlation Coefficient	.757(**)	1.000	.823(**)	-.268(**)	-.014	-.337(**)
		Sig. (2-tailed)	.000	.	.000	.000	.828	.000
		N	232	232	232	232	232	232
	Max. Thickness	Correlation Coefficient	.825(**)	.823(**)	1.000	.052	-.528(**)	-.524(**)
		Sig. (2-tailed)	.000	.000	.	.432	.000	.000
		N	232	232	232	232	232	232
	L/W Ratio	Correlation Coefficient	.364(**)	-.268(**)	.052	1.000	-.567(**)	.451(**)
		Sig. (2-tailed)	.000	.000	.432	.	.000	.000
		N	232	232	232	232	232	232
	W/Th Ratio	Correlation Coefficient	-.353(**)	-.014	-.528(**)	-.567(**)	1.000	.412(**)
		Sig. (2-tailed)	.000	.828	.000	.000	.	.000
		N	232	232	232	232	232	232
	L/Th Ratio	Correlation Coefficient	-.006	-.337(**)	-.524(**)	.451(**)	.412(**)	1.000
		Sig. (2-tailed)	.924	.000	.000	.000	.000	.000
		N	232	232	232	232	232	232

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.13 Spearman's rho Correlations for the dimension of adzes

No. of Use-Faces	No.	%
None (Unused)	1	.0
One	1245	52.1
Two Adjacent	72	3.0
Two Opposed	1038	43.4
More Than Two	35	1.5
Total	2391	100.0

Table 5.14 The number of use-faces on grinding slabs (excluding indet. cases).

Upper Use-Face		Lower Use-Face				Total
		Light	Moderate	Heavy	Worn Out	
Light	Count	1	0	0	0	1
	% within Lower Use-face	50.0%	.0%	.0%	.0%	.1%
Moderate	Count	0	226	27	2	255
	% within Lower Use-face	.0%	70.7%	7.6%	0.6%	25.0%
Heavy	Count	1	35	290	9	335
	% within Lower Use-face	50.0%	10.9%	81.5%	2.6%	32.8%
Worn Out	Count	0	59	39	333	431
	% within Lower Use-face	.0%	18.4%	10.9%	96.8%	42.2%
Total	Count	2	320	356	344	1022
	% within Lower use	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5.15 Cross-tabulation of degree of wear for grinding slabs with two opposed use-faces (excluding indet. cases).

Geological Category		No. of Use-Faces: One	No. of Use-Faces: Two Or More	Total
Sedimentary	Count	232	698	930
	% within Geo Cat	24.9%	75.1%	100.0%
Metamorphic	Count	41	288	329
	% within Geo Cat	12.5%	87.5%	100.0%
Igneous	Count	17	33	50
	% within Geo Cat	34.0%	66.0%	100.0%
Total	Count	290	1019	1309
	% within Geo Cat	22.2%	77.8%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	26.192(a)	2	.000(b)
N of Valid Cases	1309		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.08.
b Based on 10000 sampled tables with starting seed 957002199.

Table 5.16 The relation of geological category and no. of use-faces of grinding slabs and the result of the chi-square test (only cases with complete thickness are considered).

Degree of Wear		Geological Cateory: Sedimentary	Metamorphic	Igneous	Total
Light	Count	9	3	0	12
	% within Geo Cat	.5%	.5%	.0%	.5%
Moderate	Count	565	122	14	701
	% within Geo Cat	33.2%	20.8%	19.4%	29.7%
Heavy	Count	546	187	22	755
	% within Geo Cat	32.1%	31.9%	30.6%	32.0%
Worn Out	Count	580	274	36	890
	% within Geo Cat	34.1%	46.8%	50.0%	37.7%
Total	Count	1700	586	72	2358
	% within Geo Cat	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	47.079[(a)]	6	.000(b)
N of Valid Cases	2358		

a 2 cells (16.7%) have expected count less than 5. The minimum expected count is .37.
b Based on 10000 sampled tables with starting seed 2000000.

Table 5.17 The relation of degree of wear and geological category of grinding slabs and the result of the chi-square test (excluding reused and indet. cases).

Mod. of Use-Face		Geological Category			Total
		Sedimentary	Metamorphic	Igneous	
No Modification	Count	1398	348	45	1791
	% within Geo Cat	86.4%	66.2%	73.8%	81.2%
Repecking	Count	220	178	16	414
	% within Geo Cat	13.6%	33.8%	26.2%	18.8%
Total	Count	1618	526	61	2205
	% within Geo Cat	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	108.951(a)	2	.000(b)
N of Valid Cases	2205		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.45.
b Based on 10000 sampled tables with starting seed 624387341.

Table 5.18 Crosstabulation of modification of use-face and geological category of grinding slabs and the result of the chi-square test (excluding reused and indet. cases).

Shape of Use Face		Geological Category			Total
		Sedimentary	Metamorphic	Igneous	
Irregular	Count	6	0	0	6
	% within GR_RM	.4%	.0%	.0%	.3%
Flat	Count	1356	557	66	1979
	% within GR_RM	83.5%	96.2%	94.3%	87.1%
Concave	Count	163	10	0	173
	% within GR_RM	10.0%	1.7%	.0%	7.6%
Convex	Count	2	2	0	4
	% within GR_RM	.1%	.3%	.0%	.2%
Flat & Convex	Count	7	4	2	13
	% within GR_RM	.4%	.7%	2.9%	.6%
Flat & Concave	Count	88	6	2	96
	% within GR_RM	5.4%	1.0%	2.9%	4.2%
Concave & Convex	Count	1	0	0	1
	% within GR_RM	.1%	.0%	.0%	.0%
Total	Count	1623	579	70	2272
	% within GR_RM	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	83.491(a)	12	.000(b)
N of Valid Cases	2272		

a 12 cells (57.1%) have expected count less than 5. The minimum expected count is .03.
b Based on 10000 sampled tables with starting seed 79654295.

Table 5.19 The relation of grinding slab use-face type and geological category and the result of the Chi Square test (excluding reused and indet. cases).

Degree of Wear		Phase		Total
		MK I	MK II	
Light	Count	3	10	13
	% within Phase	.2%	1.3%	.5%
Moderate	Count	438	272	710
	% within Phase	26.8%	34.3%	29.3%
Heavy	Count	499	283	782
	% within Phase	30.6%	35.7%	32.2%
Worn Out	Count	692	228	920
	% within Phase	42.4%	28.8%	37.9%
Total	Count	1632	793	2425
	% within Phase	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	52.236(a)	3	.000(b)
N of Valid Cases	2425		

a 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.25.
b Based on 10000 sampled tables with starting seed 126474071.

Table 5.20 The degree of wear per phase for grinding slabs and the results of the chi-square test (excluding indet. cases).

Modif. of Use-Face		Phase		Total
		MK I	MK II	
No Modification	Count	1196	644	1840
	% within Phase	78.4%	86.3%	81.0%
Repecking	Count	329	102	431
	% within Phase	21.6%	13.7%	19.0%
Total	Count	1525	746	2271
	% within Phase	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Exact Sig. (2-sided)
Pearson Chi-Square	20.337(b)	1	.000
N of Valid Cases	2271		

a Computed only for a 2x2 table
b 0 cells (.0%) have expected count less than 5. The minimum expected count is 141.58.

Table 5.21 The modification of use-face per phase for grinding slabs and the results of the chi-square test (excluding indet. cases).

	No.	Minimum	Maximum	Mean	Std. Deviation
Max. Length	7	19.8	32.0	26.914	4.4495
Max. Width	7	11.0	19.5	16.514	2.9729
Max. Thickness	7	3.8	9.2	6.286	1.8325
Weight	7	2600	7600	4200.00	1800.000
Valid N (listwise)	7				

a)

AG NO.	LXW	SHAPE IN PLAN	CM^2
13224	24.0x11.0	Ovate	207.24
13319	19.8x15.4	Sub-Rectangular	304.92
13460	31.0x15.3	Obovate	372.33
14446	32.0x18.7	Irregular	598.4
14531	30.0x19.0	Irregular (Almost Ovate)	223.72
14736	24.2x16.7	Ovate	317.24
18971	27.4x19.5	Ovate/Obovate	419.43
13080	26.5x16.5	Sub-Rectangular	437.25

b)

AG NO.	LXW	SHAPE IN PLAN	CM^2
13205	26.5x11.5	Subrectangular	304.75
13224	24.0x11.0	Ovate	363.00
14166	20.1x13.9	Subrectangular	279.39
14259	15.3x10.7	Subrectangular	163.71
14475	20.0x19.0	Ovate	298.30
14794	22.0x15.3	Rectangular	336.60
18415	35.3x23.5	Ovate	651.19

c)

Table 5.22 The metrical dimensions of grinding slabs a) the dimensions of complete grinding slabs, b) calculated area for grinding slabs with complete and almost complete (ΑΓ 13080) dimensions, (c) calculated area for grinding slabs with complete width and length equal/more than 15cm. For ovate/obovate cases area was calculated as π x L/2 x W/2

Degree of Wear	No.	%
Light	33	4.2%
moderate	436	55.0%
Heavy	220	27.7%
worn out	104	13.1%
Total	793	100.0%

Table 5.23 The degree of wear on grinders (excluding indet. cases and reused tools).

No.of Use-Faces	No.	%
One	327	41.8%
Two Adjacent	24	3.15%
Two Opposed	386	49.4%
More Than Two	45	5.8%
Total	782	100.0%

Table 5.24 Number of use-faces for grinders (excluding indet. cases and reused tools).

	Tool Category			
	Abrader		Polisher	
Degree of Wear	No.	%	No.	%
None	0	.0%	1	.3%
Light	0	.0%	29	9.2%
Moderate	28	62.2%	161	51.3%
Heavy	9	20.0%	81	25.8%
Worn Out	8	17.8%	42	13.4%
Total	45	100.0%	314	100.0%

Table 5.25 The degree of wear per tool category for grinders and abraders.

Degree of Wear		Geological Category					Total
		Sedimentary	Metam	Igneous	Quartz	Indet.	
Light	Count	0	4	0	8	0	12
	% within Geo Cat	.0%	8.9%	.0%	12.5%	.0%	9.9%
Moderate	Count	3	33	3	48	1	88
	% within Geo Cat	75.0%	73.3%	42.9%	75.0%	100.0%	72.7%
Heavy	Count	1	8	4	8	0	21
	% within Geo Cat	25.0%	17.8%	57.1%	12.5%	.0%	17.4%
Total	Count	4	45	7	64	1	121
	% within Geo Cat	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

a)

No. of Use Surfaces		Geological Category					Total
		Sedim	Metam	Igneous	Quartz	Indet	
One	Count	2	25	2	57	1	87
	% within Geo Cat	50.0%	55.6%	28.6%	89.1%	100.0%	71.9%
Two Adjacent	Count	1	8	1	7	0	17
	% within Geo Cat	25.0%	17.8%	14.3%	10.9%	.0%	14.0%
Two Opposed	Count	0	7	3	0	0	10
	% within Geo Cat	.0%	15.6%	42.9%	.0%	.0%	8.3%
More Than Two	Count	1	4	1	0	0	6
	% within Geo Cat	25.0%	8.9%	14.3%	.0%	.0%	5.0%
Indet.	Count	0	1	0	0	0	1
	% within Geo Cat	.0%	2.2%	.0%	.0%	.0%	.8%
Total	Count	4	45	7	64	1	121
	% within Geo Cat	100.0%	100.0%	100.0%	100.0%	100.0%	100.0 %

b)

Table 5.26 Hammers: a) the relation of degree of wear and geological category, b) the number of use-faces and geological category.

General Object Category		Phase		Total
		MK I	MK II	
Edge Tools	Count	932	812	1744
	% within Phase	19.6%	28.4%	22.9%
Percussive tools	Count	41	104	145
	% within Phase	.9%	3.6%	1.9%
Perforators	Count	22	18	40
	% within Phase	.5%	.6%	.5%
Grinding/Abrasive Tools	Count	3486	1630	5116
	% within Phase	73.5%	57.0%	67.3%
Miscellaneous	Count	69	91	160
	% within Phase	1.5%	3.2%	2.1%
Multiple-Use Tools	Count	126	151	277
	% within Phase	2.7%	5.3%	3.6%
Ornaments	Count	68	53	121
	% within Phase	1.4%	1.9%	1.6%
Total	Count	4744	2859	7603
	% within Phase	100.0%	100.0%	100.0%

Table 5.27 The distribution of object categories in MK I and MK II.

Object Category		Phase		Total
		MK I	MK II	
Edge-Indet	Count	485	397	882
	% within Phase	10.2%	13.9%	11.6%
Edge-Axe	Count	45	49	94
	% within Phase	.9%	1.7%	1.2%
Edge-Adze	Count	359	306	665
	% within Phase	7.6%	10.7%	8.7%
Edge-Chisel	Count	43	60	103
	% within Phase	.9%	2.1%	1.4%
Percussive-Indet.	Count	0	1	1
	% within Phase	.0%	.0%	.0%
Percussive-Hammer	Count	34	81	115
	% within Phase	.7%	2.8%	1.5%
Percussive-Macehead	Count	7	22	29
	% within Phase	.1%	.8%	.4%
Perforator-Indet.	Count	3	2	5
	% within Phase	.1%	.1%	.1%
Perforator-Drill Base	Count	14	16	30
	% within Phase	.3%	.6%	.4%
Perforator-Drill	Count	5	0	5
	% within Phase	.1%	.0%	.1%
Grind/Abras-Indet	Count	1081	250	1331
	% within Phase	22.8%	8.7%	17.5%
Grind/Abras-Abrader	Count	22	21	43
	% within Phase	.5%	.7%	.6%
Grind/Abras-Polisher/Smoothed Stone	Count	146	157	303
	% within Phase	3.1%	5.5%	4.0%
Grind/Abras-Grooved Abrader	Count	6	2	8
	% within Phase	.1%	.1%	.1%
Grind/Abras-Pestle	Count	30	17	47
	% within Phase	.6%	.6%	.6%
Grind/Abras-Grinder	Count	536	337	873
	% within Phase	11.3%	11.8%	11.5%
Grind/Abras-Grind. Slab	Count	1662	806	2468
	% within Phase	35.0%	28.2%	32.5%
Grind/Abras-Mortar	Count	3	40	43
	% within Phase	.1%	1.4%	.6%
Other-Indet.	Count	1	5	6
	% within Phase	.0%	.2%	.1%
Other-Weights	Count	9	26	35
	% within Phase	.2%	.9%	.5%
Other-Waste By Products	Count	4	2	6
	% within Phase	.1%	.1%	.1%

Table 5.28 The distribution of object subcategories in MK I and MK II.

Other-Retouched Tool	Count	1	4	5
	% within Phase	.0%	.1%	.1%
Other-Chipped Flaked Core	Count	0	2	2
	% within Phase	.0%	.1%	.0%
Other-Flake	Count	1	3	4
	% within Phase	.0%	.1%	.1%
Other-Unworked Nodule	Count	43	42	85
	% within Phase	.9%	1.5%	1.1%
Other- Gst Core	Count	1	1	2
	% within Phase	.0%	.0%	.0%
Other-Rocks With Natural Holes	Count	0	1	1
	% within Phase	.0%	.0%	.0%
Other-Pitted/Cupped Stone	Count	9	5	14
	% within Phase	.2%	.2%	.2%
Multiple Use Tool-Indet.	Count	3	6	9
	% within Phase	.1%	.2%	.1%
Mult.-Polisher/Hammer	Count	13	16	29
	% within Phase	.3%	.6%	.4%
Mult.-Pestle/Hammer	Count	22	7	29
	% within Phase	.5%	.2%	.4%
Mult.Drillbase/Hammer	Count	1	2	3
	% within Phase	.0%	.1%	.0%
Mult.-Grinder/Hammer	Count	85	118	203
	% within Phase	1.8%	4.1%	2.7%
Mult.Grooved Abrader/Grind. Slab	Count	1	2	3
	% within Phase	.0%	.1%	.0%
Mult.-Abrader/Hammer	Count	1	0	1
	% within Phase	.0%	.0%	.0%
Ornaments-Indet	Count	5	1	6
	% within Phase	.1%	.0%	.1%
Ornam-Beads	Count	14	24	38
	% within Phase	.3%	.8%	.5%
Ornam-Pendants	Count	10	9	19
	% within Phase	.2%	.3%	.2%
Ornam-Bracelets	Count	39	19	58
	% within Phase	.8%	.7%	.8%
Total	Count	4744	2859	7603
	% within Phase	100.0%	100.0%	100.0%

Table 5.28 (cont.) The distribution of object subcategories in MK I and MK II.

Length completeness

	No.	%
Complete	11	.4
Incomplete	2473	99.6
Total	2484	100.0

Width Completeness

	No.	%
Complete	176	7.1
Incomplete	2308	92.9
Total	2484	100.0

Thickness Completeness

	No.	%
Complete	1413	56.9
Incomplete	1071	43.1
Total	2484	100.0

Table 5.29 The completeness of the basic dimensions of grinding slabs

Geological Category		Width Completeness		Total
		Complete	Incomplete	
Sedimentary	Count	120	1612	1732
	% within Geo Cat	6.9%	93.1%	100.0%
Metamorphic	Count	36	560	596
	% within Geo Cat	6.0%	94.0%	100.0%
Igneous	Count	8	65	73
	% within Geo Cat	11.0%	89.0%	100.0%
Total	Count	164	2237	2401
	% within Geo Cat	6.8%	93.2%	100.0%

a)

Geological Category		Thick Completeness		Total
		Complete	Incomplete	
Sedimentary	Count	975	757	1732
	% within Geo Cat	56.3%	43.7%	100.0%
Metamorphic	Count	341	255	596
	% within Geo Cat	57.2%	42.8%	100.0%
Igneous	Count	51	22	73
	% within Geo Cat	69.9%	30.1%	100.0%
Total	Count	1367	1034	2401
	% within Geo Cat	56.9%	43.1%	100.0%

Chi-Square Tests

	Value	df	Exact Sig. (2-sided)
Pearson Chi-Square	5.286(a)	2	.071
N of Valid Cases	2401		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 31.44.

b)

Table 5.30 Crosstabulation of geological categories and fragmentation patterns for grinding slabs a) width completeness, b) thickness completeness.

Degree of Wear		Thick Completeness		Total
		Complete	Incomplete	
Light	Count	6	7	13
	% within Thick Completen.	.4%	.7%	.5%
Moderate	Count	385	330	715
	% within Thick Completen.	27.5%	31.6%	29.3%
Heavy	Count	458	328	786
	% within Thick Completen.	32.8%	31.4%	32.2%
Worn Out	Count	549	378	927
	% within Thick Completen.	39.3%	36.2%	38.0%
Total	Count	1398	1043	2441
	% within Thick Completen.	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Exact Sig. (2-sided)
Pearson Chi-Square	5.848(a)	3	.118
N of Valid Cases	2441		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.55.
b The standardized statistic is -2.242.

Table 5.31 Crosstabulation of degree of wear and thickness completeness and the result of the chi-square test for grinding slabs.

	No.	Minimum	Maximum	Mean	Std. Deviation
Max. Length	2484	1.6	35.3	8.418	3.6618
Max. Width	2484	1.8	24.0	7.969	3.2259
Max. Thickness	2484	.7	14.5	4.555	1.7438
Weight	2484	20	9000	501.97	636.661
Valid N (listwise)	2484				

a)

	No.	Minimum	Maximum	Mean	Std. Deviation
Max. Length	154	6.6	48.2	16.471	6.8650
Max. Width	154	5.4	34.2	14.000	4.8312
Max. Thickness	154	1.8	14.2	6.388	2.1097
Weight	154	160	15100	2395.49	2342.549
Valid N (listwise)	154				

b)

	No.	Minimum	Maximum	Mean	Std. Deviation
Max. Length	21	10.5	31.6	20.581	5.5841
Max. Width	21	9.1	24.8	16.267	3.6637
Max. Thickness	21	2.3	8.9	6.314	1.7370
Weight	21	510	7000	3107.62	1590.116
Valid N (listwise)	21				

c)

Table 5.32 The dimensions of grinding slabs from a) Makriyalos, b) Thermi and c) DETh.

Surface Condition		Completeness		Total
		Incomplete	Complete	
Burnt	Count	1138	49	1187
	% within Completeness	14.9%	5.5%	14.0%
Good	Count	6479	836	7315
	% within Completeness	85.1%	94.5%	86.0%
Total	Count	7617	885	8502
	% within Completeness	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Exact Sig. (2-sided)
Pearson Chi-Square	58.367(b)	1	.000
Continuity Correction(a)	57.587	1	
N of Valid Cases	8502		

a Computed only for a 2x2 table
b 0 cells (.0%) have expected count less than 5. The minimum expected count is 123.56.

Table 5.33 Crosstabulation of surface condition and completeness (excluding indet. cases) and the result of the chi-square test.

General Object Category		Surface Condition		Total
		Burnt	Good	
Edge Tools	Count	208	1584	1792
	% within Tool Cat	11.6%	88.4%	100.0%
Percussive Tools	Count	12	137	149
	% within Tool Cat	8.1%	91.9%	100.0%
Perforators	Count	0	42	42
	% within Tool Cat	.0%	100.0%	100.0%
Grinding/Abrasive Tools	Count	782	4266	5048
	% within Tool Cat	15.5%	84.5%	100.0%
Miscellaneous	Count	10	162	172
	% within Tool Cat	5.8%	94.2%	100.0%
Multiple-Use Tools	Count	37	253	290
	% within Tool Cat	12.8%	87.2%	100.0%
Ornaments	Count	0	124	124
	% within Tool Cat	.0%	100.0%	100.0%
Total	Count	1049	6568	7617
	% within Tool Cat	13.8%	86.2%	100.0%

Table 5.34 Crosstabulation of surface condition and general object category (excluding indet. cases).

Recovery Context	No.	Percent
Topsoil	236	4.4
Phase I Habitation	692	13.0
Phase I Ditches	1905	35.7
Phase I Borrow Pits	2373	44.5
Indeterminate	124	2.3
Total	5330	100.0

Table 6.1 The distribution of ground stone objects in MK I.

General Object Category		Recovery Context: Phase I Habitation	Phase I Ditches	Phase I Borrow Pits	Total
Edge Tools	Count	195	229	397	821
	% within Rec. Context	32.1%	13.3%	18.4%	18.3%
Percussive Tools	Count	9	18	12	39
	% within Rec. Context	1.5%	1.0%	.6%	.9%
Perforators	Count	1	14	6	21
	% within Rec. Context	.2%	.8%	.3%	.5%
Grinding/Abrasive Tools	Count	363	1356	1659	3378
	% within Rec. Context	59.7%	78.6%	76.7%	75.2%
Miscellaneous	Count	16	27	19	62
	% within Rec. Context	2.6%	1.6%	.9%	1.4%
Multiple-Use Tools	Count	18	47	46	111
	% within Rec. Context	3.0%	2.7%	2.1%	2.5%
Ornaments	Count	6	34	23	63
	% within Rec. Context	1.0%	2.0%	1.1%	1.4%
Total	Count	608	1725	2162	4495
	% within Rec. Context	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	142.513(a)	12	.000(b)
N of Valid Cases	4495		

a 1 cells (4.8%) have expected count less than 5. The minimum expected count is 2.84.
b Based on 10000 sampled tables with starting seed 2000000.

Table 6.2 The distribution of general object categories within MK I contexts (excluding indeterminate cases) and the result of the chi-square test.

Object Category		Recovery Context			Total
		Phase I Habitation	Phase I Ditches	Phase I Borrow Pits	
Edge-Indet	Count	99	130	196	425
	% within Rec. Context	16.3%	7.5%	9.1%	9.5%
Edge-Axe	Count	9	14	18	41
	% within Rec. Context	1.5%	.8%	.8%	.9%
Edge-Adze	Count	78	74	165	317
	% within Rec. Context	12.8%	4.3%	7.6%	7.1%
Edge-Chisel	Count	9	11	18	38
	% within Rec. Context	1.5%	.6%	.8%	.8%
Percussive-Hammer	Count	9	14	9	32
	% within Rec. Context	1.5%	.8%	.4%	.7%
Percussive-Mace-Head	Count	0	4	3	7
	% within Rec. Context	.0%	.2%	.1%	.2%
Perforator-Indet.	Count	0	1	2	3
	% within Rec. Context	.0%	.1%	.1%	.1%
Perforator-Drill Base	Count	0	10	3	13
	% within Rec. Context	.0%	.6%	.1%	.3%
Perforator-Drill	Count	1	3	1	5
	% within Rec. Context	.2%	.2%	.0%	.1%
Grind/Abras-Indet	Count	107	398	538	1043
	% within Rec. Context	17.6%	23.1%	24.9%	23.2%
Grind/Abras-Abrader	Count	7	7	6	20
	% within Rec. Context	1.2%	.4%	.3%	.4%
Grind/Abras-Polisher	Count	18	75	49	142
	% within Rec. Context	3.0%	4.3%	2.3%	3.2%
Grind/Abras-Grooved Abrader	Count	1	3	2	6
	% within Rec. Context	.2%	.2%	.1%	.1%
Grind/Abras-Pestle	Count	7	6	9	22
	% within Rec. Context	1.2%	.3%	.4%	.5%
Grind/Abras-Grinder	Count	45	260	219	524
	% within Rec. Context	7.4%	15.1%	10.1%	11.7%
Grind/Abras-Grinding Slab	Count	178	606	834	1618
	% within Rec. Context	29.3%	35.1%	38.6%	36.0%
Grind/Abras-Mortar	Count	0	1	2	3
	% within Rec. Context	.0%	.1%	.1%	.1%
Other-Indet.	Count	0	0	1	1
	% within Rec. Context	.0%	.0%	.0%	.0%
Other-Weights	Count	2	2	5	9
	% within Rec. Context	.3%	.1%	.2%	.2%
Other-Waste By Products	Count	2	2	0	4
	% within Rec. Context	.3%	.1%	.0%	.1%
Other-Retouched Tool	Count	0	0	1	1
	% within Rec. Context	.0%	.0%	.0%	.0%
Other-Flake	Count	0	1	0	1
	% within Rec. Context	.0%	.1%	.0%	.0%
Other-Unworked Nodule	Count	10	18	8	36
	% within Rec. Context	1.6%	1.0%	.4%	.8%
Other- GST Core	Count	0	0	1	1
	% within Rec. Context	.0%	.0%	.0%	.0%
Other-Pitted/Cupped Stone	Count	2	4	3	9
	% within Rec. Context	.3%	.2%	.1%	.2%
Multiple Use Tool-Indeterminate	Count	2	0	1	3
	% within Rec. Context	.3%	.0%	.0%	.1%
Multiple Use-Polisher/Hammer	Count	2	6	5	13
	% within Rec. Context	.3%	.3%	.2%	.3%
Multiple Use-Pestle/Hammer	Count	5	5	7	17
	% within Rec. Context	.8%	.3%	.3%	.4%
Multiple Use - Drillbase/Hammer	Count	0	0	1	1
	% within Rec. Context	.0%	.0%	.0%	.0%
Multiple Use - Grinder/Hammer	Count	7	36	32	75
	% within Rec. Context	1.2%	2.1%	1.5%	1.7%
Multiple Use Grooved Abrader/Grinding Slab	Count	1	0	0	1
	% within Rec. Context	.2%	.0%	.0%	.0%

Multiple Use - Abrader/Hammer	Count	1	0	0	1
	% within Rec. Context	.2%	.0%	.0%	.0%
Ornaments-Indet	Count	0	2	2	4
	% within Rec. Context	.0%	.1%	.1%	.1%
Ornaments-Beads	Count	2	6	6	14
	% within Rec. Context	.3%	.3%	.3%	.3%
Ornaments-Pendants	Count	1	4	4	9
	% within Rec. Context	.2%	.2%	.2%	.2%
Ornaments-Rings	Count	3	22	11	36
	% within Rec. Context	.5%	1.3%	.5%	.8%
Total	Count	608	1725	2162	4495
	% within Rec. Context	100.0%	100.0%	100.0%	100.0%

Table 6.3 The distribution of object sub-categories within MK I contexts (excluding indet. cases).

Raw Material		Recovery Context: Phase I Habitation	Phase I Ditches	Phase I Borrow Pits	Total
Well cemented sandstone	Count	4	2	2	8
	% within Recovery Context	2.3%	1.0%	.6%	1.1%
Serpentinite	Count	65	73	133	271
	% within Recovery Context	38.0%	35.6%	37.5%	37.1%
Schist	Count	8	9	8	25
	% within Recovery Context	4.7%	4.4%	2.3%	3.4%
Marble	Count	0	1	0	1
	% within Recovery Context	.0%	.5%	.0%	.1%
Slate	Count	0	1	0	1
	% within Recovery Context	.0%	.5%	.0%	.1%
Granulite	Count	0	1	0	1
	% within Recovery Context	.0%	.5%	.0%	.1%
Indet. Metamorphic	Count	14	14	18	46
	% within Recovery Context	8.2%	6.8%	5.1%	6.3%
Gabbro	Count	9	4	7	20
	% within Recovery Context	5.3%	2.0%	2.0%	2.7%
Dolerite	Count	16	22	53	91
	% within Recovery Context	9.4%	10.7%	14.9%	12.4%
Diorite	Count	6	7	12	25
	% within Recovery Context	3.5%	3.4%	3.4%	3.4%
Basalt	Count	11	25	43	79
	% within Recovery Context	6.4%	12.2%	12.1%	10.8%
Andesite	Count	10	11	14	35
	% within Recovery Context	5.8%	5.4%	3.9%	4.8%
Andesite-Basalt	Count	3	10	14	27
	% within Recovery Context	1.8%	4.9%	3.9%	3.7%
Lydite	Count	0	0	1	1
	% within Recovery Context	.0%	.0%	.3%	.1%
Indet. Igneous	Count	25	25	50	100
	% within Recovery Context	14.6%	12.2%	14.1%	13.7%
Total	Count	171	205	355	731
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	33.832(a)	28	.177(b)
N of Valid Cases	731		

a 16 cells (35.6%) have expected count less than 5. The minimum expected count is .23.
b Based on 10000 sampled tables with starting seed 2000000.

Table 6.4 The distribution of raw materials for edge tools per MK I recovery context (excluding indet. cases) and the result of the chi-square test.

Raw Material		Recovery Context			Total
		Phase I Habitation	Phase I Ditches	Phase I Borrow Pits	
Fine Sandstone	Count	20	60	44	124
	% within Recovery Context	11.5%	10.3%	5.4%	7.9%
Medium Sandstone	Count	2	6	2	10
	% within Recovery Context	1.1%	1.0%	.2%	.6%
Coarse Sandstone	Count	1	0	6	7
	% within Recovery Context	.6%	.0%	.7%	.4%
Well Cemented Sandstone	Count	112	350	580	1042
	% within Recovery Context	64.4%	60.0%	71.8%	66.6%
Limestone	Count	1	9	9	19
	% within Recovery Context	.6%	1.5%	1.1%	1.2%
Indet Sedimentary	Count	0	1	5	6
	% within Recovery Context	.0%	.2%	.6%	.4%
Serpentinite	Count	1	1	1	3
	% within Recovery Context	.6%	.2%	.1%	.2%
Schist	Count	12	46	57	115
	% within Recovery Context	6.9%	7.9%	7.1%	7.3%
Gneiss	Count	12	77	67	156
	% within Recovery Context	6.9%	13.2%	8.3%	10.0%
Marble	Count	1	3	0	4
	% within Recovery Context	.6%	.5%	.0%	.3%
Indet. Metamorphic	Count	6	15	10	31
	% within Recovery Context	3.4%	2.6%	1.2%	2.0%
Gabbro	Count	3	1	3	7
	% within Recovery Context	1.7%	.2%	.4%	.4%
Dolerite	Count	0	3	9	12
	% within Recovery Context	.0%	.5%	1.1%	.8%
Basalt	Count	0	2	2	4
	% within Recovery Context	.0%	.3%	.2%	.3%
Pyroxenite	Count	1	5	6	12
	% within Recovery Context	.6%	.9%	.7%	.8%
Indet. Igneous	Count	2	4	7	13
	% within Recovery Context	1.1%	.7%	.9%	.8%
Total	Count	174	583	808	1565
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	65.438(a)	30	.001(b)
N of Valid Cases	1565		

a 28 cells (58.3%) have expected count less than 5. The minimum expected count is .33.
b Based on 10000 sampled tables with starting seed 1993510611.

Table 6.5 The distribution of raw materials for grinding slabs per recovery context (MK I) (excluding indet. cases) and the result of the chi-square test.

Raw Material		Recovery Context			Total
		Phase I Habitation	Phase I Ditches	Phase I Borrow Pits	
Fine Sandstone	Count	0	2	0	2
	% within Recovery Context	.0%	.8%	.0%	.4%
Well Cemented Sandstone	Count	2	9	4	15
	% within Recovery Context	4.4%	3.5%	1.8%	2.9%
Limestone	Count	0	0	1	1
	% within Recovery Context	.0%	.0%	.5%	.2%
Indet Sedimentary	Count	1	0	0	1
	% within Recovery Context	2.2%	.0%	.0%	.2%
Serpentinite	Count	1	0	0	1
	% within Recovery Context	2.2%	.0%	.0%	.2%
Gneiss	Count	0	1	0	1
	% within Recovery Context	.0%	.4%	.0%	.2%
Marble	Count	26	233	185	444
	% within Recovery Context	57.8%	89.6%	84.9%	84.9%
Dolerite	Count	2	0	1	3
	% within Recovery Context	4.4%	.0%	.5%	.6%
Diorite	Count	0	0	1	1
	% within Recovery Context	.0%	.0%	.5%	.2%
Basalt	Count	0	0	1	1
	% within Recovery Context	.0%	.0%	.5%	.2%
Indet. Igneous	Count	2	0	2	4
	% within Recovery Context	4.4%	.0%	.9%	.8%
Quartz	Count	11	15	23	49
	% within Recovery Context	24.4%	5.8%	10.6%	9.4%
Total	Count	45	260	218	523
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	72.731(a)	22	.000(b)
N of Valid Cases	523		

a 29 cells (80.6%) have expected count less than 5. The minimum expected count is .09.
b Based on 10000 sampled tables with starting seed 1487459085.

Table 6.6 The distribution of raw materials for grinders per recovery context (MK I) and the result of the chi-square test.

Surface Condition		Recovery Context			Total
		Phase I Habitation	Phase I Ditches	Phase I Borrow Pits	
Burnt	Count	25	33	57	115
	% within Recovery Context	13.4%	14.9%	15.0%	14.6%
Good	Count	158	186	315	659
	% within Recovery Context	84.9%	83.8%	83.1%	83.7%
Altered	Count	3	3	7	13
	% within Recovery Context	1.6%	1.4%	1.8%	1.7%
Total	Count	186	222	379	787
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%

Table 6.7 The surface condition of edge tools per recovery context (MK I) (excluding indet. cases).

Degree of Wear		Recovery Context			Total
		Phase I Habitation	Phase I Ditches	Phase I Borrow Pits	
Light	Count	5	1	6	12
	% within Recovery Context	4.4%	.9%	2.7%	2.7%
Moderate	Count	26	18	34	78
	% within Recovery Context	23.0%	15.7%	15.2%	17.3%
Heavy	Count	34	50	95	179
	% within Recovery Context	30.1%	43.5%	42.4%	39.6%
Worn Out	Count	48	46	89	183
	% within Recovery Context	42.5%	40.0%	39.7%	40.5%
Total	Count	113	115	224	452
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	9.227(a)	6	.157(b)
N of Valid Cases	452		

a 2 cells (16.7%) have expected count less than 5. The minimum expected count is 3.00.
b Based on 10000 sampled tables with starting seed 624387341.

Table 6.8 The degree of wear of edge tools per recovery context (MK I) (excluding indet. cases) and the result of the chi-square test.

Surface Condition		Recovery Context			Total
		Phase I Habitation	Phase I Ditches	Phase I Borrow Pits	
Burnt	Count	45	127	125	297
	% within Recovery Context	26.0%	21.5%	15.4%	18.9%
Good	Count	128	463	687	1278
	% within Recovery Context	74.0%	78.5%	84.6%	81.1%
Total	Count	173	590	812	1575
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	14.897(a)	2	.000(b)
N of Valid Cases	1575		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 32.62.
b Based on 10000 sampled tables with starting seed 113410539.

Table 6.9 The surface condition of grinding slabs among MK I recovery contexts and the result of the chi-square test.

Surface Condition		Recovery Context			Total
		Phase I Habitation	Phase I Ditches	Phase I Borrow Pits	
Burnt	Count	10	80	34	124
	% within Recovery Context	22.7%	31.6%	16.3%	24.5%
Good	Count	34	173	175	382
	% within Recovery Context	77.3%	68.4%	83.7%	75.5%
Total	Count	44	253	209	506
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	14.664(a)	2	.001(b)
N of Valid Cases	506		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.78.
b Based on 10000 sampled tables with starting seed 403768731.

Table 6.10 The surface condition of grinders per recovery context (MK I) and the result of the chi-square test.

General Object Category		Habitation Context				Total
		Pit Cluster KΛ	Pit Cluster Λ	Pit Cluster O	Pit 258	
Edge Tools	Count	42	21	26	9	98
	% within Hab. Context	38.2%	35.0%	32.9%	21.4%	33.7%
Percussive Tools	Count	1	0	0	0	1
	% within Hab. Context	.9%	.0%	.0%	.0%	.3%
Grinding/ Abrasive Tools	Count	58	35	49	32	174
	% within Hab. Context	52.7%	58.3%	62.0%	76.2%	59.8%
Miscellaneous	Count	2	1	1	1	5
	% within Hab. Context	1.8%	1.7%	1.3%	2.4%	1.7%
Multiple-Use Tools	Count	6	1	2	0	9
	% within Hab. Context	5.5%	1.7%	2.5%	.0%	3.1%
Ornaments	Count	1	2	1	0	4
	% within Hab. Context	.9%	3.3%	1.3%	.0%	1.4%
Total	Count	110	60	79	42	291
	% within Hab. Context	100.0%	100.0%	100.0%	100.0%	100.0%

Table 6.11 The distribution of ground stone categories among pit clusters and pit 258 (MK I) (excluding indeterminate cases).

Object Category		Habitation Context				Total
		Pit Cluster KΛ	Pit Cluster Λ	Pit Cluster O	Pit 258	
Edge-Indet	Count	21	8	13	2	44
	% within Hab. Context	19.1%	13.3%	16.5%	4.8%	15.1%
Edge-Axe	Count	2	2	0	0	4
	% within Hab. Context	1.8%	3.3%	.0%	.0%	1.4%
Edge-Adze	Count	17	9	12	7	45
	% within Hab. Context	15.5%	15.0%	15.2%	16.7%	15.5%
Edge-Chisel	Count	2	2	1	0	5
	% within Hab. Context	1.8%	3.3%	1.3%	.0%	1.7%
Percussive-Hammer	Count	1	0	0	0	1
	% within Hab. Context	.9%	.0%	.0%	.0%	.3%
Grind/Abras-Indet	Count	10	14	17	9	50
	% within Hab. Context	9.1%	23.3%	21.5%	21.4%	17.2%
Grind/Abras-Abrader	Count	2	0	0	0	2
	% within Hab. Context	1.8%	.0%	.0%	.0%	.7%
Grind/Abras-Polisher	Count	1	0	1	0	2
	% within Hab. Context	.9%	.0%	1.3%	.0%	.7%
Grind/Abras-Grooved Abrader	Count	1	0	0	0	1
	% within Hab. Context	.9%	.0%	.0%	.0%	.3%
Grind/Abras-Pestle	Count	0	1	3	0	4
	% within Hab. Context	.0%	1.7%	3.8%	.0%	1.4%
Grind/Abras-Grinder	Count	6	1	4	1	12
	% within Hab. Context	5.5%	1.7%	5.1%	2.4%	4.1%
Grind/Abras-Grinding Slab	Count	38	19	24	22	103
	% within Hab. Context	34.5%	31.7%	30.4%	52.4%	35.4%
Other-Waste By Products	Count	0	1	0	0	1
	% within Hab. Context	.0%	1.7%	.0%	.0%	.3%
Other-Unworked Nodule	Count	2	0	1	1	4
	% within Hab. Context	1.8%	.0%	1.3%	2.4%	1.4%
Multiple Use Tool-Indet.	Count	2	0	0	0	2
	% within Hab. Context	1.8%	.0%	.0%	.0%	.7%
Mult.-Pestle/Hammer	Count	0	1	1	0	2
	% within Hab. Context	.0%	1.7%	1.3%	.0%	.7%
Mult.-Grinder/Hammer	Count	3	0	1	0	4
	% within Hab. Context	2.7%	.0%	1.3%	.0%	1.4%
Mult.-Abrader/Hammer	Count	1	0	0	0	1
	% within Hab. Context	.9%	.0%	.0%	.0%	.3%
Ornam-Beads	Count	1	0	0	0	1
	% within Hab. Context	.9%	.0%	.0%	.0%	.3%
Ornam-Pendants	Count	0	1	0	0	1
	% within Hab. Context	.0%	1.7%	.0%	.0%	.3%
Ornam-Bracelets	Count	0	1	1	0	2
	% within Hab. Context	.0%	1.7%	1.3%	.0%	.7%
Total	Count	110	60	79	42	291
	% within Hab. Context	100.0%	100.0%	100.0%	100.0%	100.0%

Table 6.12 The distribution of ground stone sub-categories among pit clusters and single pits (MK I) (excluding indet. cases).

	Habitation Context							
	Pit Cluster KΛ		Pit Cluster Λ		Pit Cluster O		Pit 258	
	Surface Condition		Surface Condition		Surface Condition		Surface Condition	
	Count	%	Count	%	Count	%	Count	%
Burnt	24	20.7%	8	12.7%	12	14.1%	5	11.4%
Good	92	79.3%	55	87.3%	73	85.9%	39	88.6%
Total	116	100.0%	63	100.0%	85	100.0%	44	100.0%

Table 6.13 The surface condition of ground stone among pit clusters and single pits (MK I) (excluding indet. cases).

(A)

		Habitation Context				
Grinding Slabs		Pit Cluster KΛ	Pit Cluster Λ	Pit Cluster O	Pit 258	Total
No Modification	Count	29	17	19	19	84
	% within Hab. Context	85.3%	100.0%	82.6%	90.5%	88.4%
Repecking	Count	5	0	4	2	11
	% within Hab. Context	14.7%	.0%	17.4%	9.5%	11.6%
Total	Count	34	17	23	21	95
	% within Hab. Context	100.0%	100.0%	100.0%	100.0%	100.0%

(B)

		Habitation Context				
Edge Tools		Pit Cluster KΛ	Pit Cluster Λ	Pit Cluster O	Pit 258	Total
No Modification	Count	2	4	5	1	12
	% within Hab. Context	8.3%	22.2%	26.3%	14.3%	17.6%
Modification	Count	22	14	14	6	56
	% within Hab. Context	91.7%	77.8%	73.7%	85.7%	82.4%
Total	Count	24	18	19	7	68
	% within Hab. Context	100.0%	100.0%	100.0%	100.0%	100.0%

Table 6.14 Frequency of maintenance techniques among pit clusters and single pits (MK I) A) grinding slabs, B) edge tools (excluding indet. cases).

Geological Category		Habitation Context				Total
		Pit Cluster KL	Pit Cluster L	Pit Cluster O	Pit 258	
Sedimentary	Count	41	33	35	25	134
	% within Hab. Context	35.3%	54.1%	42.2%	56.8%	44.1%
Metamorphic	Count	35	19	22	10	86
	% within Hab. Context	30.2%	31.1%	26.5%	22.7%	28.3%
Igneous	Count	32	8	24	9	73
	% within Hab. Context	27.6%	13.1%	28.9%	20.5%	24.0%
Quartz	Count	8	1	1	0	10
	% within Hab. Context	6.9%	1.6%	1.2%	.0%	3.3%
Fossilised material	Count	0	0	1	0	1
	% within Hab. Context	.0%	.0%	1.2%	.0%	.3%
Total	Count	116	61	83	44	304
	% within Hab. Context	100.0%	100.0%	100.0%	100.0%	100.0%

Table 6.15 The distribution of geological categories among pit clusters and single pits (MK I) (all tool categories and excluding indeterminate rock types).

General Object Category		Ditch		Total
		Ditch A	Ditch Γ	
Edge Tools	Count	152	61	213
	% within Ditch	18.1%	7.6%	13.0%
Percussive tools	Count	9	8	17
	% within Ditch	1.1%	1.0%	1.0%
Perforators	Count	8	6	14
	% within Ditch	1.0%	.8%	.9%
Grinding/Abrasive Tools	Count	613	677	1290
	% within Ditch	73.2%	84.7%	78.8%
Miscellaneous	Count	14	11	25
	% within Ditch	1.7%	1.4%	1.5%
Multiple-Use Tools	Count	28	17	45
	% within Ditch	3.3%	2.1%	2.7%
Ornaments	Count	14	19	33
	% within Ditch	1.7%	2.4%	2.0%
Total	Count	838	799	1637
	% within Ditch	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	45.301(a)	6	.000(b)
N of Valid Cases	1637		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.83.
b Based on 10000 sampled tables with starting seed 1993510611.

Table 6.16 The distribution of ground stone categories among Ditch A and Ditch Γ (MK I) (excl. indeterminate cases) and the result of the chi-square test.

Object Category		Ditch		Total
		Ditch A	Ditch Γ	
Edge-Indet	Count	89	39	128
	% within Ditch	10.6%	4.9%	7.8%
Edge-Axe	Count	7	4	11
	% within Ditch	.8%	.5%	.7%
Edge-Adze	Count	49	14	63
	% within Ditch	5.8%	1.8%	3.8%
Edge-Chisel	Count	7	4	11
	% within Ditch	.8%	.5%	.7%
Percussive-Hammer	Count	6	7	13
	% within Ditch	.7%	.9%	.8%
Percussive-Macehead	Count	3	1	4
	% within Ditch	.4%	.1%	.2%
Perforator-Indet.	Count	1	0	1
	% within Ditch	.1%	.0%	.1%
Perforator-Drill Base	Count	5	5	10
	% within Ditch	.6%	.6%	.6%
Perforator-Drill	Count	2	1	3
	% within Ditch	.2%	.1%	.2%
Grind/Abras-Indet	Count	153	208	361
	% within Ditch	18.3%	26.0%	22.1%
Grind/Abras-Abrader	Count	3	4	7
	% within Ditch	.4%	.5%	.4%
Grind/Abras-Polisher	Count	37	36	73
	% within Ditch	4.4%	4.5%	4.5%
Grind/Abras-Grooved Abrader	Count	1	2	3
	% within Ditch	.1%	.3%	.2%
Grind/Abras-Pestle	Count	4	2	6
	% within Ditch	.5%	.3%	.4%
Grind/Abras-Grinder	Count	126	129	255
	% within Ditch	15.0%	16.1%	15.6%
Grind/Abras-Grinding Slab	Count	289	295	584
	% within Ditch	34.5%	36.9%	35.7%
Grind/Abras-Mortar	Count	0	1	1
	% within Ditch	.0%	.1%	.1%
Other-Weights	Count	1	1	2
	% within Ditch	.1%	.1%	.1%
Other-Waste By Products	Count	1	0	1
	% within Ditch	.1%	.0%	.1%
Other-Unworked Nodule	Count	8	10	18
	% within Ditch	1.0%	1.3%	1.1%
Other-Pitted/Cupped Stone	Count	4	0	4
	% within Ditch	.5%	.0%	.2%
Mult.-Polisher/Hammer	Count	2	4	6
	% within Ditch	.2%	.5%	.4%
Mult.-Pestle/Hammer	Count	3	1	4
	% within Ditch	.4%	.1%	.2%
Mult.-Grinder/Hammer	Count	23	12	35
	% within Ditch	2.7%	1.5%	2.1%
Ornaments-Indet	Count	2	0	2
	% within Ditch	.2%	.0%	.1%
Ornam-Beads	Count	3	3	6
	% within Ditch	.4%	.4%	.4%
Ornam-Pendants	Count	2	1	3
	% within Ditch	.2%	.1%	.2%
Ornam-Bracelets	Count	7	15	22
	% within Ditch	.8%	1.9%	1.3%
Total	Count	838	799	1637
	% within Ditch	100.0%	100.0%	100.0%

Table 6.17 The distribution of object sub-categories among Ditch A and Ditch Γ (MK I) (excl. indeterminate cases).

	Ditch			
	Ditch A		Ditch Γ	
	Raw Material		Raw Material	
	Count	%	Count	%
Serpentinite	49	36.0%	19	34.5%
Schist	4	2.9%	4	7.3%
Marble	0	.0%	1	1.8%
Slate	1	.7%	0	.0%
Granulite	1	.7%	0	.0%
Indet. Metamorphic	9	6.6%	4	7.3%
Gabbro	3	2.2%	0	.0%
Dolerite	12	8.8%	7	12.7%
Diorite	6	4.4%	1	1.8%
Basalt	19	14.0%	6	10.9%
Andesite	3	2.2%	8	14.5%
Andesite-Basalt	8	5.9%	2	3.6%
Indet. Igneous	19	14.0%	3	5.5%
Well Cemented Sandstone	2	1.5%	0	.0%
Total	136	100.0%	55	100.0%

Table 6.18 The distribution of rock types among edge tools from Ditch A and Γ (excluding indet. cases).

Geological Category		Ditch		Total
		Ditch A	Ditch Γ	
Sedimentary	Count	221	194	415
	% within Ditch	79.8%	67.8%	73.7%
Metamorphic	Count	48	87	135
	% within Ditch	17.3%	30.4%	24.0%
Igneous	Count	8	5	13
	% within Ditch	2.9%	1.7%	2.3%
Total	Count	277	286	563
	% within Ditch	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	13.575(a)	2	.001(b)
N of Valid Cases	563		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.40.
b Based on 10000 sampled tables with starting seed 1507486128.

Table 6.19 The distribution of geological categories for lower grinding tools among Ditch A & Ditch Γ (excluding indet. cases) and the result of the chi-square test.

General Object Category		Sector K	Sector Λ	Sector Ξ	Total
Edge Tools	Count	47	38	37	122
	% within Sector	21.9%	21.3%	12.1%	17.5%
Percussive Tools	Count	3	4	2	9
	% within Sector	1.4%	2.2%	.7%	1.3%
Perforators	Count	2	1	1	4
	% within Sector	.9%	.6%	.3%	.6%
Grinding/Abrasive Tools	Count	142	126	252	520
	% within Sector	66.0%	70.8%	82.4%	74.4%
Miscellaneous	Count	7	1	3	11
	% within Sector	3.3%	.6%	1.0%	1.6%
Multiple-Use Tools	Count	9	3	7	19
	% within Sector	4.2%	1.7%	2.3%	2.7%
Ornaments	Count	5	5	4	14
	% within Sector	2.3%	2.8%	1.3%	2.0%
Total	Count	215	178	306	699
	% within Sector	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	26.711(a)	12	.006(b)
N of Valid Cases	699		

a 12 cells (57.1%) have expected count less than 5. The minimum expected count is 1.02.
b Based on 10000 sampled tables with starting seed 2000000.

Table 6.20 The distribution of general object categories among the different sectors of Ditch A (excluding indet. cases) and the result of the chi-square test.

Object Category		Sector			Total
		K	Λ	Ξ	
Edge-Indet	Count	30	22	20	72
	% within Sector	14.0%	12.4%	6.5%	10.3%
Edge-Axe	Count	2	3	0	5
	% within Sector	.9%	1.7%	.0%	.7%
Edge-Adze	Count	14	11	14	39
	% within Sector	6.5%	6.2%	4.6%	5.6%
Edge-Chisel	Count	1	2	3	6
	% within Sector	.5%	1.1%	1.0%	.9%
Percussive-Hammer	Count	1	3	2	6
	% within Sector	.5%	1.7%	.7%	.9%
Percussive-Macehead	Count	2	1	0	3
	% within Sector	.9%	.6%	.0%	.4%
Perforator-Indet.	Count	1	0	0	1
	% within Sector	.5%	.0%	.0%	.1%
Perforator-Drill Base	Count	0	1	1	2
	% within Sector	.0%	.6%	.3%	.3%
Perforator-Drill	Count	1	0	0	1
	% within Sector	.5%	.0%	.0%	.1%
Grind/Abras-Indet	Count	42	24	61	127
	% within Sector	19.5%	13.5%	19.9%	18.2%
Grind/Abras-Abrader	Count	0	2	0	2
	% within Sector	.0%	1.1%	.0%	.3%
Grind/Abras-Polisher	Count	12	9	12	33
	% within Sector	5.6%	5.1%	3.9%	4.7%
Grind/Abras-Grooved Abrader	Count	0	0	1	1
	% within Sector	.0%	.0%	.3%	.1%
Grind/Abras-Pestle	Count	2	1	0	3
	% within Sector	.9%	.6%	.0%	.4%
Grind/Abras-Grinder	Count	37	26	37	100
	% within Sector	17.2%	14.6%	12.1%	14.3%
Grind/Abras-Grinding Slab	Count	49	64	141	254
	% within Sector	22.8%	36.0%	46.1%	36.3%
Other-Weights	Count	1	0	0	1
	% within Sector	.5%	.0%	.0%	.1%
Other-Waste By Products	Count	0	0	1	1
	% within Sector	.0%	.0%	.3%	.1%
Other-Unworked Nodule	Count	5	0	1	6
	% within Sector	2.3%	.0%	.3%	.9%
Other-Pitted/Cupped Stone	Count	1	1	1	3
	% within Sector	.5%	.6%	.3%	.4%

Mult.-Polisher/Hammer	Count	1	0	1	2
	% within Sector	.5%	.0%	.3%	.3%
Mult.-Pestle/Hammer	Count	1	0	2	3
	% within Sector	.5%	.0%	.7%	.4%
Mult.-Grinder/Hammer	Count	7	3	4	14
	% within Sector	3.3%	1.7%	1.3%	2.0%
Ornaments-Indet	Count	1	0	1	2
	% within Sector	.5%	.0%	.3%	.3%
Ornam-Beads	Count	1	2	0	3
	% within Sector	.5%	1.1%	.0%	.4%
Ornam-Pendants	Count	0	1	1	2
	% within Sector	.0%	.6%	.3%	.3%
Ornam-Bracelets	Count	3	2	2	7
	% within Sector	1.4%	1.1%	.7%	1.0%
Total	Count	215	178	306	699
	% within Sector	100.0%	100.0%	100.0%	100.0%

Table 6.21 The distribution of object sub-categories among the different sectors of Ditch A (excluding indet. cases).

Surface Condition		**Sector**			Total
		K	Λ	Ξ	
Burnt	Count	33	43	42	118
	% within Sector	14.3%	23.0%	12.8%	15.8%
Good	Count	198	144	284	626
	% within Sector	85.7%	77.0%	86.9%	84.0%
Altered	Count	0	0	1	1
	% within Sector	.0%	.0%	.3%	.1%
Total	Count	231	187	327	745
	% within Sector	100.0%	100.0%	100.0%	100.0%

Table 6.22 The surface condition of all objects among the sectors of Ditch A (excluding indet. cases).

Geological Category		Sector K	Sector Λ	Sector Ξ	Total
Sedimentary	Count	0	1	0	1
	% within Sector	.0%	2.8%	.0%	.9%
Metamorphic	Count	21	14	24	59
	% within Sector	48.8%	38.9%	72.7%	52.7%
Igneous	Count	22	21	9	52
	% within Sector	51.2%	58.3%	27.3%	46.4%
Total	Count	43	36	33	112
	% within Sector	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	9.964(a)	4	.020(b)
N of Valid Cases	112		

a 3 cells (33.3%) have expected count less than 5. The minimum expected count is .29.
b Based on 10000 sampled tables with starting seed 92208573.

Table 6.23 The distribution of raw materials for edge tools among the different sectors of Ditch A (excluding indet. cases) and the result of the chi-square test.

Surface Condition		Sector K	Sector Λ	Sector Ξ	Total
Burnt	Count	9	1	7	17
	% within Sector	19.1%	2.7%	20.6%	14.4%
Good	Count	38	36	26	100
	% within Sector	80.9%	97.3%	76.5%	84.7%
Altered	Count	0	0	1	1
	% within Sector	.0%	.0%	2.9%	.8%
Total	Count	47	37	34	118
	% within Sector	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	8.671(a)	4	.033(b)
N of Valid Cases	118		

a 4 cells (44.4%) have expected count less than 5. The minimum expected count is .29.
b Based on 10000 sampled tables with starting seed 2000000.

Table 6.24 The surface condition of edge tools among the different sectors of Ditch A (excluding indet. cases) and the result of the chi-square test.

Geological Category		Sector K	Sector Λ	Sector Ξ	Total
Sedimentary	Count	30	55	110	195
	% within Sector	62.5%	91.7%	80.9%	79.9%
Metamorphic	Count	15	3	24	42
	% within Sector	31.3%	5.0%	17.6%	17.2%
Igneous	Count	3	2	2	7
	% within Sector	6.3%	3.3%	1.5%	2.9%
Total	Count	48	60	136	244
	% within Sector	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	16.468(a)	4	.002(b)
N of Valid Cases	244		

a 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.38.
b Based on 10000 sampled tables with starting seed 475497203.

Table 6.25 The distribution of raw materials for grinding slabs among the different sectors of Ditch A (excluding indet. cases) and the result of the chi-square test.

Surface Condition		Sector K	Sector Λ	Sector Ξ	Total
Burnt	Count	7	19	9	35
	% within Sector	14.6%	31.1%	6.7%	14.3%
Good	Count	41	42	126	209
	% within Sector	85.4%	68.9%	93.3%	85.7%
Total	Count	48	61	135	244
	% within Sector	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	20.497(a)	2	.000(b)
N of Valid Cases	244		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.89.
b Based on 10000 sampled tables with starting seed 1487459085.

Table 6.26 The surface condition of grinding slabs among the different sectors of Ditch A (excluding indet. cases) and the result of the chi-square test.

General Object Category		Borrow Pit		Total
		212	214	
Edge Tools	Count	244	124	368
	% within Borrow Pit	20.1%	15.5%	18.3%
Percussive Tools	Count	6	4	10
	% within Borrow Pit	.5%	.5%	.5%
Perforators	Count	3	3	6
	% within Borrow Pit	.2%	.4%	.3%
Grinding/Abrasive Tools	Count	918	630	1548
	% within Borrow Pit	75.6%	78.8%	76.9%
Miscellaneous	Count	7	7	14
	% within Borrow Pit	.6%	.9%	.7%
Multiple-Use Tools	Count	19	26	45
	% within Borrow Pit	1.6%	3.3%	2.2%
Ornaments	Count	17	5	22
	% within Borrow Pit	1.4%	.6%	1.1%
Total	Count	1214	799	2013
	% within Borrow Pit	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	15.864(a)	6	.013(b)
N of Valid Cases	2013		

a 3 cells (21.4%) have expected count less than 5. The minimum expected count is 2.38.
b Based on 10000 sampled tables with starting seed 2000000.

Table 6.27 The distribution of general object categories among borrow pits 212 and 214 (excluding indet. cases) and the result of the chi-square test.

Object Category		Borrow Pit		Total
		212	214	
Edge-Indet	Count	111	67	178
	% within Borrow Pit	9.1%	8.4%	8.8%
Edge-Axe	Count	6	11	17
	% within Borrow Pit	.5%	1.4%	.8%
Edge-Adze	Count	114	45	159
	% within Borrow Pit	9.4%	5.6%	7.9%
Edge-Chisel	Count	13	1	14
	% within Borrow Pit	1.1%	.1%	.7%
Percussive-Hammer	Count	3	4	7
	% within Borrow Pit	.2%	.5%	.3%
Percussive-Macehead	Count	3	0	3
	% within Borrow Pit	.2%	.0%	.1%
Perforator-Indet.	Count	1	1	2
	% within Borrow Pit	.1%	.1%	.1%
Perforator-Drill Base	Count	2	1	3
	% within Borrow Pit	.2%	.1%	.1%
Perforator-Drill	Count	0	1	1
	% within Borrow Pit	.0%	.1%	.0%
Grind/Abras-Indet	Count	316	171	487
	% within Borrow Pit	26.0%	21.4%	24.2%
Grind/Abras-Abrader	Count	2	3	5
	% within Borrow Pit	.2%	.4%	.2%
Grind/Abras-Polisher/Smoothed Stone	Count	21	22	43
	% within Borrow Pit	1.7%	2.8%	2.1%
Grind/Abras-Grooved Abrader	Count	1	1	2
	% within Borrow Pit	.1%	.1%	.1%
Grind/Abras-Pestle	Count	4	5	9
	% within Borrow Pit	.3%	.6%	.4%
Grind/Abras-Grinder	Count	83	118	201
	% within Borrow Pit	6.8%	14.8%	10.0%
Grind/Abras-Grinding Slab	Count	489	310	799
	% within Borrow Pit	40.3%	38.8%	39.7%
Grind/Abras-Mortar	Count	2	0	2
	% within Borrow Pit	.2%	.0%	.1%
Other-Indet.	Count	1	0	1
	% within Borrow Pit	.1%	.0%	.0%
Other-Weights	Count	2	3	5
	% within Borrow Pit	.2%	.4%	.2%
Other-Retouched Tool	Count	1	0	1
	% within Borrow Pit	.1%	.0%	.0%
Other-Unworked Nodule	Count	2	2	4
	% within Borrow Pit	.2%	.3%	.2%
Other-Pitted/Cupped Stone	Count	1	2	3
	% within Borrow Pit	.1%	.3%	.1%
Multiple Use Tool-Indet.	Count	1	0	1
	% within Borrow Pit	.1%	.0%	.0%
Mult.-Polisher/Hammer	Count	0	5	5
	% within Borrow Pit	.0%	.6%	.2%
Mult.-Pestle/Hammer	Count	5	2	7
	% within Borrow Pit	.4%	.3%	.3%
Mult.Drillbase/Hammer	Count	0	1	1
	% within Borrow Pit	.0%	.1%	.0%
Mult.-Grinder/Hammer	Count	13	18	31
	% within Borrow Pit	1.1%	2.3%	1.5%
Ornaments-Indet	Count	2	0	2
	% within Borrow Pit	.2%	.0%	.1%
Ornam-Beads	Count	4	2	6
	% within Borrow Pit	.3%	.3%	.3%
Ornam-Pendants	Count	3	1	4
	% within Borrow Pit	.2%	.1%	.2%
Ornam-Bracelets	Count	8	2	10
	% within Borrow Pit	.7%	.3%	.5%
Total	Count	1214	799	2013
	% within Borrow Pit	100.0%	100.0%	100.0%

Table 6.28 The distribution of object categories among borrow pits 212 and 214 (excluding indet. cases).

Bit Damage		Borrow Pit		Total
		212	214	
Undamaged	Count	74	21	95
	% within Borrow Pit	30.7%	17.4%	26.2%
Damaged	Count	50	29	79
	% within Borrow Pit	20.7%	24.0%	21.8%
Crushed/Destroyed	Count	117	71	188
	% within Borrow Pit	48.5%	58.7%	51.9%
Total	Count	241	121	362
	% within Borrow Pit	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	7.445(a)	2	.025(b)
N of Valid Cases	362		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.41.
b Based on 10000 sampled tables with starting seed 79654295.

Table 6.29 The condition of edge tool bits among borrow pits 212 and 214 (excluding indet. cases) and the result of the chi-square test.

Degree of Wear		Borrow Pit		Total
		212	214	
Light	Count	4	1	5
	% within Borrow Pit	2.7%	1.6%	2.4%
Moderate	Count	30	3	33
	% within Borrow Pit	20.3%	4.8%	15.6%
Heavy	Count	60	26	86
	% within Borrow Pit	40.5%	41.3%	40.8%
Worn Out	Count	54	33	87
	% within Borrow Pit	36.5%	52.4%	41.2%
Total	Count	148	63	211
	% within Borrow Pit	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	9.741(a)	3	.018(b)
N of Valid Cases	211		

a 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.49.
b Based on 10000 sampled tables with starting seed 126474071.

Table 6.30 Degree of wear for edge tools among borrow pits 212 and 214 (excluding indet. cases) and the result of the chi-square test.

Modification		Borrow Pit		Total
		212	214	
No Modification	Count	26	34	60
	% within Borrow Pit	19.8%	49.3%	30.0%
Modification	Count	105	35	140
	% within Borrow Pit	80.2%	50.7%	70.0%
Total	Count	131	69	200
	% within Borrow Pit	100.0%	100.0%	100.0%

Chi-Square Tests(c)

	Value	df	Exact Sig. (2-sided)
Pearson Chi-Square	18.638(b)	1	.000
Continuity Correction(a)	17.263	1	
N of Valid Cases	200		

a Computed only for a 2x2 table
b 0 cells (.0%) have expected count less than 5. The minimum expected count is 20.70.
c For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

Table 6.31 Frequency of edge tools that have been modified among borrow pits 212 and 214 and the result of the chi-square test.

Borrow Pit		Max. Length	Max. Width	Max. Thickness	Weight
212	N	489	489	489	489
	Minimum	2.4	2.4	1.0	25
	Maximum	35.3	23.5	10.9	9000
	Mean	8.015	8.186	4.482	449.88
	Std. Deviation	3.2259	3.0237	1.7342	514.093
214	N	310	310	310	310
	Minimum	2.1	2.2	1.2	40
	Maximum	19.3	18.8	9.4	2800
	Mean	7.794	7.341	4.252	376.05
	Std. Deviation	2.7873	2.7881	1.5769	324.806

Mann-Whitney Test

Ranks

	Borrow Pit	N	Mean Rank	Sum of Ranks
weight	212	489	420.09	205423.00
	214	310	368.31	114177.00
	Total	799		

Test Statistics(b)

		weight
Mann-Whitney U		65972.000
Wilcoxon W		114177.000
Z		-3.091
Monte Carlo Sig. (2-tailed)	Sig.	.002(a)

a Based on 10000 sampled tables with starting seed 303130861.
b Grouping Variable: Borrow Pit

Table 6.32 The dimensions of grinding slabs from Borrow Pits 212 and 214 and the result of the Mann-Whitney test conducted for weight.

General Object Category		Recovery Context				Total
		Phase II H Borrow Pits	Phase II Habitation	Phase II watercourse	Phase II ditch	
Edge Tools	Count	247	368	82	12	709
	% within Recovery Context	26.8%	27.2%	40.6%	17.1%	27.8%
Percussive Tools	Count	37	43	14	2	96
	% within Recovery Context	4.0%	3.2%	6.9%	2.9%	3.8%
Perforators	Count	4	10	0	0	14
	% within Recovery Context	.4%	.7%	.0%	.0%	.5%
Grinding/ Abrasive Tools	Count	543	787	82	46	1458
	% within Recovery Context	59.0%	58.1%	40.6%	65.7%	57.2%
Miscellaneous	Count	25	48	7	4	84
	% within Recovery Context	2.7%	3.5%	3.5%	5.7%	3.3%
Multiple-Use Tools	Count	46	78	8	6	138
	% within Recovery Context	5.0%	5.8%	4.0%	8.6%	5.4%
Ornaments	Count	19	20	9	0	48
	% within Recovery Context	2.1%	1.5%	4.5%	.0%	1.9%
Total	Count	921	1354	202	70	2547
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	50.963(a)	18	.001(b)
N of Valid Cases	2547		

a 7 cells (25.0%) have expected count less than 5. The minimum expected count is .38.
b Based on 10000 sampled tables with starting seed 957002199.

Table 6.33 The distribution of general object categories among the MK II recovery contexts (excluding indet. cases) and the result of the chi-square test.

Object Category		Recovery Context				Total
		Phase II Borrow Pits	Phase II Habitation	Phase II watercourse	Phase II ditch	
Edge-Indet	Count	140	166	39	5	350
	% within Recovery Context	15.2%	12.3%	19.3%	7.1%	13.7%
Edge-Axe	Count	11	28	4	0	43
	% within Recovery Context	1.2%	2.1%	2.0%	.0%	1.7%
Edge-Adze	Count	78	151	31	7	267
	% within Recovery Context	8.5%	11.2%	15.3%	10.0%	10.5%
Edge-Chisel	Count	18	23	8	0	49
	% within Recovery Context	2.0%	1.7%	4.0%	.0%	1.9%
Percussive-Indet	Count	1	0	0	0	1
	% within Recovery Context	.1%	.0%	.0%	.0%	.0%
Percussive-Hammer	Count	29	37	8	2	76
	% within Recovery Context	3.1%	2.7%	4.0%	2.9%	3.0%
Percussive-Macehead	Count	7	6	6	0	19
	% within Recovery Context	.8%	.4%	3.0%	.0%	.7%
Perforator-Indet.	Count	1	0	0	0	1
	% within Recovery Context	.1%	.0%	.0%	.0%	.0%
Perforator-Drill Base	Count	3	10	0	0	13
	% within Recovery Context	.3%	.7%	.0%	.0%	.5%
Grind/Abras-Indet	Count	85	110	14	8	217
	% within Recovery Context	9.2%	8.1%	6.9%	11.4%	8.5%
Grind/Abras-Abrader	Count	5	9	3	0	17
	% within Recovery Context	.5%	.7%	1.5%	.0%	.7%
Grind/Abras-Polisher	Count	52	85	8	2	147
	% within Recovery Context	5.6%	6.3%	4.0%	2.9%	5.8%
Grind/Abras-Grooved Abrader	Count	0	2	0	0	2
	% within Recovery Context	.0%	.1%	.0%	.0%	.1%
Grind/Abras-Pestle	Count	1	13	0	1	15
	% within Recovery Context	.1%	1.0%	.0%	1.4%	.6%
Grind/Abras-Grinder	Count	77	204	18	5	304
	% within Recovery Context	8.4%	15.1%	8.9%	7.1%	11.9%
Grind/Abras-Grinding Slab	Count	317	338	35	30	720
	% within Recovery Context	34.4%	25.0%	17.3%	42.9%	28.3%
Grind/Abras-Mortar	Count	6	26	4	0	36
	% within Recovery Context	.7%	1.9%	2.0%	.0%	1.4%
Other-Indet.	Count	2	3	0	0	5
	% within Recovery Context	.2%	.2%	.0%	.0%	.2%
Other-Weights	Count	3	15	4	1	23
	% within Recovery Context	.3%	1.1%	2.0%	1.4%	.9%
Other-Waste By Products	Count	1	1	0	0	2
	% within Recovery Context	.1%	.1%	.0%	.0%	.1%
Other-Retouched Tool	Count	1	2	0	0	3
	% within Recovery Context	.1%	.1%	.0%	.0%	.1%
Other-Chipped Flaked Core	Count	0	1	0	1	2
	% within Recovery Context	.0%	.1%	.0%	1.4%	.1%
Other-Flake	Count	0	2	0	1	3
	% within Recovery Context	.0%	.1%	.0%	1.4%	.1%
Other-Unworked Nodule	Count	14	22	2	1	39
	% within Recovery Context	1.5%	1.6%	1.0%	1.4%	1.5%
Other- GST Core	Count	1	0	0	0	1
	% within Recovery Context	.1%	.0%	.0%	.0%	.0%
Other-Rocks With Natural Holes	Count	1	0	0	0	1
	% within Recovery Context	.1%	.0%	.0%	.0%	.0%
Other-Pitted/Cupped Stone	Count	2	2	1	0	5
	% within Recovery Context	.2%	.1%	.5%	.0%	.2%
Multiple Use Tool-Indet.	Count	3	3	0	0	6
	% within Recovery Context	.3%	.2%	.0%	.0%	.2%
Mult.-Polisher/Hammer	Count	7	5	1	2	15
	% within Recovery Context	.8%	.4%	.5%	2.9%	.6%
Mult.-Pestle/Hammer	Count	1	6	0	0	7
	% within Recovery Context	.1%	.4%	.0%	.0%	.3%

Mult.Drillbase/ Hammer	Count	2	0	0	0	2
	% within Recovery Context	.2%	.0%	.0%	.0%	.1%
Mult.- Grinder/Hammer	Count	33	62	7	4	106
	% within Recovery Context	3.6%	4.6%	3.5%	5.7%	4.2%
Mult.Grooved Abrader/Grinding Slab	Count	0	2	0	0	2
	% within Recovery Context	.0%	.1%	.0%	.0%	.1%
Ornaments-Indet	Count	0	0	1	0	1
	% within Recovery Context	.0%	.0%	.5%	.0%	.0%
Ornam-Beads	Count	9	8	5	0	22
	% within Recovery Context	1.0%	.6%	2.5%	.0%	.9%
Ornam-Pendants	Count	3	5	1	0	9
	% within Recovery Context	.3%	.4%	.5%	.0%	.4%
Ornam-Rings	Count	7	7	2	0	16
	% within Recovery Context	.8%	.5%	1.0%	.0%	.6%
Total	Count	921	1354	202	70	2547
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%	100.0%

Table 6.34 The distribution of object sub- categories among the recovery contexts of MK II (excluding indet. cases).

General Object Category		Recovery Context				Total
		Phase II Borrow Pits	Phase II Habitation	Phase II watercourse	Phase II ditch	
Edge Tools	Count	12	43	3	0	58
	% within Recovery Context	11.7%	33.1%	17.6%	.0%	22.3%
Percussive Tools	Count	3	1	1	0	5
	% within Recovery Context	2.9%	.8%	5.9%	.0%	1.9%
Grinding/ Abrasive Tools	Count	83	79	13	10	185
	% within Recovery Context	80.6%	60.8%	76.5%	100.0%	71.2%
Miscellaneous	Count	1	1	0	0	2
	% within Recovery Context	1.0%	.8%	.0%	.0%	.8%
Multiple-Use Tools	Count	4	6	0	0	10
	% within Recovery Context	3.9%	4.6%	.0%	.0%	3.8%
Total	Count	103	130	17	10	260
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%	100.0%

Table 6.35 The distribution of general object categories with evidence for burning among MK II recovery contexts.

		Recovery Context				
		Phase II Borrow Pits	Phase II Habitation	Phase II watercourse	Phase II ditch	Total
Undamaged	Count	100	254	36	14	404
	% within Recovery Context	12.9%	22.7%	24.5%	21.9%	19.2%
Damaged	Count	674	867	111	50	1702
	% within Recovery Context	87.1%	77.3%	75.5%	78.1%	80.8%
Total	Count	774	1121	147	64	2106
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

			Monte Carlo Sig. (2-sided)
	Value	df	Sig.
Pearson Chi-Square	31.286(a)	3	.000(b)
N of Valid Cases	2106		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.28.
b Based on 10000 sampled tables with starting seed 726961337.

Table 6.36 The condition of objects among the recovery contexts of MK II (excluding edge tools and indet. cases) and the result of the chi-square test.

Recovery Context		Max. Length	Max. Width	Max. Thickness	Weight
Phase II H Borrow Pits	N	247	247	247	247
	Minimum	.9	.6	.2	1
	Maximum	10.8	5.7	4.0	240
	Mean	4.241	3.070	1.860	54.06
	Std. Deviation	1.6373	1.1477	.8833	47.777
Phase II Habitation	N	368	368	368	368
	Minimum	.8	.5	.2	2
	Maximum	11.5	6.2	4.6	345
	Mean	4.894	3.249	1.868	68.30
	Std. Deviation	2.0077	1.1683	.9227	64.248
Phase II Watercourse	N	82	82	82	82
	Minimum	1.7	1.1	.4	2
	Maximum	8.2	5.2	3.5	235
	Mean	4.184	3.076	1.755	48.62
	Std. Deviation	1.5095	1.0128	.8290	42.284
Total	N	697	697	697	697
	Minimum	.8	.5	.2	1
	Maximum	11.5	6.2	4.6	345
	Mean	4.579	3.165	1.852	60.94
	Std. Deviation	1.8572	1.1457	.8977	57.051

Kruskal-Wallis Test

Ranks

	Recovery Context	N	Mean Rank
Max. Length	Phase II H Borrow Pits	247	316.03
	Phase II Habitation	368	380.01
	Phase II watercourse	82	309.16
	Total	697	

Test Statistics(b,c)

		Max. Length
Chi-Square		18.564
df		2
Monte Carlo Sig.	Sig.	.000(a)

a Based on 10000 sampled tables with starting seed 2000000.
b Kruskal Wallis Test
c Grouping Variable: Recovery Context

Table 6.37 The dimensions of edge tools among the MK II recovery contexts and the result of the Kruskal-Wallis test.

Raw Material	Recovery Context					
	Phase II Borrow Pits		Phase II Habitation		Phase II watercourse	
	Count	%	Count	%	Count	%
Dolomite	1	.4%	0	.0%	0	.0%
Well Cemented Sandstone	3	1.3%	3	.9%	0	.0%
Serpentinite	110	49.3%	164	51.3%	29	40.3%
Schist	3	1.3%	4	1.3%	1	1.4%
Marble	1	.4%	3	.9%	0	.0%
Indet. Metamorphic	8	3.6%	16	5.0%	4	5.6%
Granite	0	.0%	1	.3%	0	.0%
Gabbro	4	1.8%	18	5.6%	3	4.2%
Granodiorite	0	.0%	1	.3%	0	.0%
Diorite	6	2.7%	16	5.0%	4	5.6%
Dolerite	27	12.1%	40	12.5%	11	15.3%
Basalt	10	4.5%	8	2.5%	4	5.6%
Andesite	9	4.0%	16	5.0%	3	4.2%
Andesite-Basalt	8	3.6%	5	1.6%	4	5.6%
Indet. Igneous	33	14.8%	25	7.8%	9	12.5%
Total	223	100.0%	320	100.0%	72	100.0%

Table 6.38 The distribution of rock types of edge tools among MK II recovery contexts (excluding indet. cases).

Degree Of Polishing		Recovery Context			Total
		Phase II Borrow Pits	Phase II Habitation	Phase II Watercourse	
Not Applicable	Count	8	16	4	28
	% within Recovery Context	3.7%	4.8%	5.3%	4.4%
Not Well Polished	Count	45	47	20	112
	% within Recovery Context	20.5%	14.0%	26.7%	17.8%
Well Polished	Count	89	121	26	236
	% within Recovery Context	40.6%	36.0%	34.7%	37.5%
Highly Polished	Count	77	152	25	254
	% within Recovery Context	35.2%	45.2%	33.3%	40.3%
Total	Count	219	336	75	630
	% within Recovery Context	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	12.817(a)	6	.045(b)
N of Valid Cases	630		

a 1 cells (8.3%) have expected count less than 5. The minimum expected count is 3.33.
b Based on 10000 sampled tables with starting seed 475497203.

Table 6.39 Degree of polishing of edge tools among the MK II recovery contexts (excluding indet. cases) and the result of the chi-square test.

Recovery Context		Max. Length	Max. Width	Max. Thickness	Weight
Phase II H Borrow Pit	N	317	317	317	317
	Minimum	2.5	2.3	1.7	50
	Maximum	22.0	19.5	10.0	3600
	Mean	8.226	7.892	4.502	444.75
	Std. Deviation	2.7846	2.8439	1.5564	380.893
Phase II Habitation	N	338	338	338	338
	Minimum	2.4	2.7	1.3	20
	Maximum	32.0	21.2	14.5	7600
	Mean	10.572	9.428	4.978	839.64
	Std. Deviation	5.1191	3.7258	1.9220	959.733
Total	N	655	655	655	655
	Minimum	2.4	2.3	1.3	20
	Maximum	32.0	21.2	14.5	7600
	Mean	9.436	8.685	4.748	648.53
	Std. Deviation	4.3158	3.4133	1.7694	764.022

Mann-Whitney Test

Ranks

	Recovery Context	N	Mean Rank	Sum of Ranks
Max. Width	Phase II H Borrow Pit	317	287.31	91077.50
	Phase II Habitation	338	366.16	123762.50
	Total	655		

Test Statistics(b)

		Max. Width
Mann-Whitney U		40674.500
Wilcoxon W		91077.500
Z		-5.330
Monte Carlo Sig. (2-tailed)	Sig.	.000(a)

a Based on 10000 sampled tables with starting seed 329836257.
b Grouping Variable: Recovery Context

Table 6.40 Dimensions of lower grinding tools from MKII habitation and borrow pit H and the result of the Mann-Whitney Test.

Width Completeness		Recovery Context: Phase II Borrow Pit H	Recovery Context: Phase II Habitation	Total
Complete	Count	19	44	63
	% within Recovery Context	6.0%	13.0%	9.6%
Incomplete	Count	298	294	592
	% within Recovery Context	94.0%	87.0%	90.4%
Total	Count	317	338	655
	% within Recovery Context	100.0%	100.0%	100.0%

Chi-Square Tests(c)

	Value	df	Exact Sig. (2-sided)
Pearson Chi-Square	9.284(b)	1	.003
Continuity Correction(a)	8.494	1	
N of Valid Cases	655		

a Computed only for a 2x2 table
b 0 cells (.0%) have expected count less than 5. The minimum expected count is 30.49.
c For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

Table 6.41 The width completeness of grinding slabs among MK II habitation and Borrow Pit H and the result of the chi-square test.

Geological Category		Recovery Context: Phase II Borrow Pits	Recovery Context: Phase II Habitation	Total
Sedimentary	Count	190	194	384
	% within Recovery Context	61.3%	59.9%	60.6%
Metamorphic	Count	119	112	231
	% within Recovery Context	38.4%	34.6%	36.4%
Igneous	Count	1	18	19
	% within Recovery Context	.3%	5.6%	3.0%
Total	Count	310	324	634
	% within Recovery Context	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	15.163(a)	2	.001(b)
N of Valid Cases	634		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.29.
b Based on 10000 sampled tables with starting seed 1090229469.

Table 6.42 The distribution of rock types for lower grinding tools among MK II recovery contexts (excluding indet. cases) and the result of the chi-square test.

Degree of Wear		Recovery Context: Phase II Borrow Pits	Recovery Context: Phase II Habitation	Total
Light	Count	5	2	7
	% within Recovery Context	1.6%	.6%	1.1%
Moderate	Count	99	112	211
	% within Recovery Context	31.8%	33.6%	32.8%
Heavy	Count	100	131	231
	% within Recovery Context	32.2%	39.3%	35.9%
Worn Out	Count	107	88	195
	% within Recovery Context	34.4%	26.4%	30.3%
Total	Count	311	333	644
	% within Recovery Context	100.0%	100.0%	100.0%

Table 6.43 Degree of wear for lower grinding tools among MK II habitation and Borrow Pit H (excluding indet. cases).

General Object Category		MK II Habitation		Total
		Habitation NW AREA	Habitation E AREA	
Edge Tools	Count	187	146	333
	% within MK II HAB	25.5%	27.2%	26.2%
Percussive Tools	Count	26	14	40
	% within MK II HAB	3.6%	2.6%	3.2%
Perforators	Count	5	4	9
	% within MK II HAB	.7%	.7%	.7%
Grinding/Abrasive Tools	Count	444	300	744
	% within MK II HAB	60.7%	55.9%	58.6%
Miscellaneous	Count	23	25	48
	% within MK II HAB	3.1%	4.7%	3.8%
Multiple-Use Tools	Count	32	44	76
	% within MK II HAB	4.4%	8.2%	6.0%
Ornaments	Count	15	4	19
	% within MK II HAB	2.0%	.7%	1.5%
Total	Count	732	537	1269
	% within MK II HAB	100.0%	100.0%	100.0%

Table 6.44 The distribution of ground stone general categories between the NW and E area of MK II habitation.

	MK II Habitation			
	Habitation NW AREA		Habitation E AREA	
	Raw Material		Raw Material	
	Count	%	Count	%
Well Cemented Sandstone	2	3.4%	0	.0%
Serpentinite	29	50.0%	35	61.4%
Marble	1	1.7%	1	1.8%
Indet. Metamorphic	2	3.4%	4	7.0%
Granite	1	1.7%	0	.0%
Gabbro	1	1.7%	3	5.3%
Dolerite	7	12.1%	3	5.3%
Diorite	3	5.2%	1	1.8%
Basalt	3	5.2%	1	1.8%
Andesite	1	1.7%	5	8.8%
Andesite-Basalt	2	3.4%	0	.0%
Indet. Igneous	6	10.3%	4	7.0%
Total	58	100.0%	57	100.0%

Table 6.45 Distribution of rocks types for edge tools among NW and E area of MK II habitation (excluding indet. cases).

Degree Of Polishing		Mk II Habitation		
		Habitation NW AREA	Habitation E AREA	Total
Not Applicable	Count	12	4	16
	% within HABITATION	7.1%	2.9%	5.2%
Not Well Polished	Count	20	21	41
	% within HABITATION	11.9%	15.3%	13.4%
Well Polished	Count	68	39	107
	% within HABITATION	40.5%	28.5%	35.1%
Highly Polished	Count	68	73	141
	% within HABITATION	40.5%	53.3%	46.2%
Total	Count	168	137	305
	% within HABITATION	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	9.004(a)	3	.028(b)
N of Valid Cases	305		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.19.
b Based on 10000 sampled tables with starting seed 2000000.

Table 6.46 Degree of polishing for edge tools among NW and E area of habitation MK II (excluding indet. cases) and the result of the chi-square test.

Modification of Use-face		MK II Habitation		
		Habitation NW AREA	Habitation E AREA	Total
No Modification	Count	185	80	265
	% within MK II Hab	91.6%	74.8%	85.8%
Repecking	Count	17	27	44
	% within MK II Hab	8.4%	25.2%	14.2%
Total	Count	202	107	309
	% within MK II Hab	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Exact Sig. (2-sided)
Pearson Chi-Square	16.201(b)	1	.000
Continuity Correction(a)	14.853	1	
N of Valid Cases	309		

a Computed only for a 2x2 table
b 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.24.

Table 6.47 Degree of modification of the use-face of lower grinding tools among NW and E area of habitation MK II (excluding indet. cases) and the result of the chi-square test.

General Object Category		Recovery Context: Phase I Borrow Pits	Recovery Context: Phase II Borrow Pits	Total
Edge Tools	Count	397	291	688
	% within Recovery Context	18.4%	27.0%	21.2%
Percussive Tools	Count	12	41	53
	% within Recovery Context	.6%	3.8%	1.6%
Perforators	Count	6	8	14
	% within Recovery Context	.3%	.7%	.4%
Grinding/Abrasive Tools	Count	1659	634	2293
	% within Recovery Context	76.7%	58.9%	70.8%
Miscellaneous	Count	19	28	47
	% within Recovery Context	.9%	2.6%	1.5%
Multiple-Use Tools	Count	46	52	98
	% within Recovery Context	2.1%	4.8%	3.0%
Ornaments	Count	23	23	46
	% within Recovery Context	1.1%	2.1%	1.4%
Total	Count	2162	1077	3239
	% within Recovery Context	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	145.655(a)	6	.000(b)
N of Valid Cases	3239		

a 1 cells (7.1%) have expected count less than 5. The minimum expected count is 4.66.
b Based on 10000 sampled tables with starting seed 957002199.

Table 6.48 Distribution of object categories between borrow pits from MK I and II (excluding indet. cases) and the result of the chi-square test.

Surface Condition		Recovery Context: Phase I Pit 212	Recovery Context: Phase II H Borrow Pits	Total
Burnt	Count	35	12	47
	% within Recovery Context	15.2%	5.0%	10.0%
Good	Count	192	219	411
	% within Recovery Context	83.5%	90.5%	87.1%
Altered	Count	3	11	14
	% within Recovery Context	1.3%	4.5%	3.0%
Total	Count	230	242	472
	% within Recovery Context	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Monte Carlo Sig. (2-sided) Sig.
Pearson Chi-Square	17.307(a)	2	.000(b)
N of Valid Cases	472		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.82.
b Based on 10000 sampled tables with starting seed 475497203.

Table 6.49 The surface condition of edge tools among borrow pit 212 (MK I) and H borrow pits (MK II) and the result of the chi-square test (excluding indet. cases).

FIGURES

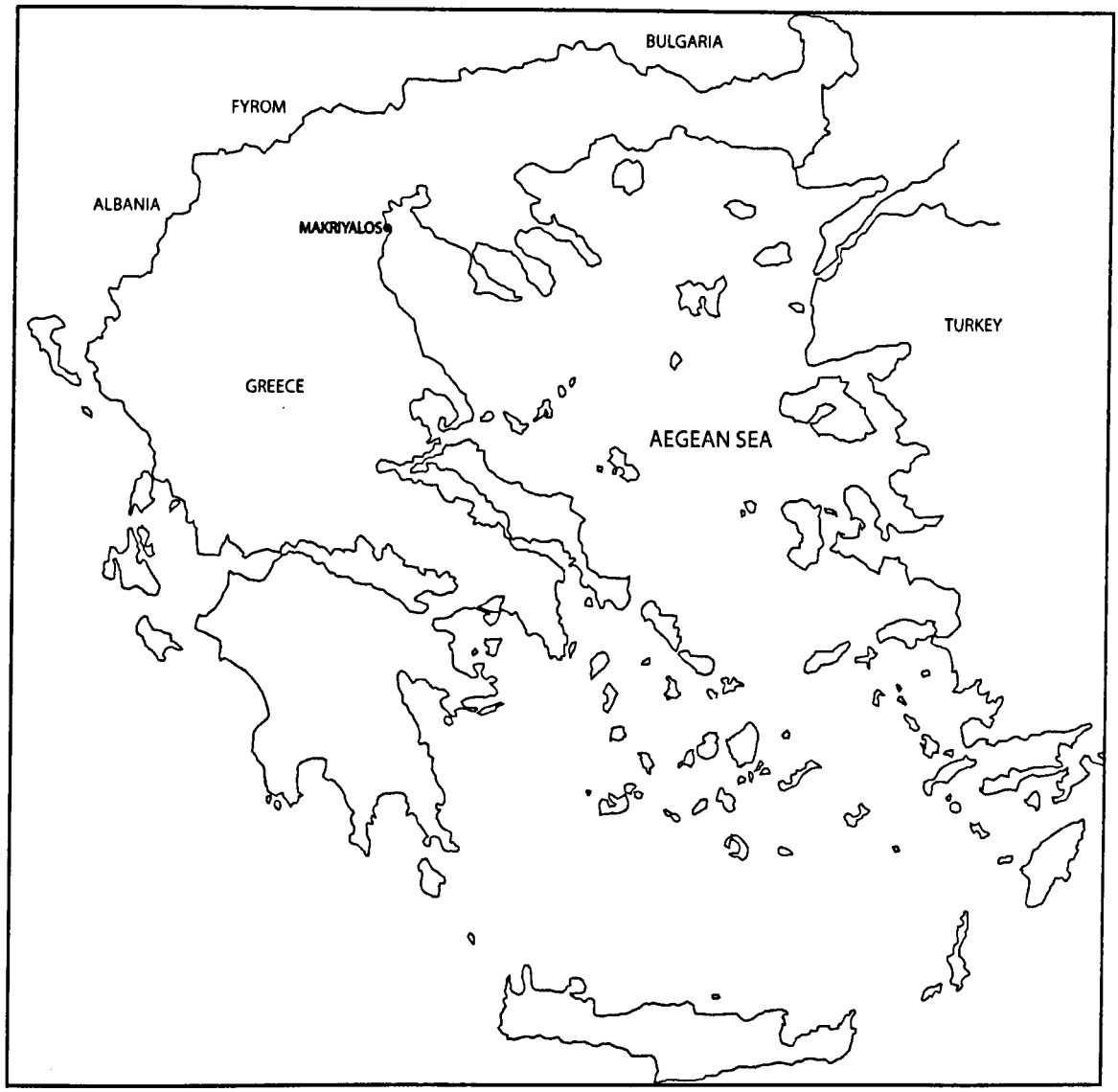


Figure 2.1 Map of Greece showing the location of LN Makriyalos in Northern Greece.

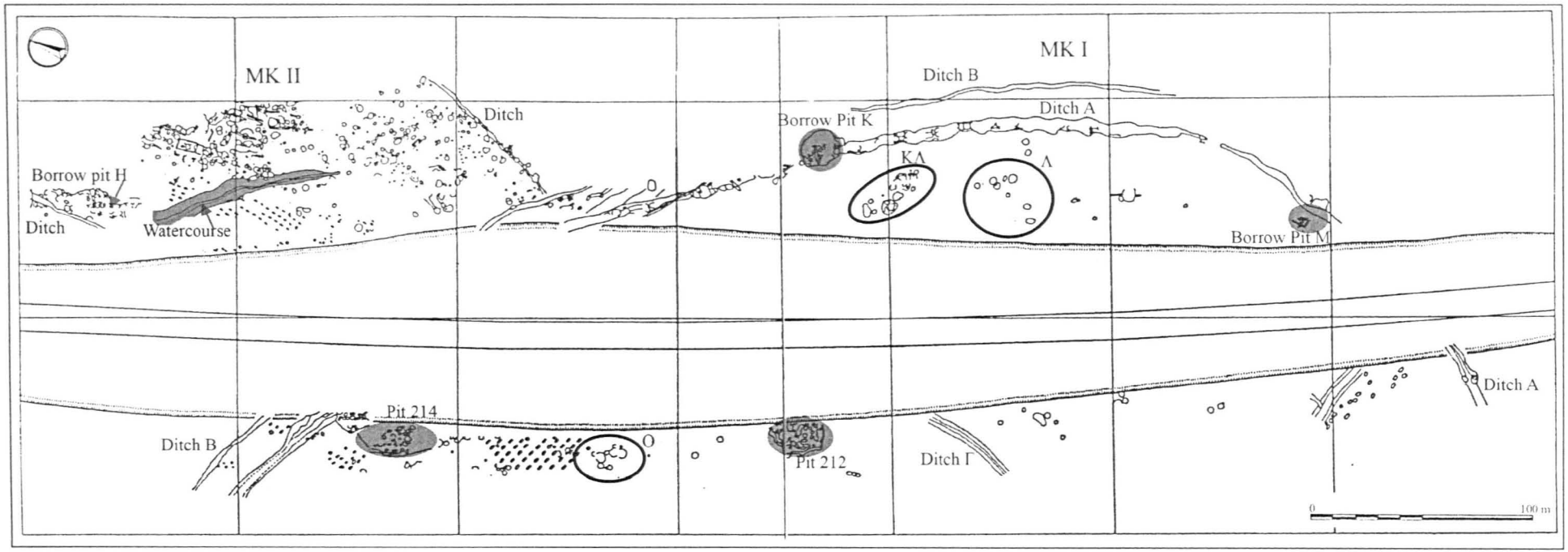


Figure 2.2 Plan of Makriyalos showing main features of phase I and II (after Besios and Pappa 1998a).

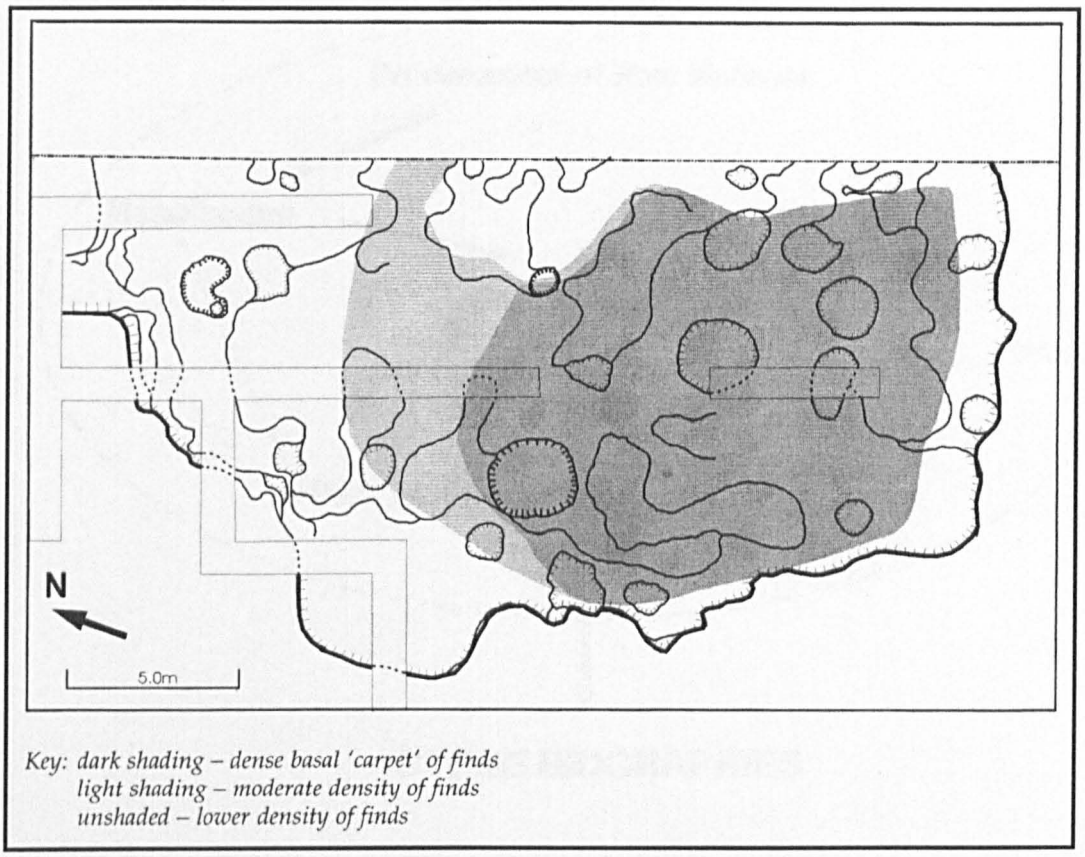


Figure 2.3 Makriyalos I. Plan of borrow pit 212 indicating the density of finds (from Pappa et al. 2004).

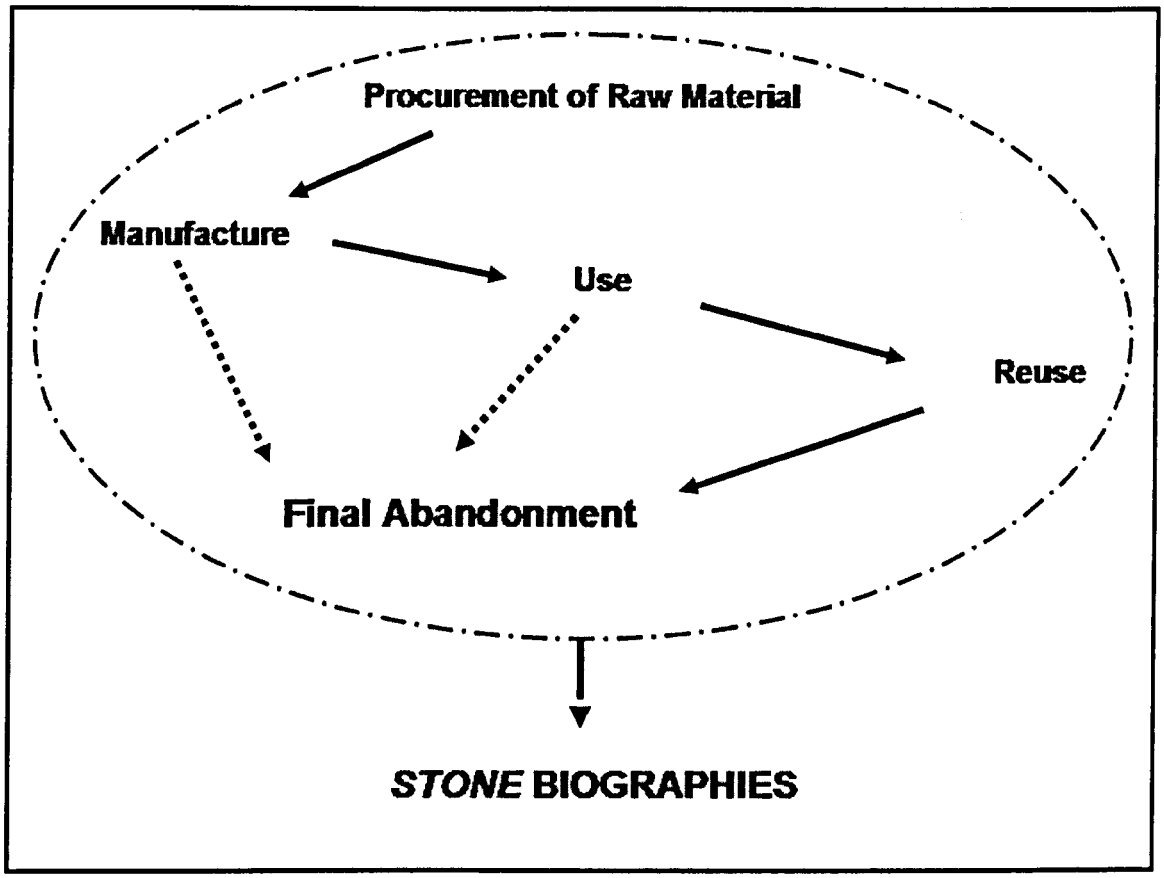


Figure 3.1 The life cycle of ground stone objects.

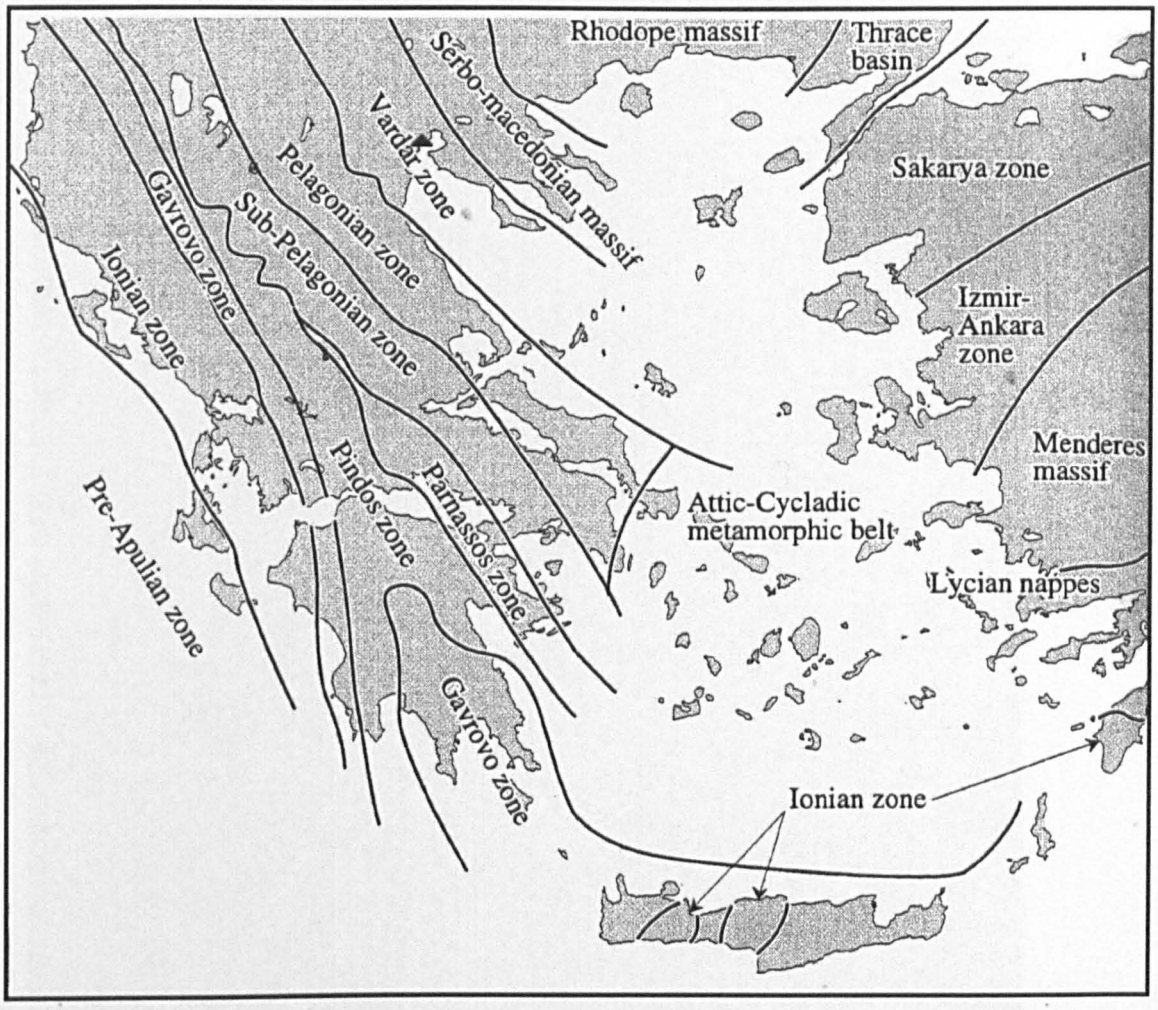
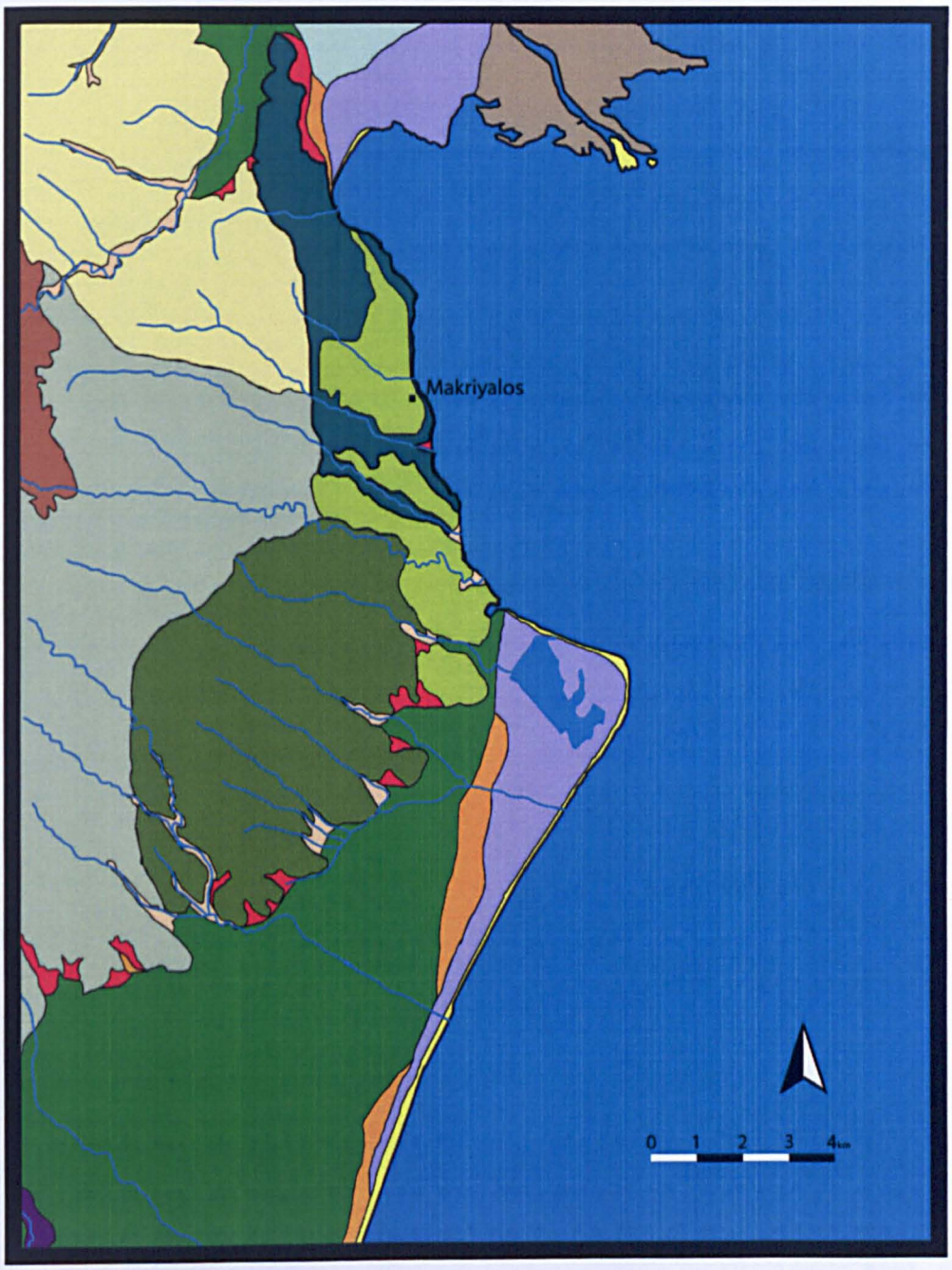


Figure 4.1 The isopic zones and massifs of Greece (the location of Makriyalos is indicated by triangle) (after Higgins and Higgins 1996).



Holocene

- Sand and Loam
- Marsh Deposits
- Deposits of Clay, Loam and Loamy Clays
- Scree of Rounded Pebbles and Loam
- Deposits of Fine-Grained Sand, Clayey Loam and Loamy Clays
- Fluvial Terraces
- Delta Deposits
- Coarse Materials of Pebbles and Sand
- Alluvial Material of Torrents

U.Miocene-L. Pliocene

- Conglomerates
- Formations of Aiginio-Katahas
- Fluvioterrestrial Deposits of Methoni-Makriyalos
- Sandstones and Clays of Sevasti-Kitro
- Sfendami-Alonia Formations

Pleistocene

- Aeolian Deposits (Loess)

Figure 4.2 Geological map of the Makriyalos region (after IGME Katerini Sheet).

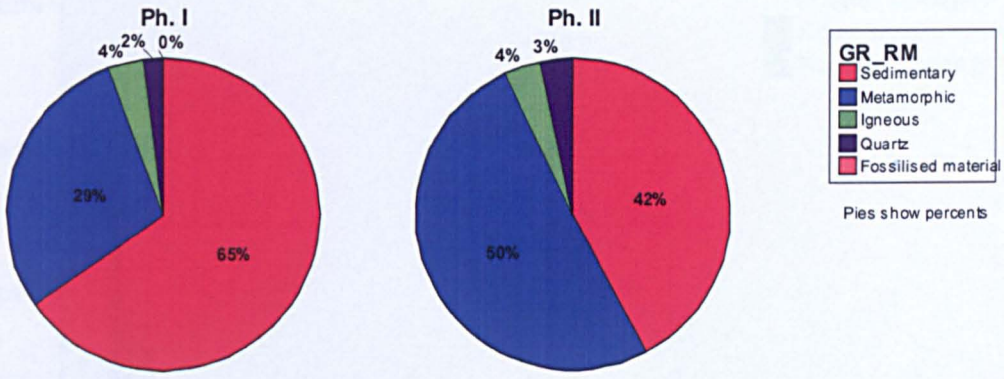


Figure 4.3 Raw material distribution for grinding/abrasive tools per chronological phase (excl. indet raw materials).

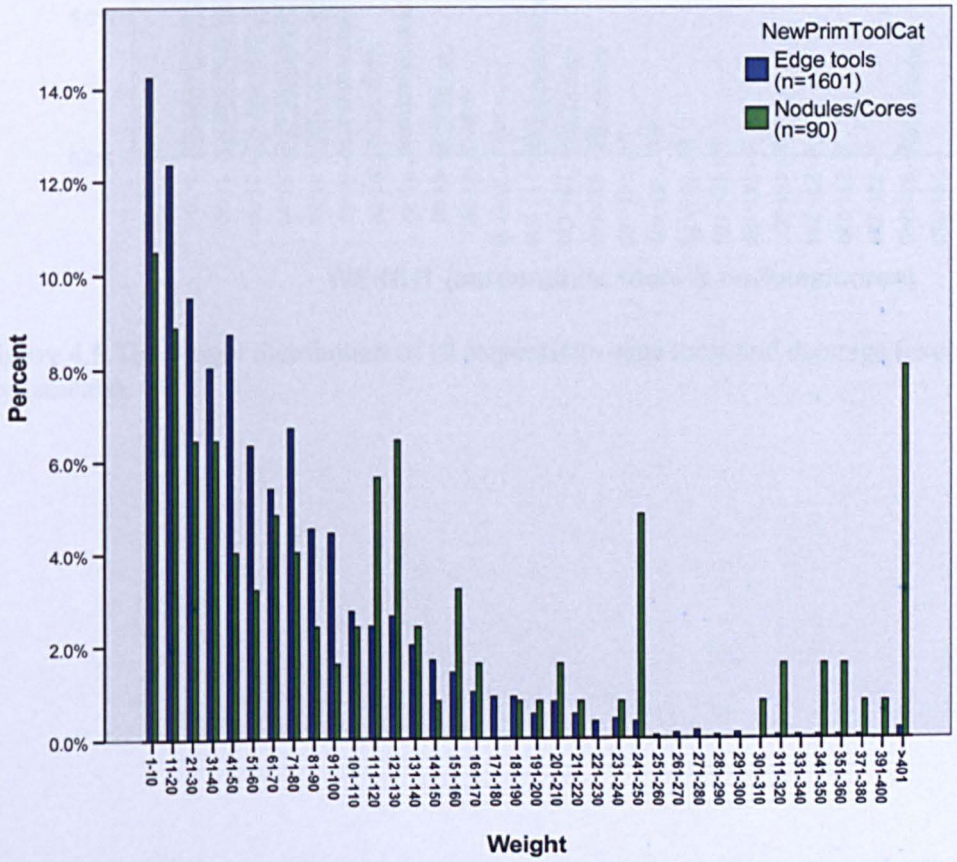


Figure 4.4 The distribution of weight for edge tools and nodules/cores (only raw materials encountered in both categories were included).

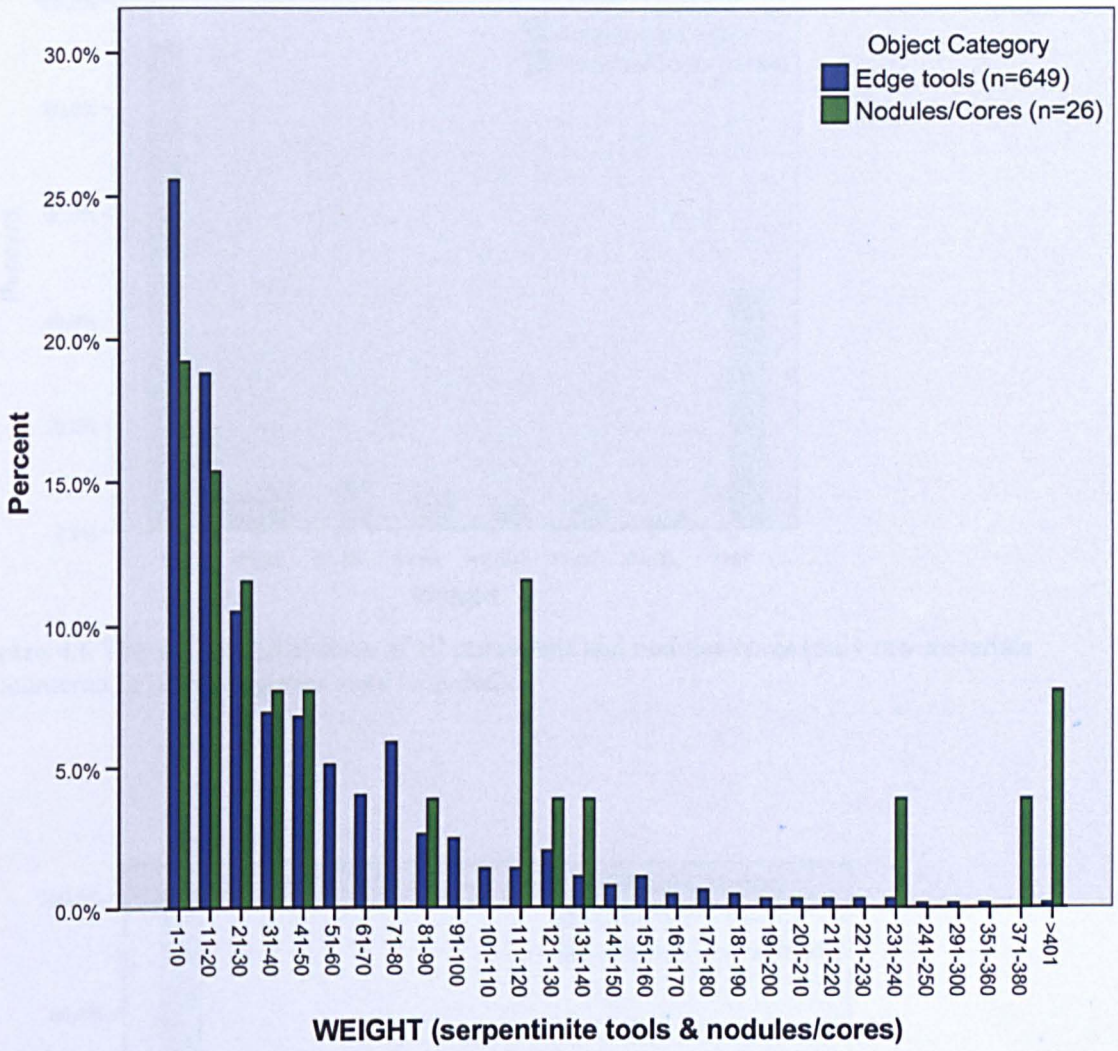


Figure 4.5 The weight distribution of all serpentinite edge tools and debitage (excluding reused implements).

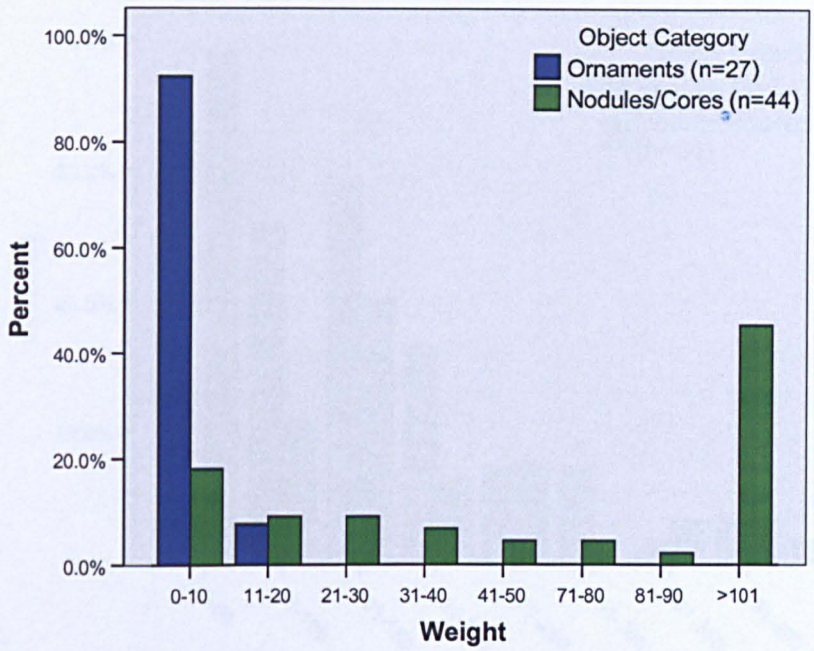


Figure 4.6 The weight distribution of all ornaments and nodules/cores (only raw materials encountered in both categories were included).

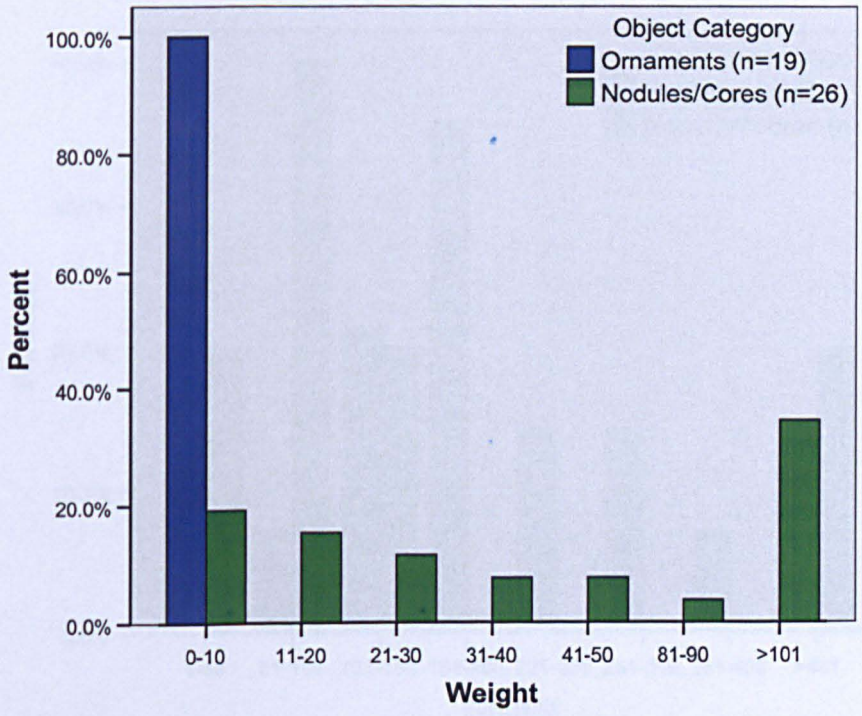


Figure 4.7 The weight distribution of all serpentinite nodules and beads.

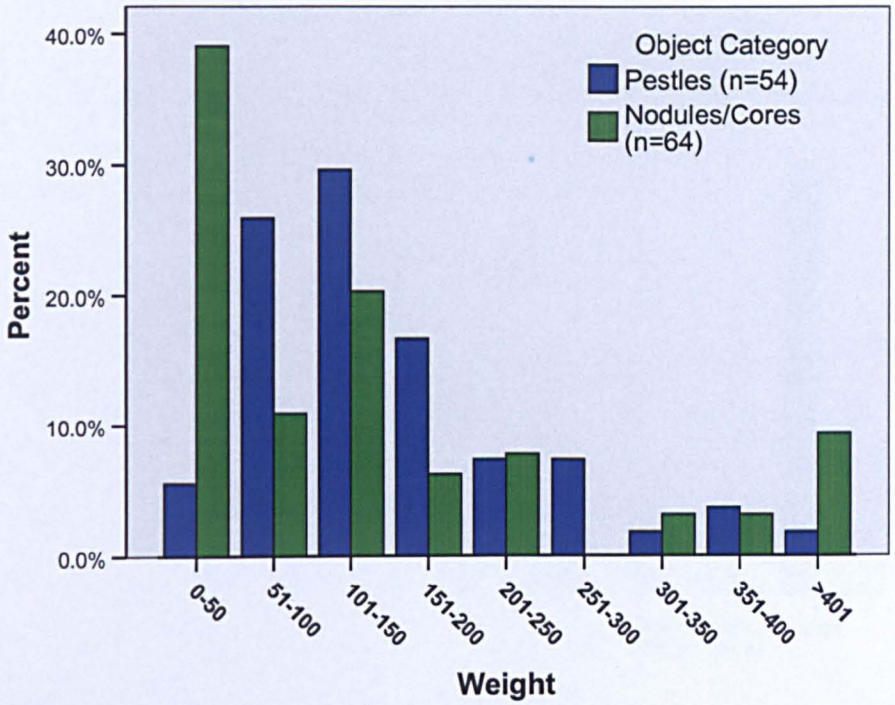


Figure 4.8 The weight distribution of pestles (incl. pestle/hammers) and nodules/cores.

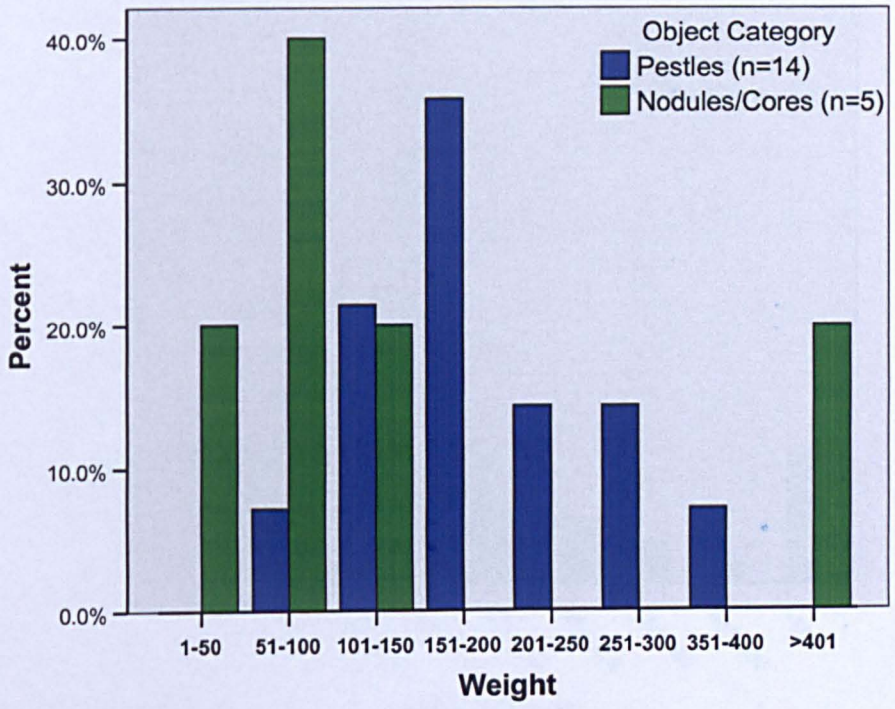


Figure 4.9 The weight distribution of complete pestles (including pestle/hammers) and nodules/cores.

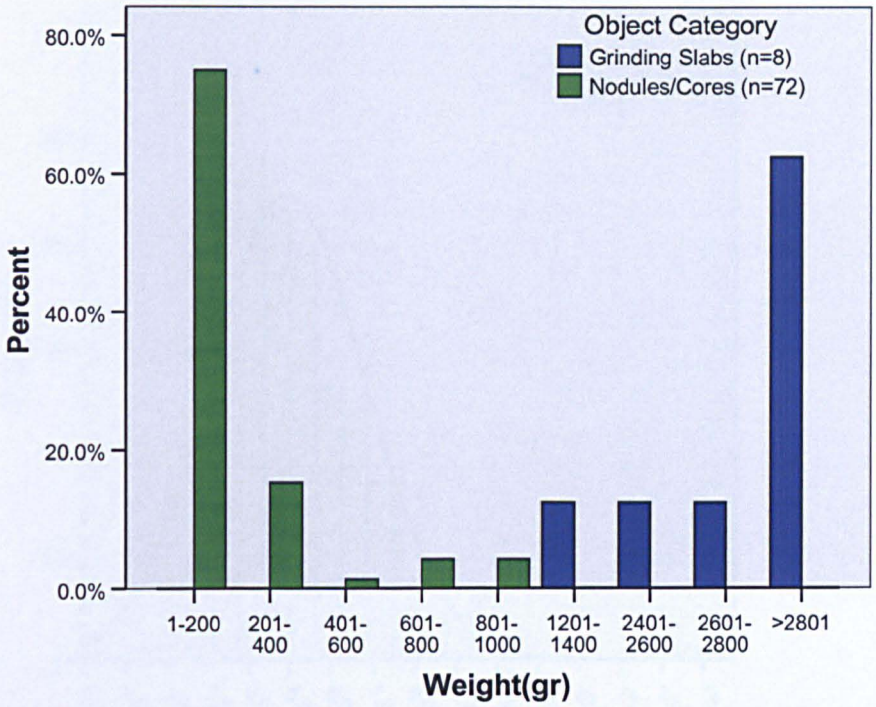


Figure 4.10 The weight distribution of complete grinding slabs and all nodules/cores.

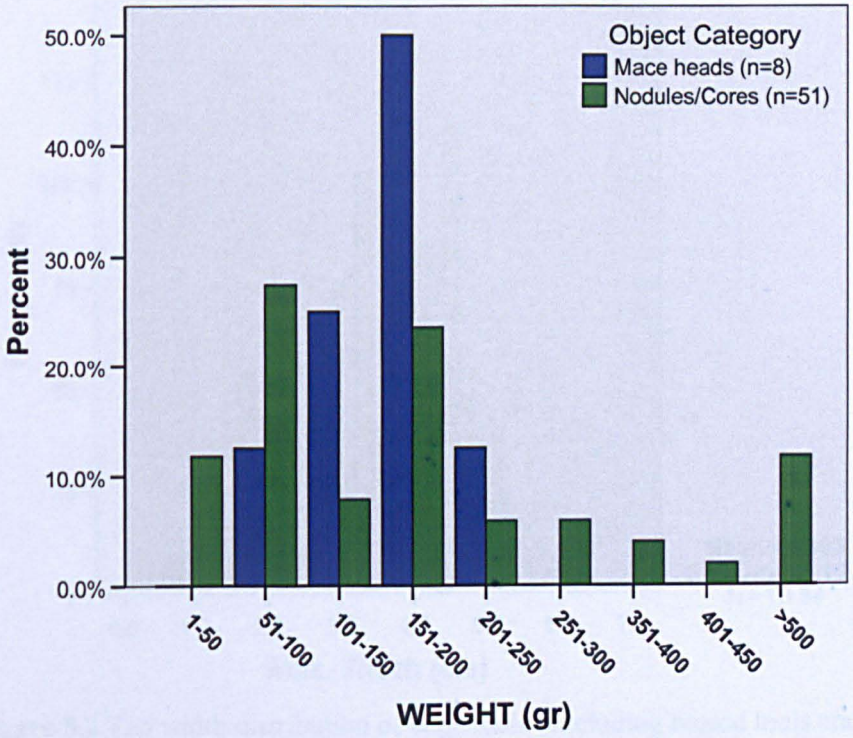


Figure 4.11 The weight distribution of mace-heads and nodules/cores (both complete and incomplete cases included).

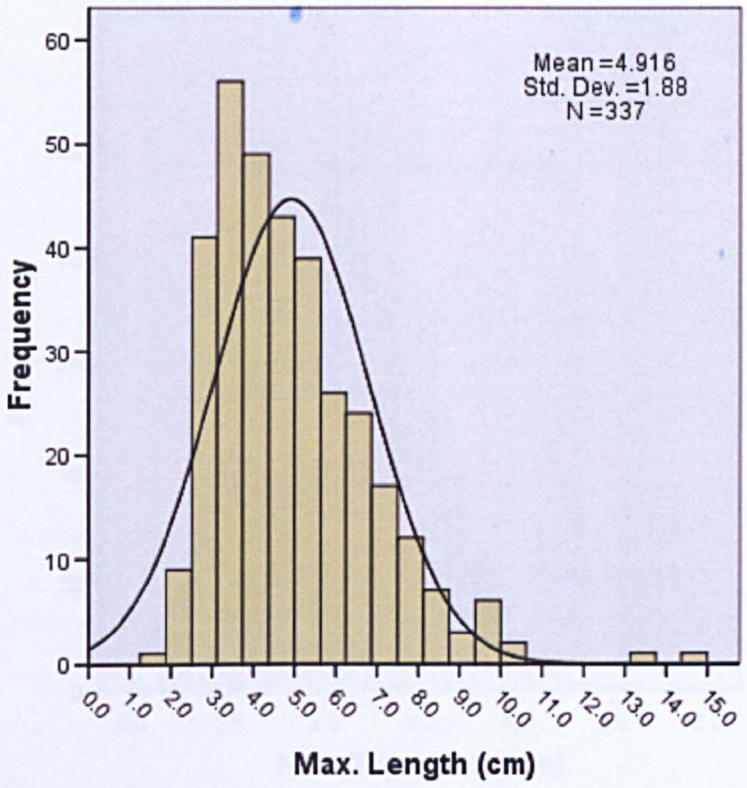


Figure 5.1 The length distribution of edge tools (excluding reused tools and incomplete cases).

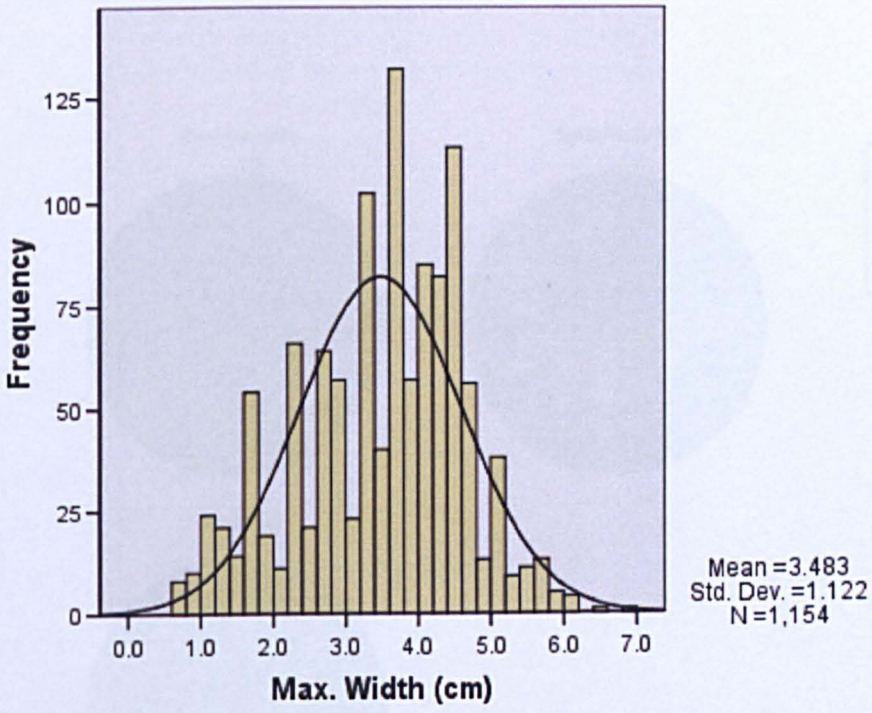


Figure 5.2 The width distribution of edge tools (excluding reused tools and incomplete cases).

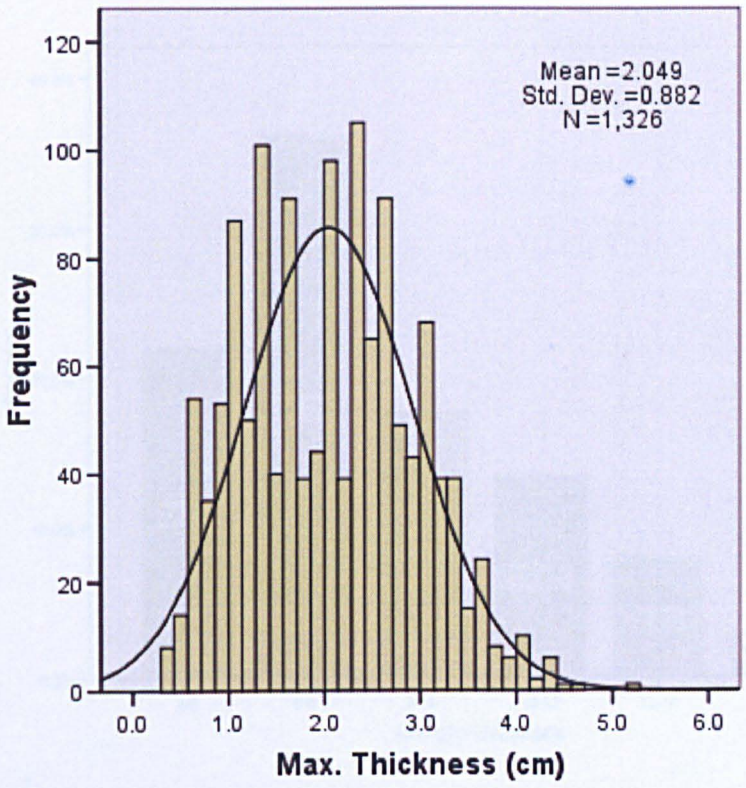


Figure 5.3 The thickness distribution of edge tools (excluding reused tools and incomplete cases).

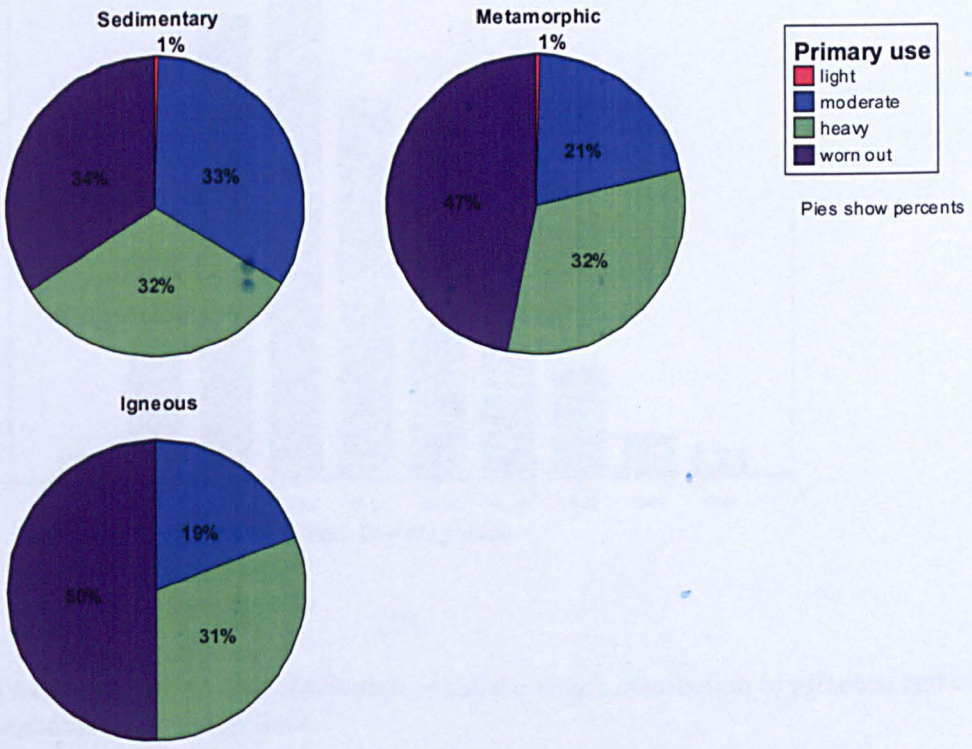
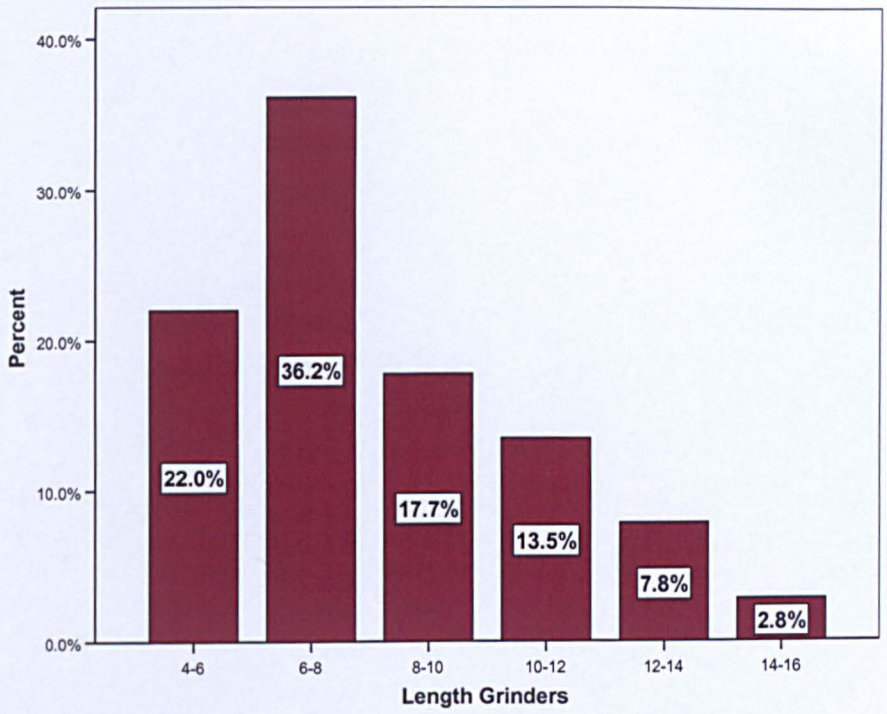
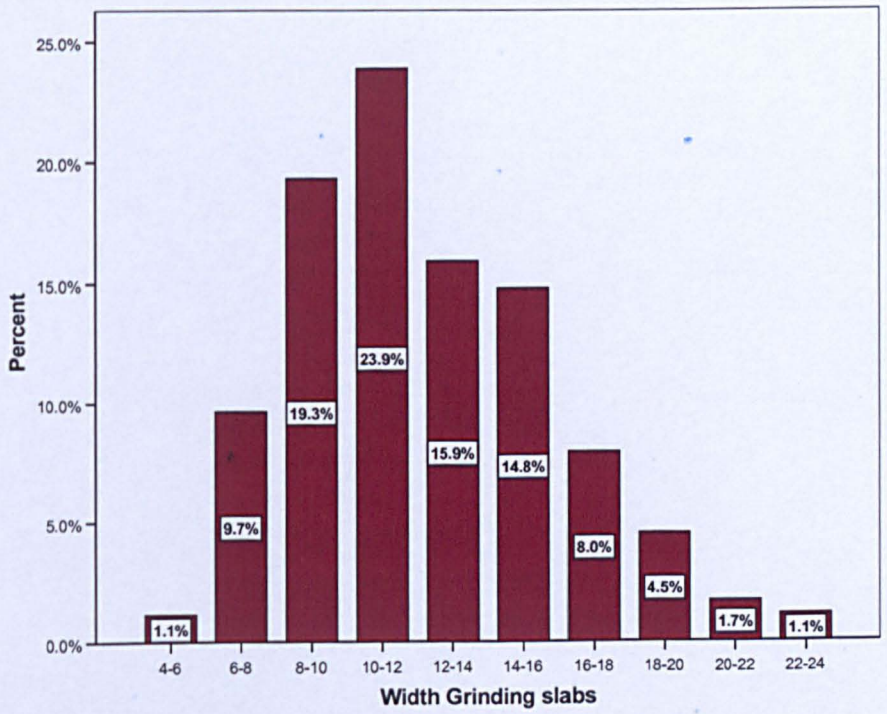


Figure 5.4 The relation of degree of wear and geological categories for grinding slabs (excluding reused tools and indet. cases).



(A)



(B)

Figure 5.5 Grinding Tools. Bar charts showing a) the length distribution of grinders, and b) the width distribution of grinding slabs.

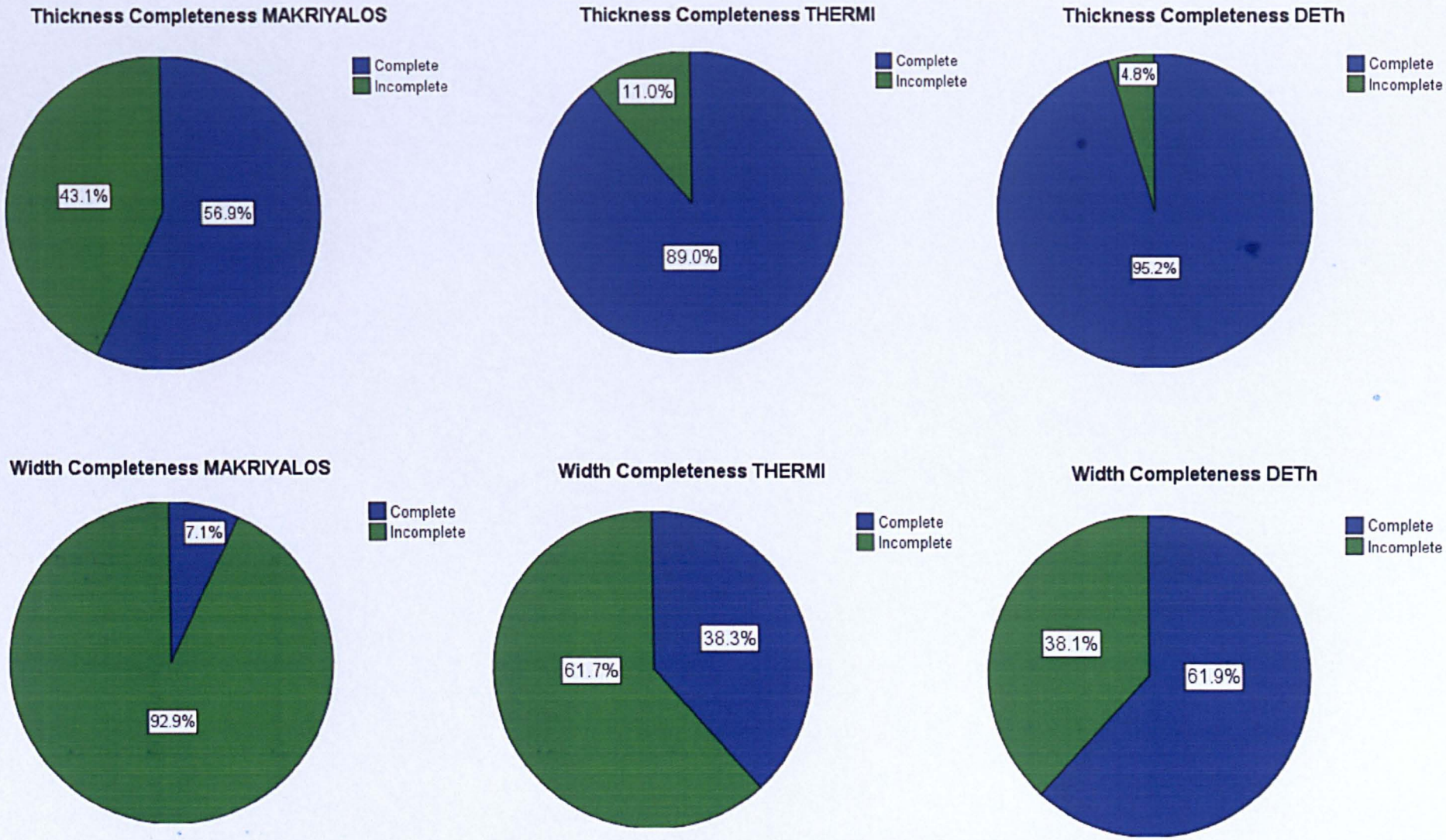


Figure 5.6 Comparison of fragmentation patterns for grinding slabs between LN Makriyalos, LN Thermi B, and MN DETh.

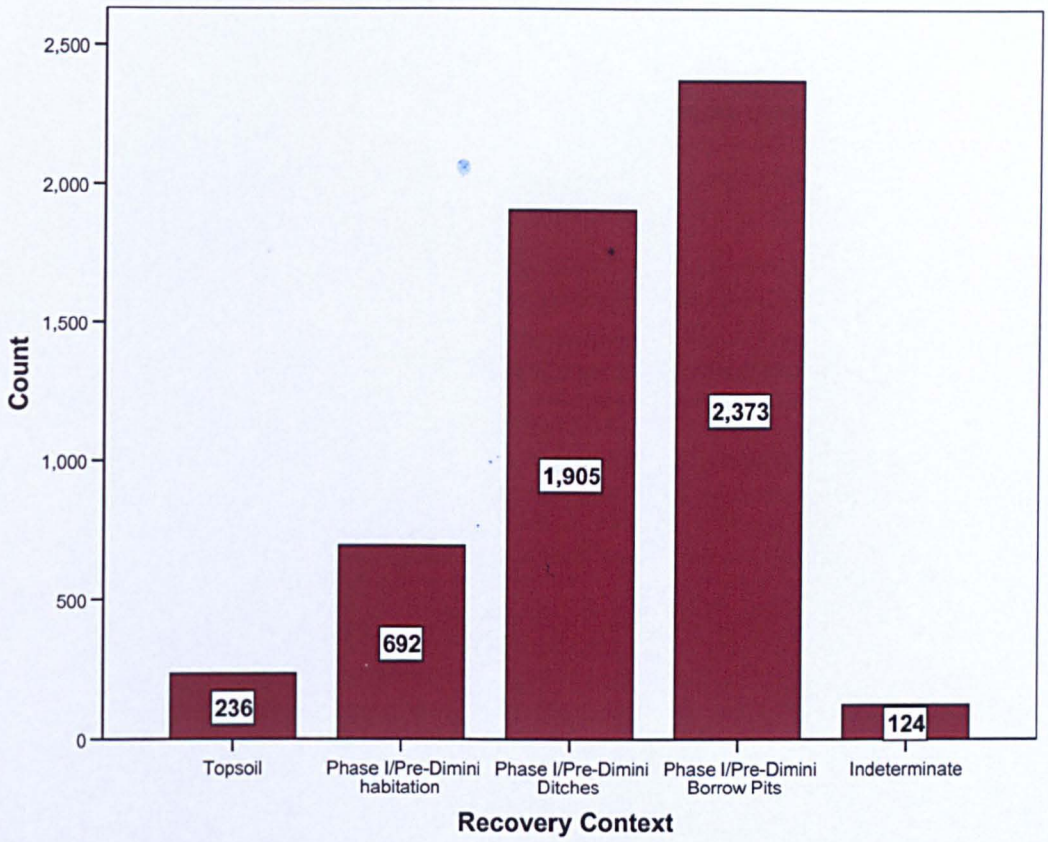


Figure 6.1 The distribution of ground stone objects in Makriyalos I.

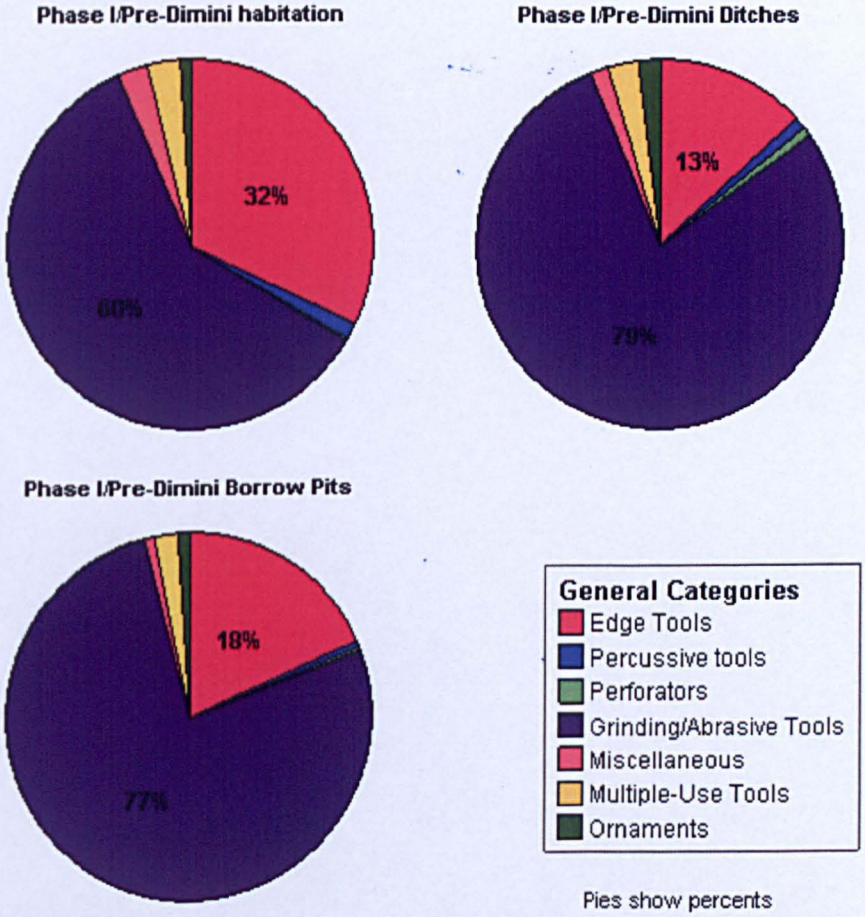


Figure 6.2 The distribution of general object categories among the Makriyalos I recovery contexts.

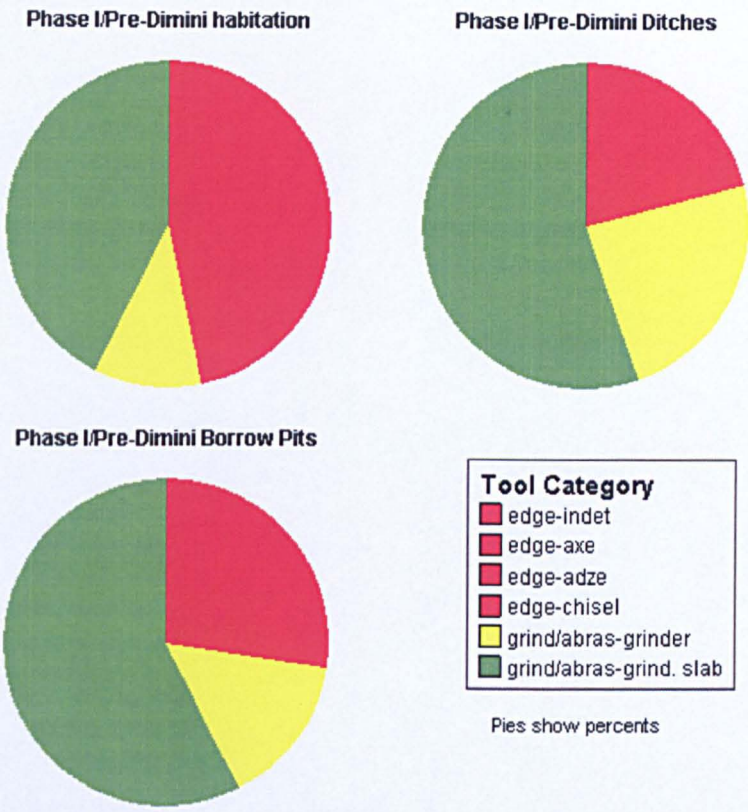


Figure 6.3 The distribution of edge tool categories, grinding slabs and grinders per recovery context from Makriyalos I.

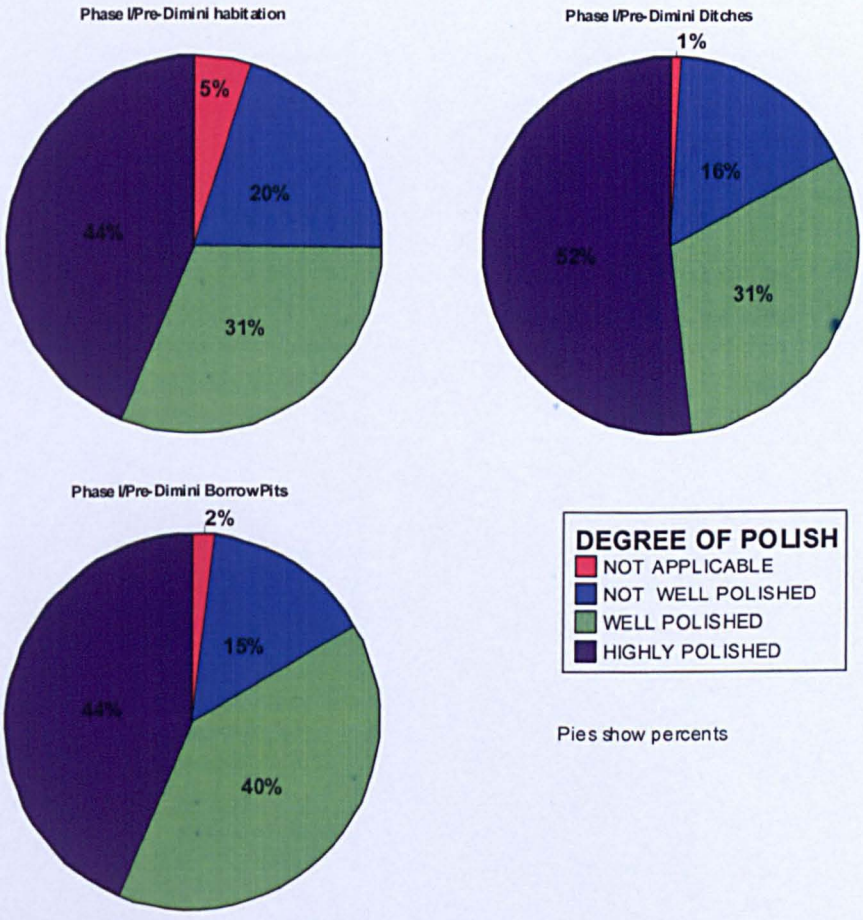


Figure 6.4 Edge tools - degree of polish per recovery context from Makriyalos I.

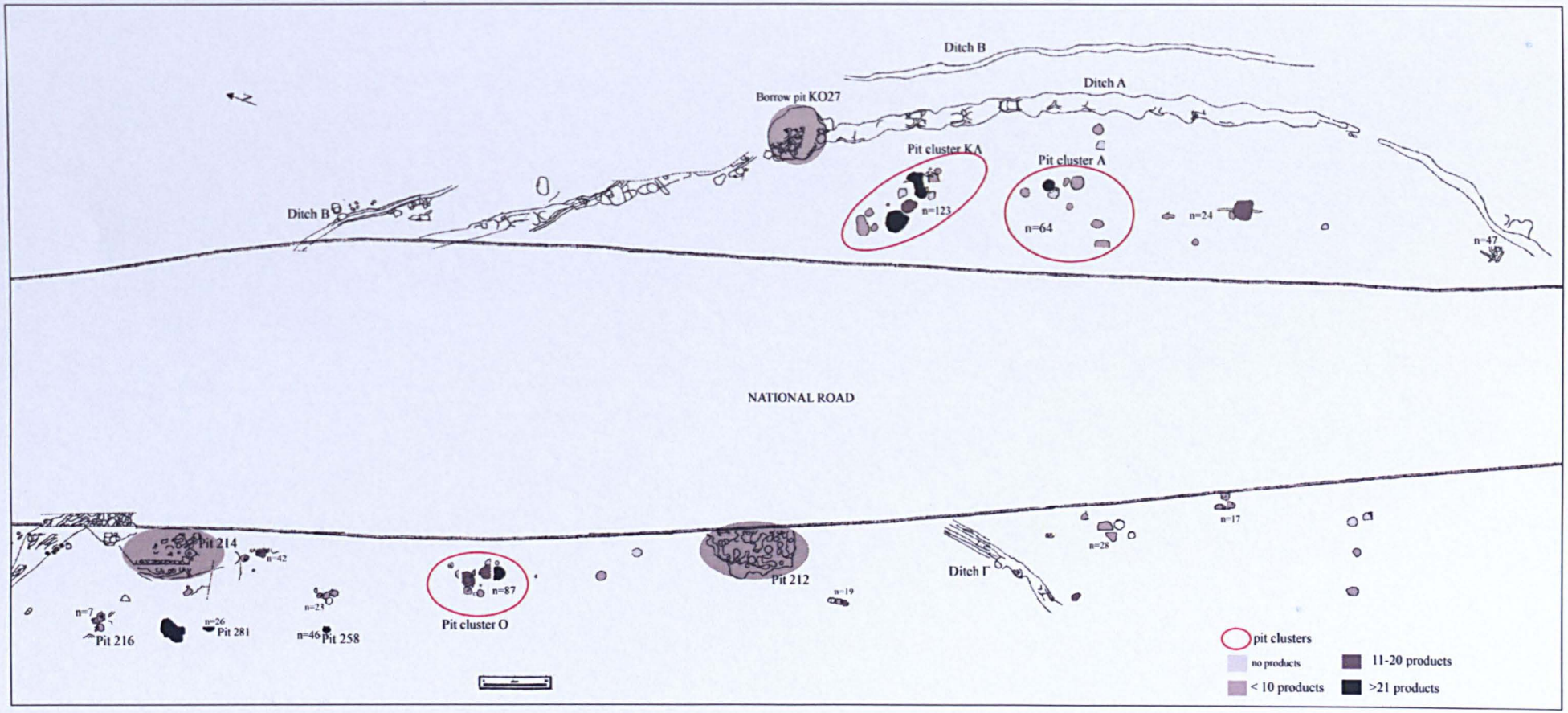
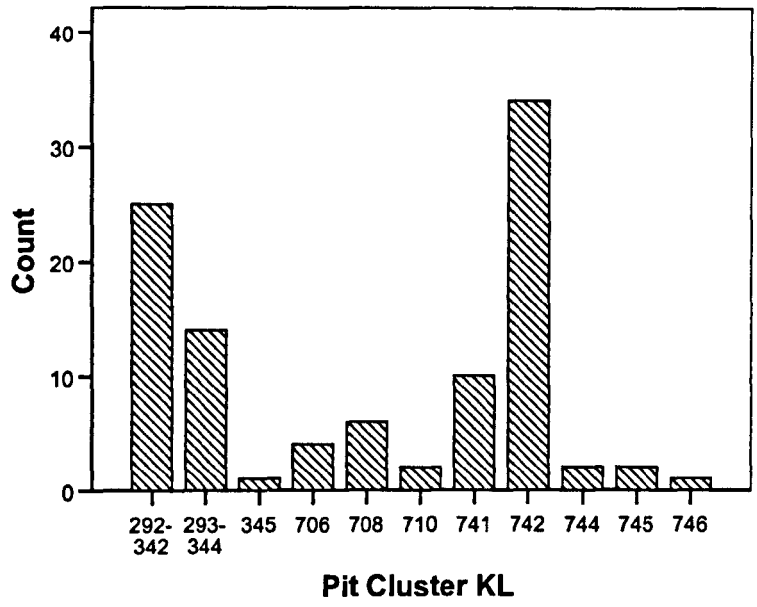
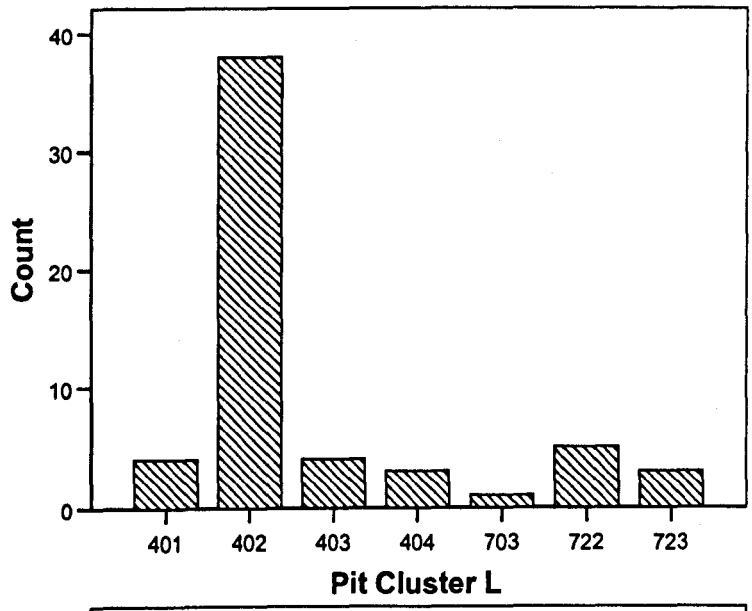


Figure 6.5 Plan of Makriyalos I showing the distribution of ground stone among the MK I habitation pit clusters.





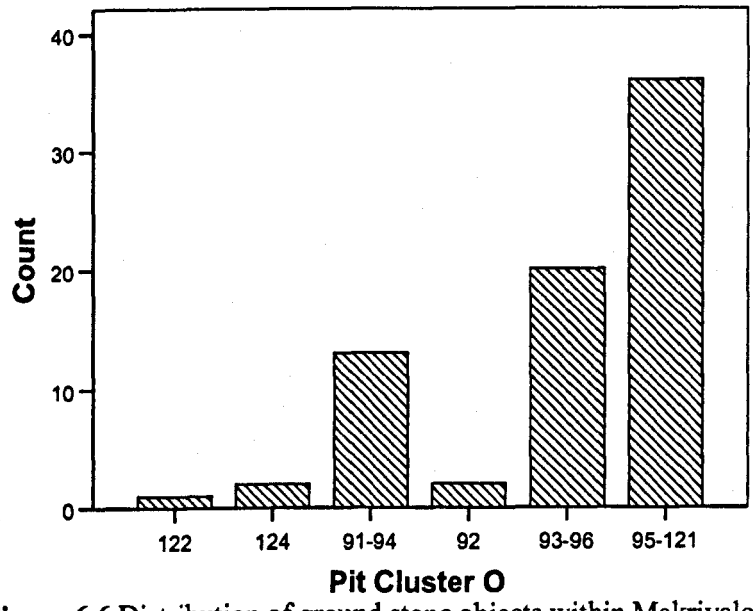
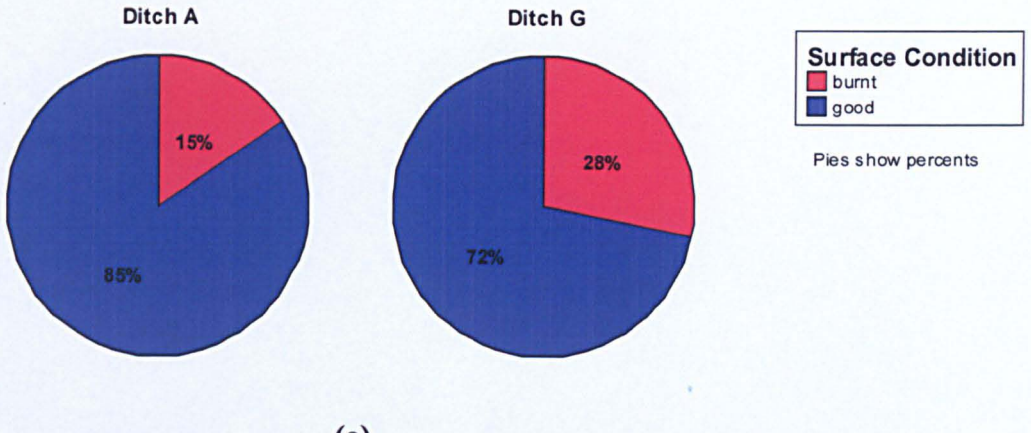
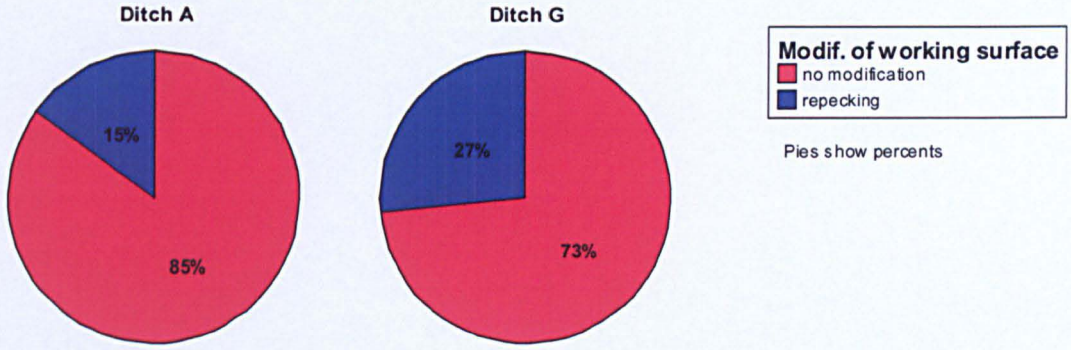


Figure 6.6 Distribution of ground stone objects within Makriyalos I pit clusters KΛ (KL), Λ (L) and O.



(a)



(b)

Figure 6.7 Grinding slabs a) surface condition, b) modification of use face among Ditch A and Γ (G) from Makriyalos I (excluding indet. cases).

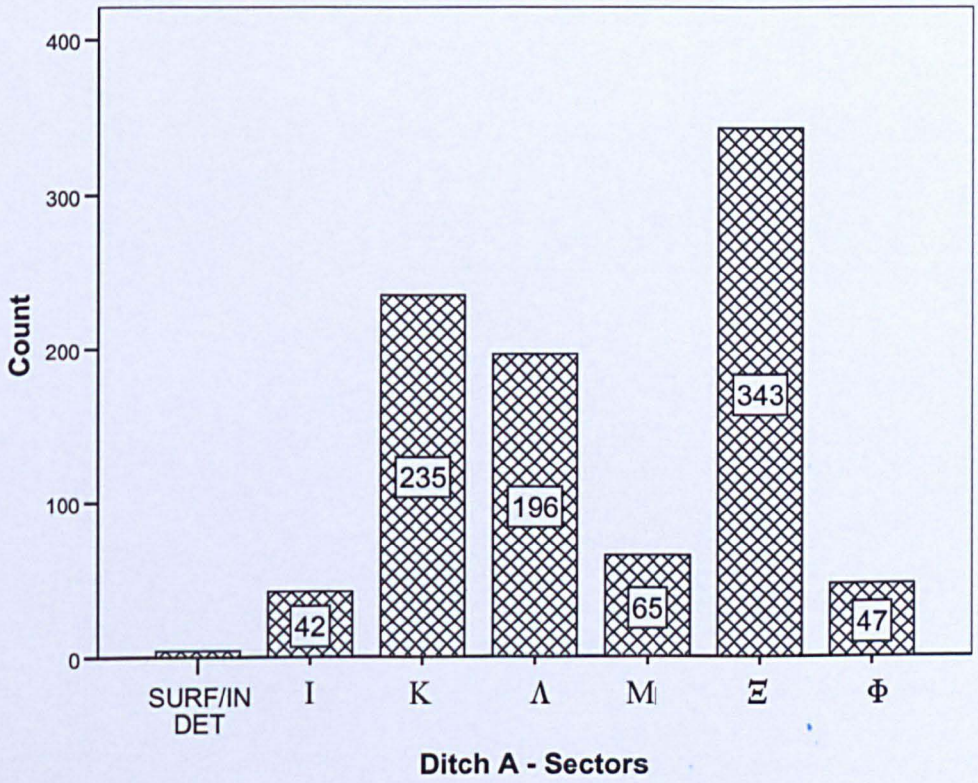


Figure 6.8 The distribution of ground stone objects between the different sectors of Ditch A from Makriyalos I.

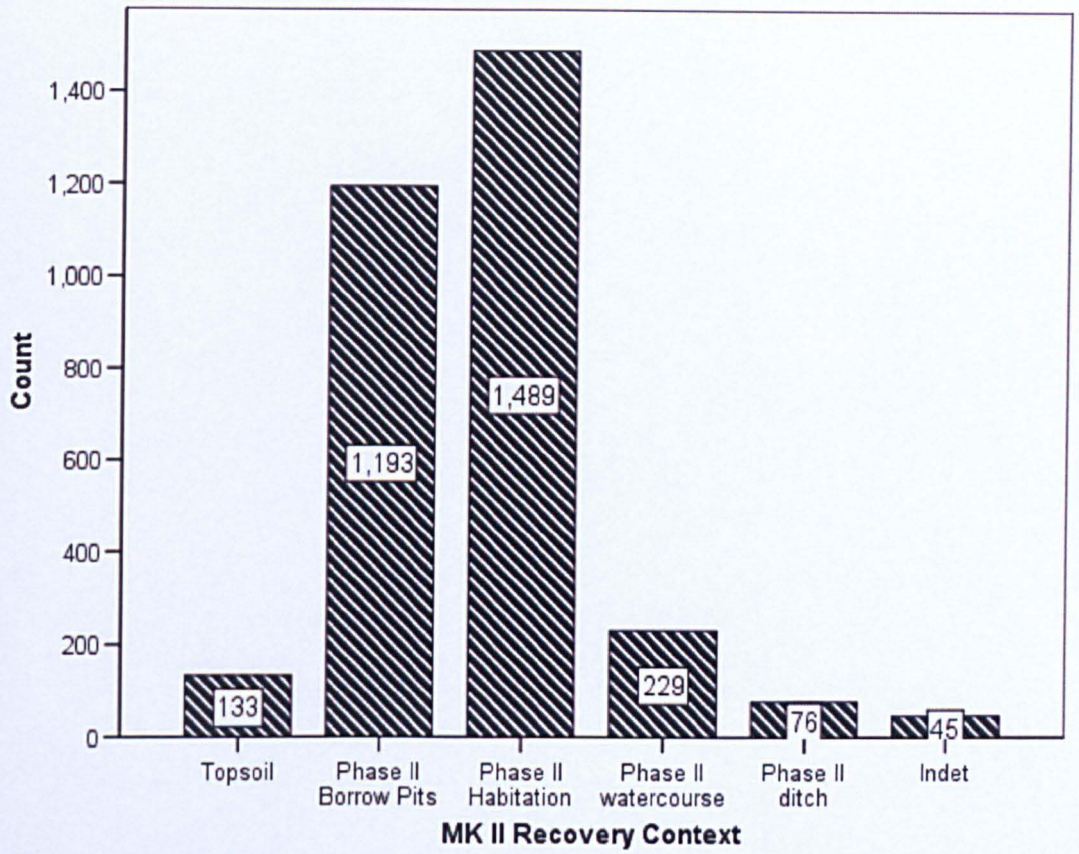


Figure 6.9 The distribution of ground stone in Makriyalos II.

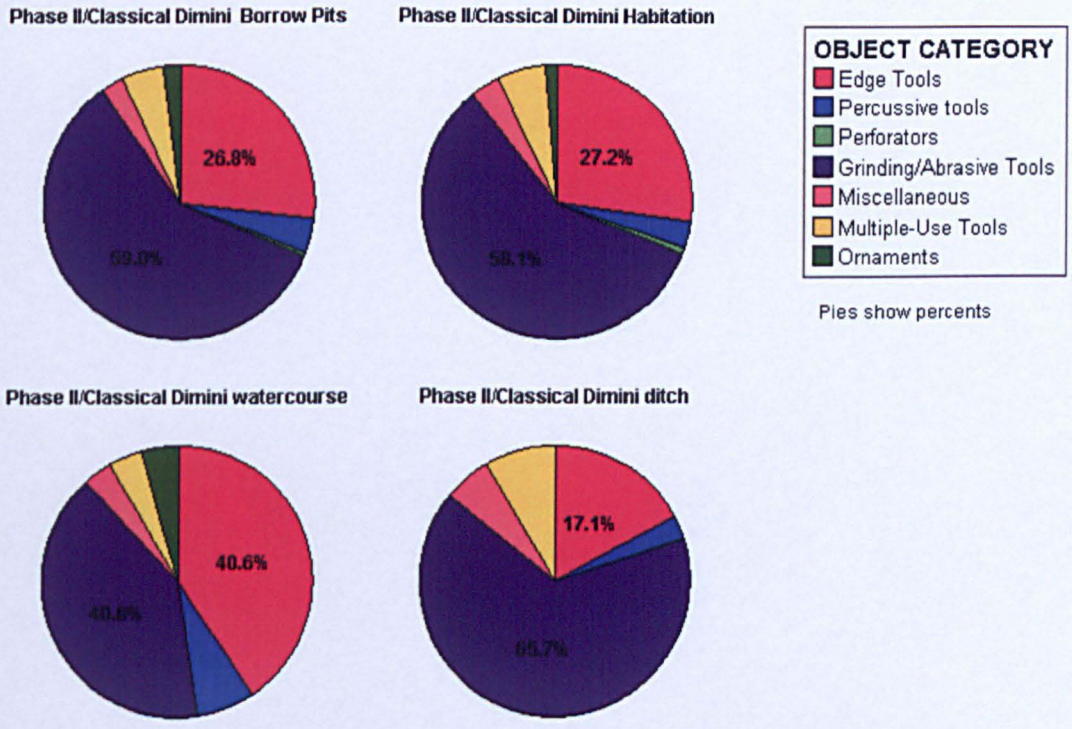


Figure 6.10 The distribution of general object categories among the Makriyalos II recovery contexts.

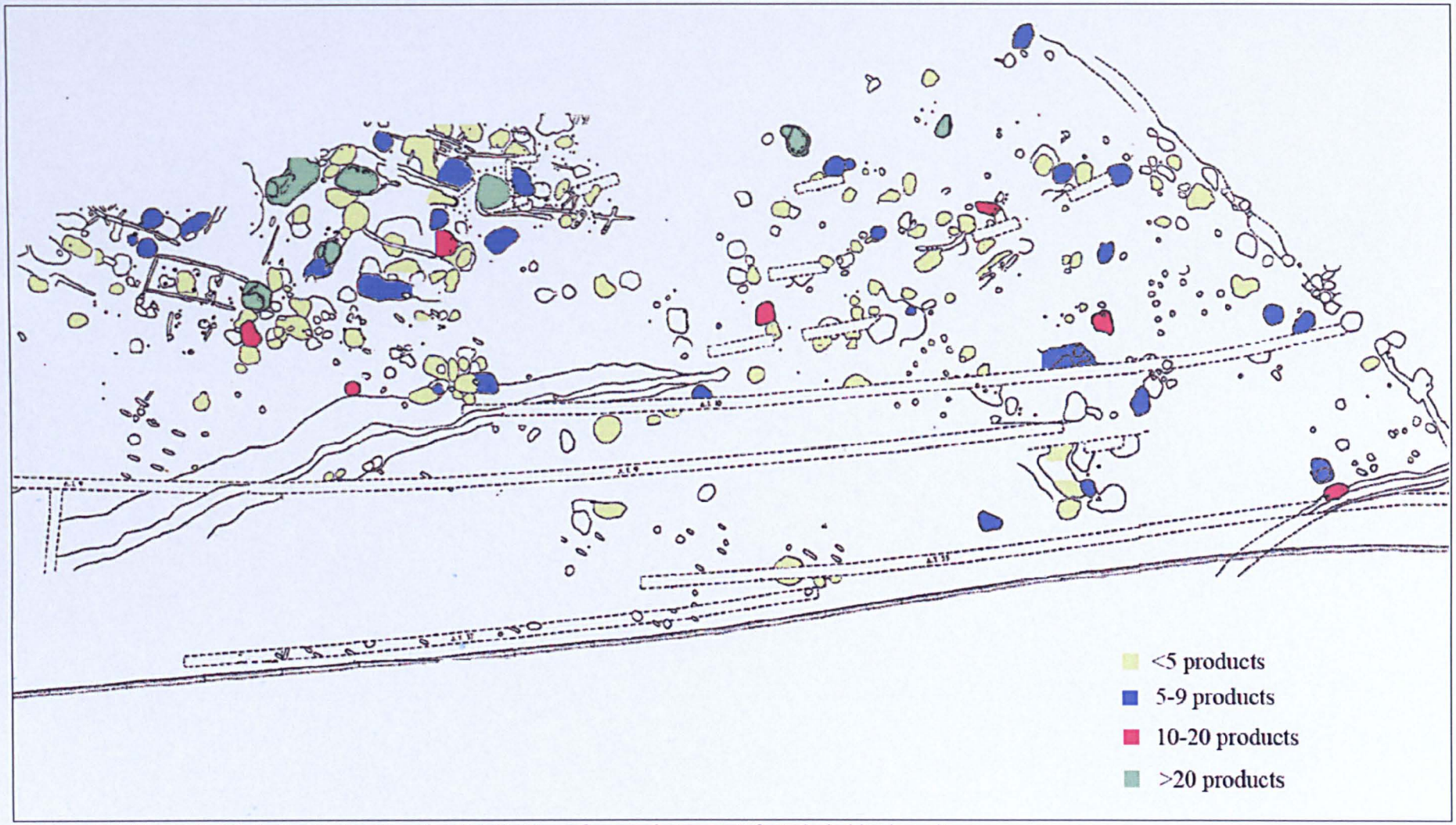


Figure 6.11 Plan of Makriyalos II showing the distribution of ground stone artefacts in habitation pits.

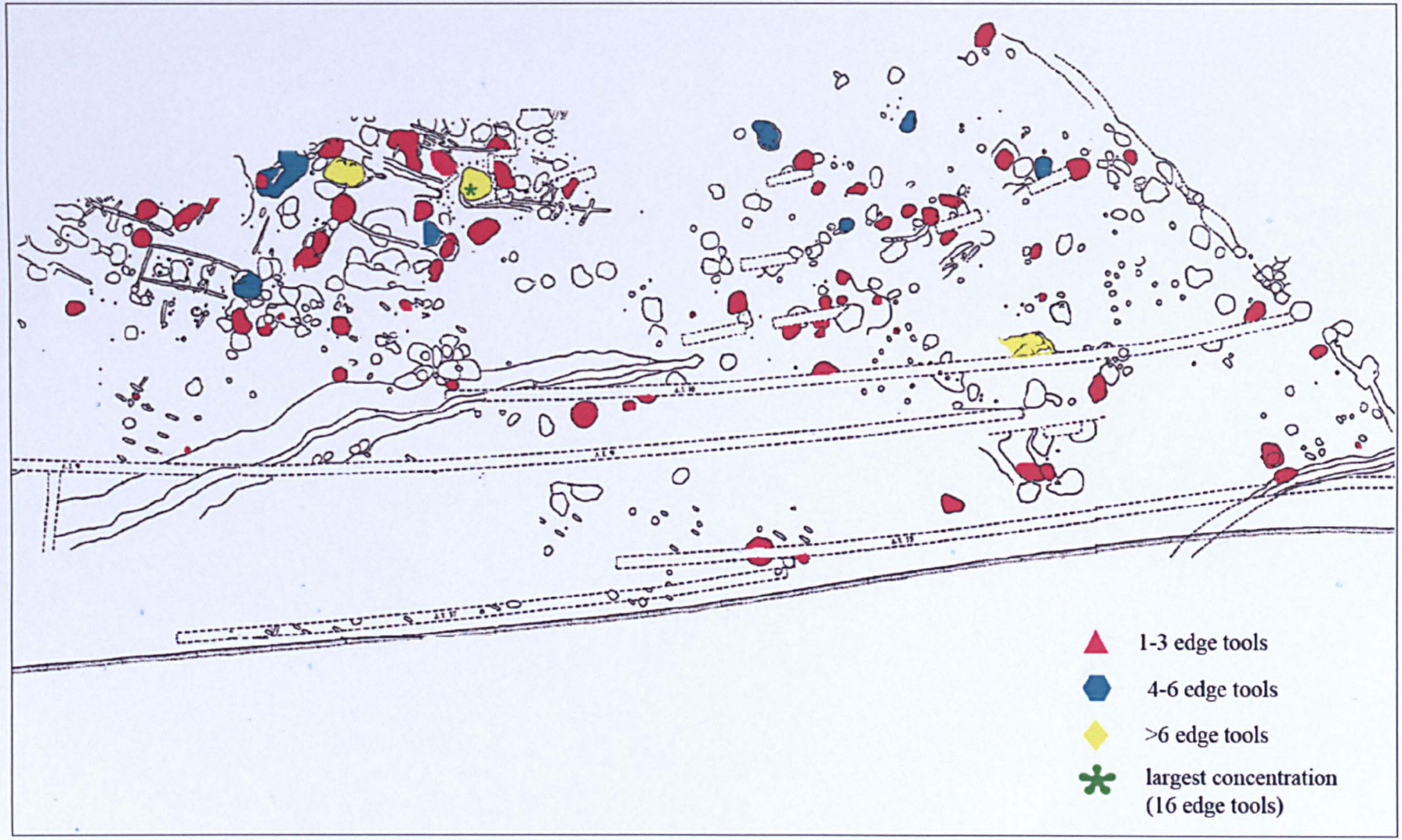


Figure 6.12 Plan of Makriyalos II showing the distribution of edge tools among the habitation pits.

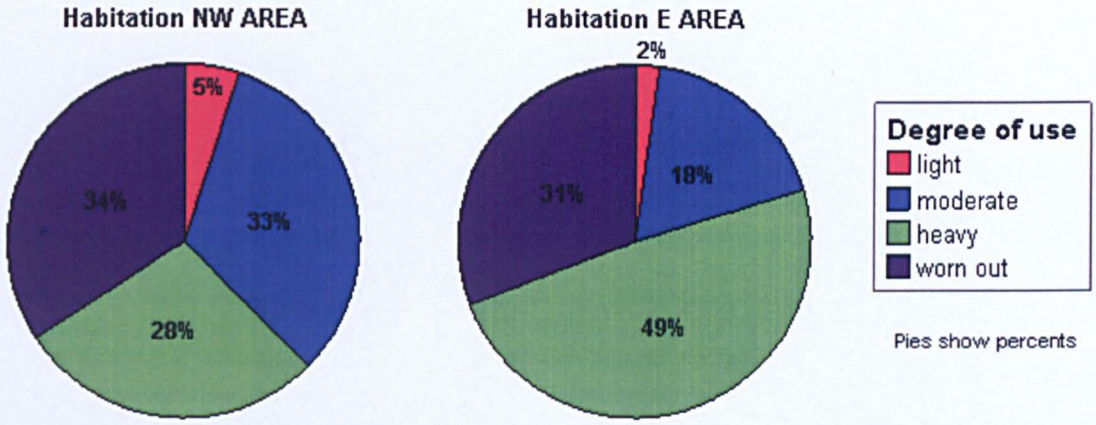


Figure 6.13 The degree of use of edge tools among the Makriyalos II NW and E parts of the habitation area (excluding indet. cases).

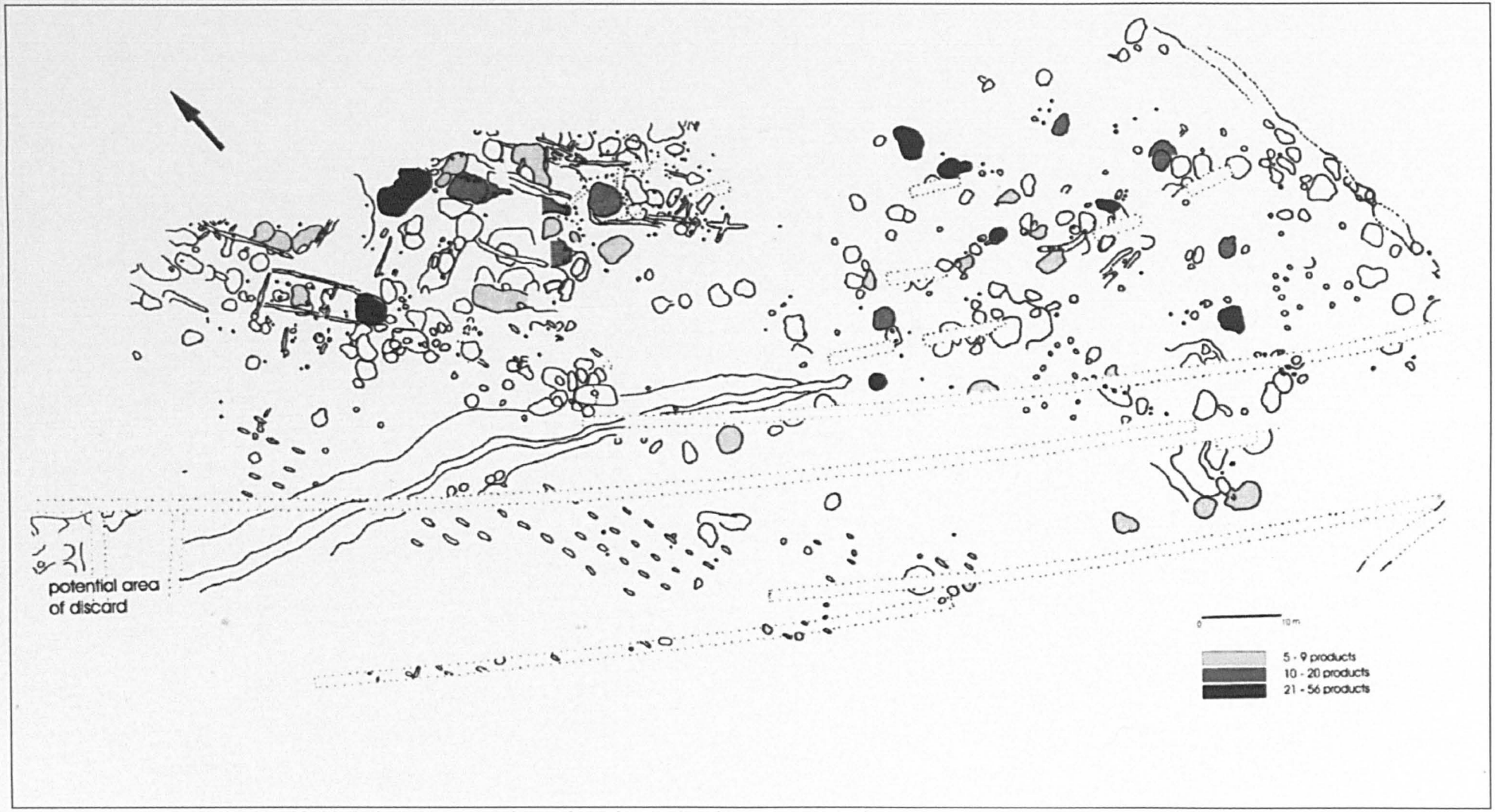


Figure 6.14 The distribution of chipped stone among the Makriyalos II pits (from Skourtopoulou 2006).

PLATES

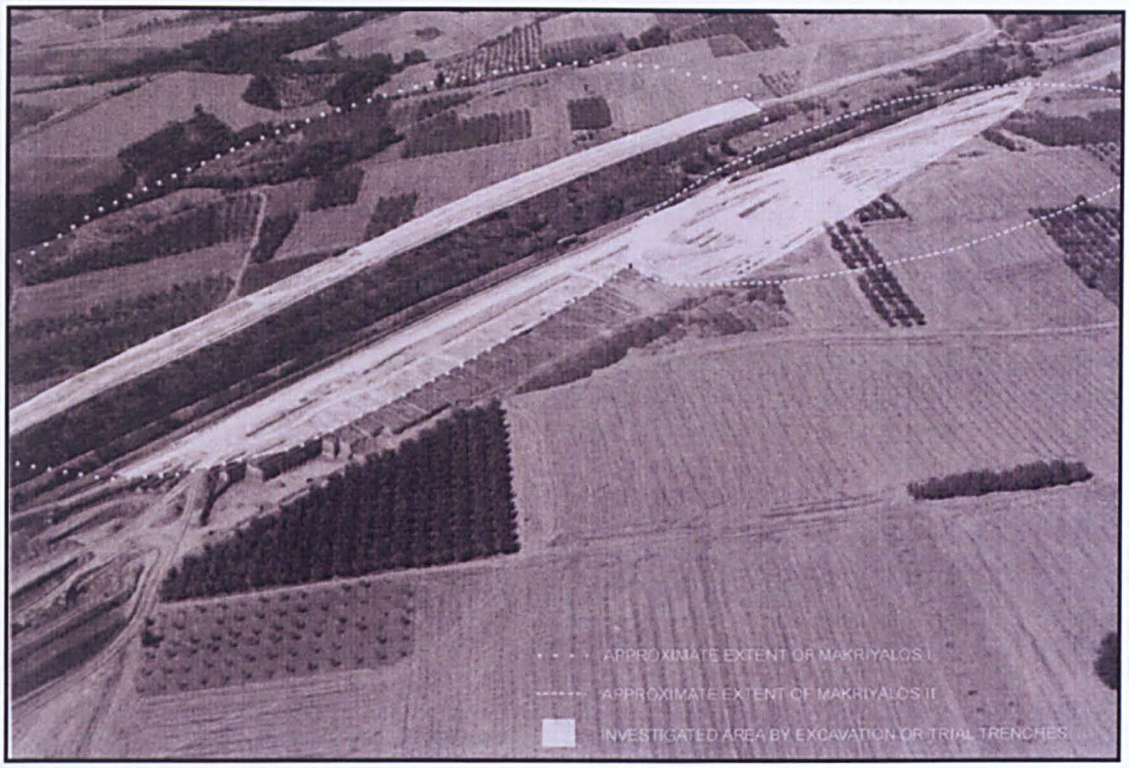


Plate 2.1 Makriyalos I and II: aerial view from the east (from Pappa and Besios 1999b).

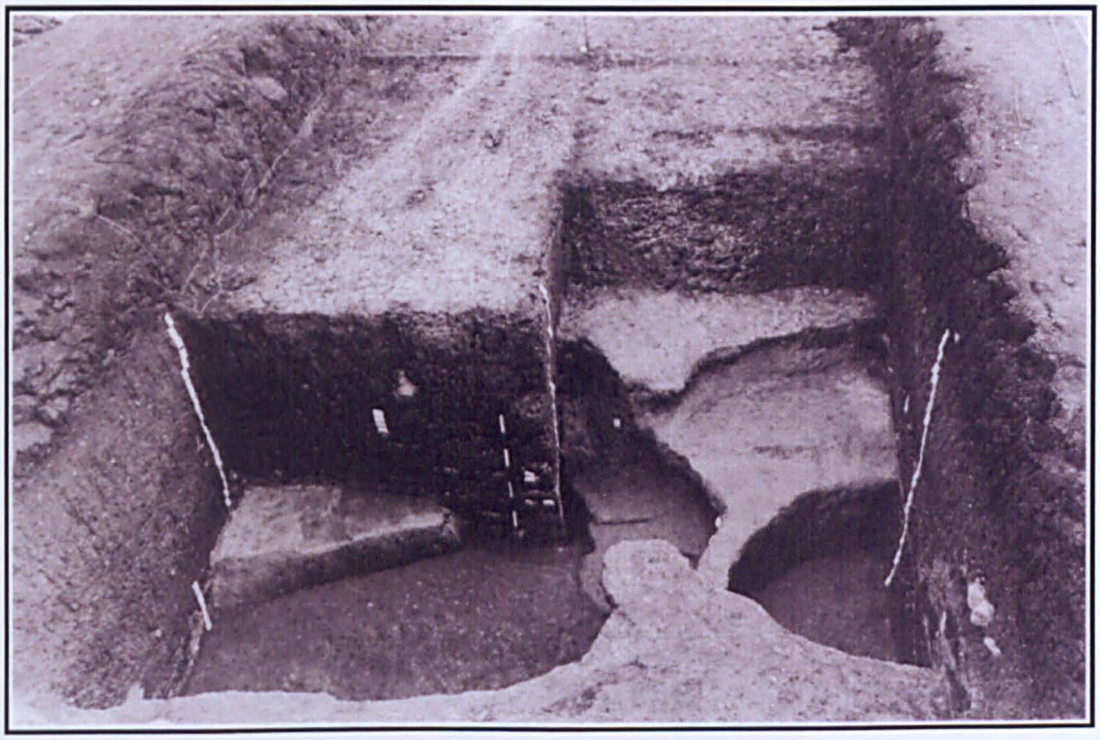


Plate 2.2 Makriyalos I Ditch A, Phase A (chain of pits) (from Pappa and Besios 1999a).

Plate 2.3 Makriyalos I Ditch A, Phase B (V-shaped channel) (from Pappa 2007)

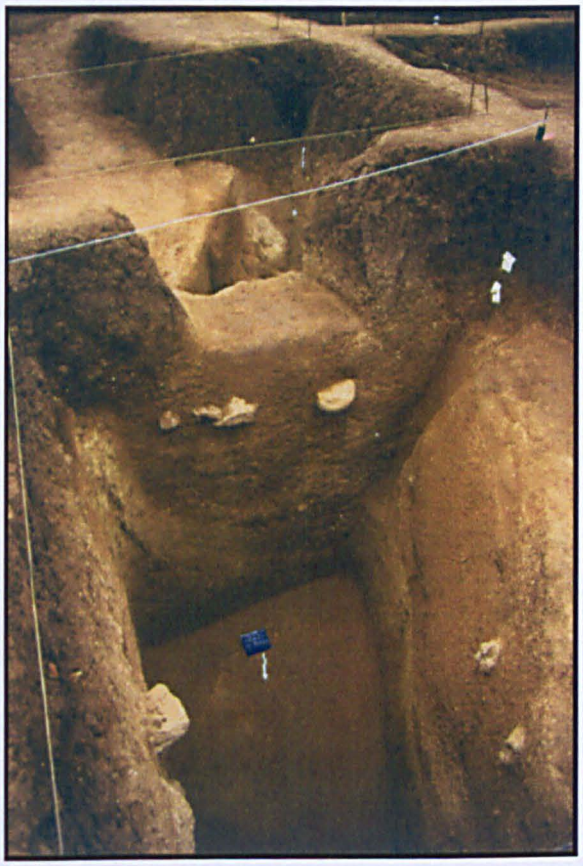


Plate 2.4 Makriyalos I Ditch Γ (from Pappa 2007).

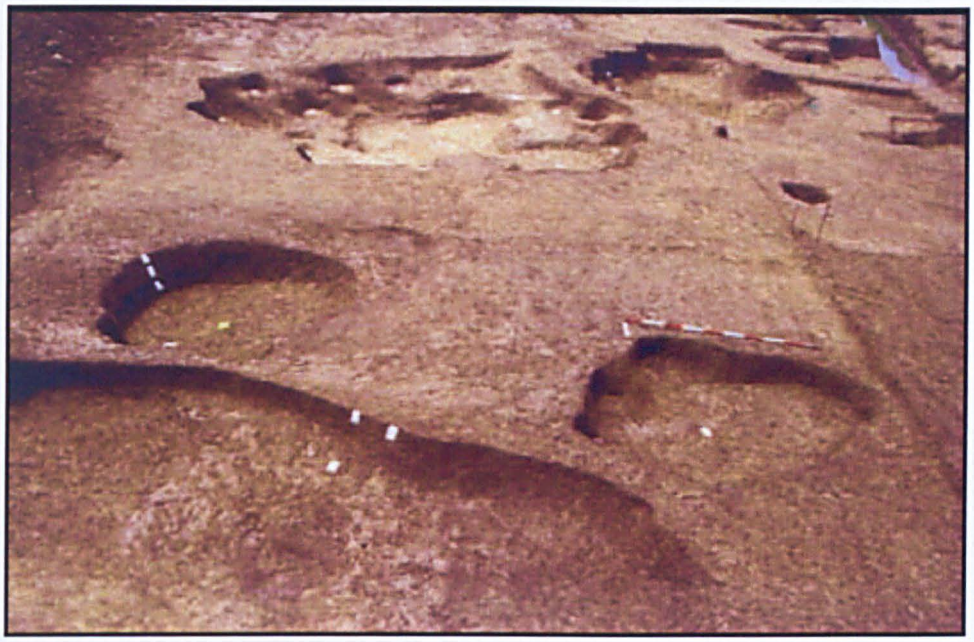


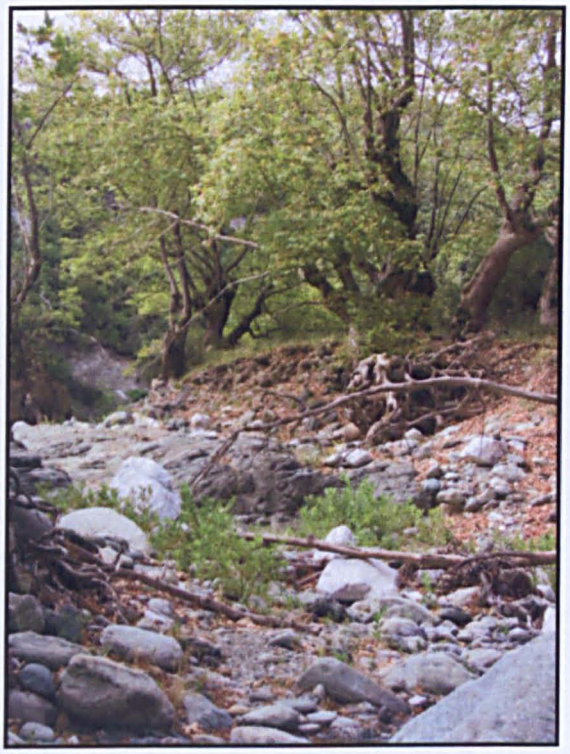
Plate 2.5 Makriyalos I habitation area with semi-subterranean buildings (from Pappa 2007).

Plate 2.6 Makriyalos I Borrow Pit 212 (from Pappa 2007).

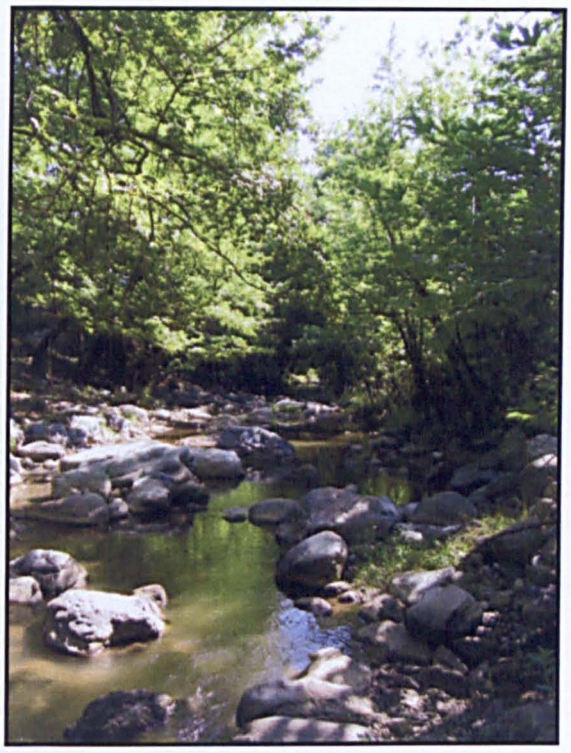
Plate 2.7 Makriyalos II habitation area. Sub-phase of pit-dwellings (from Pappa and Besios 1999a).

Plate 2.8 Makriyalos II habitation area. Sub-phase of rectilinear structures (after Pappa and Besios 1999a).

Plate 4.1 Possible quarried material (scale in cm).



(a)



(b)

(c)

(d)

Plate 4.2 Stream beds and raw material: a) Kalipefki stream, b) Petra-Gefyra stream c, d) different varieties of serpentinite from stream beds.

a)

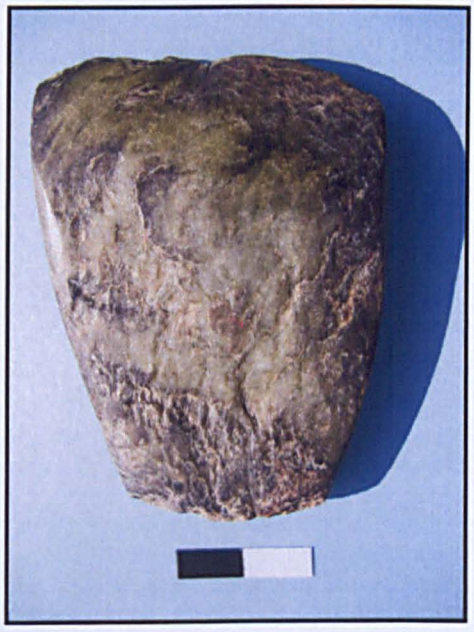
b)

c)

Plate 4.3 Quarry and raw material: a) modern serpentinite quarry near Moni Prodromou, located near Aliakmonas River, Macedonia b, c) varieties of serpentinite from the quarry.

a)

b)



c)

d)

Plate 4.4 Edge tools: a) gneiss, b) basalt with chromium veins, c) serpentinite, d) dolerite (scale in cm).

a)

b)

c)

Plate 4.5 Grinding slabs and grinders: a) grinding slab: sandstone with tightly cemented grains b) grinder: sandstone with tightly cemented grains c) grinder: marble (scale in cm).

a)

b)

c)

Plate 4.6 Mace-heads: a) 'talc', b) weathered andesite c) fossilised shell.

a)

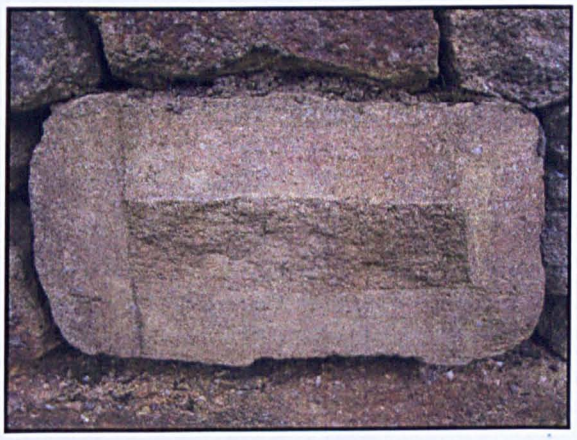
b) c)

Plate 4.7 Ornaments: a) pendant, b) marble ring, c) serpentinite bead (scale in cm).

a)

b)

c)



d)

Plate 4.8 Sawing evidence: a, b) AΓ 7608 showing a sawn surface c) AΓ 8272 blank that has been separated from the original nodule by splitting d) a modern example of this technique (scale in cm).

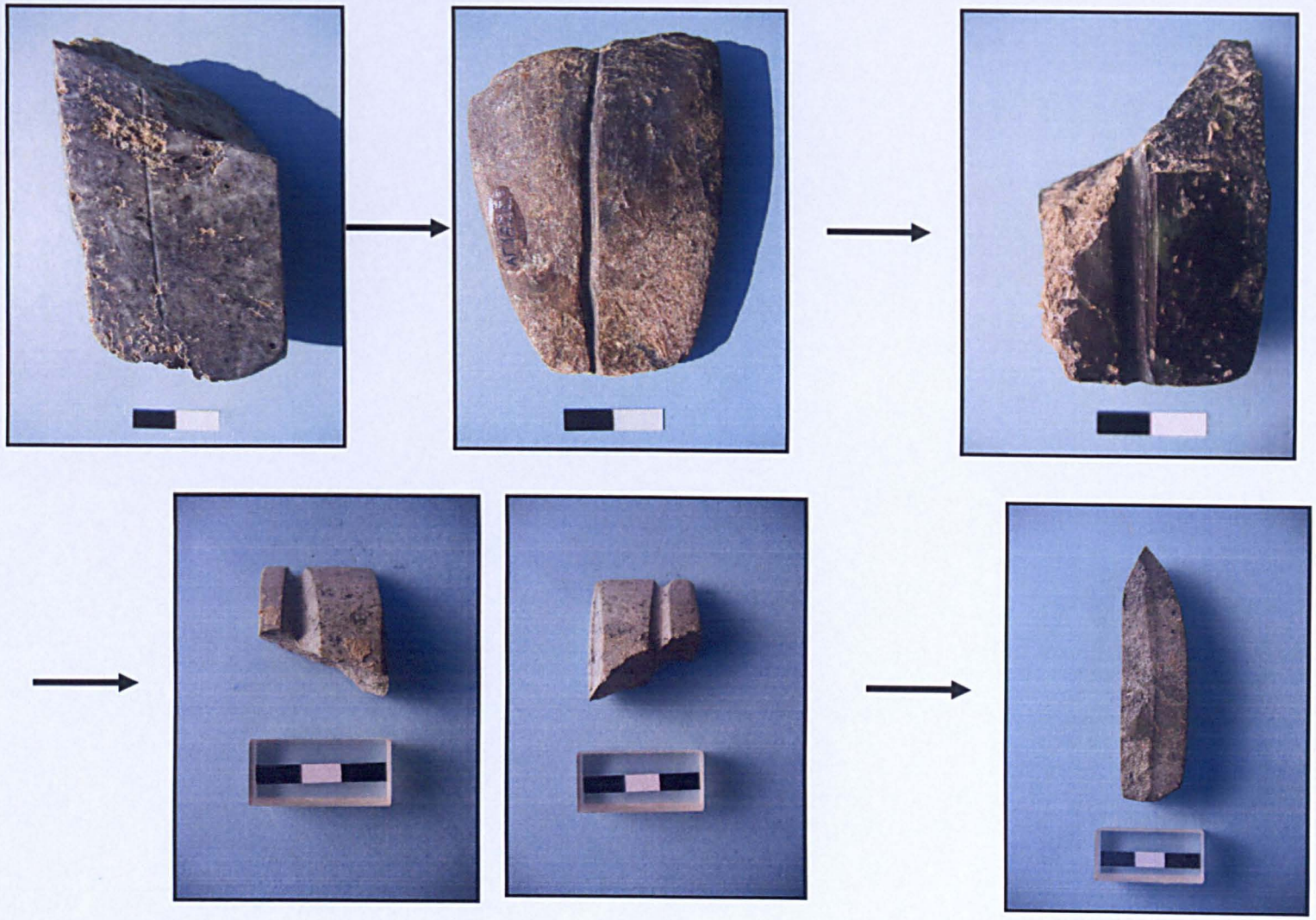
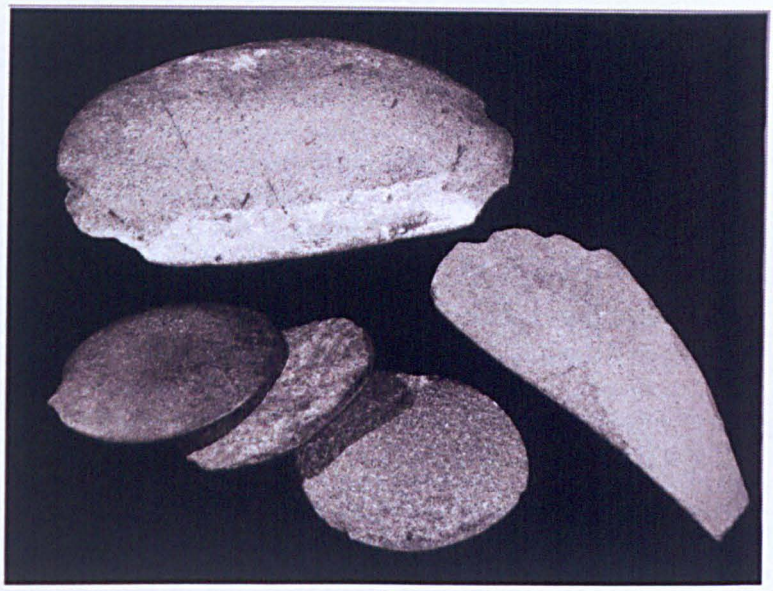
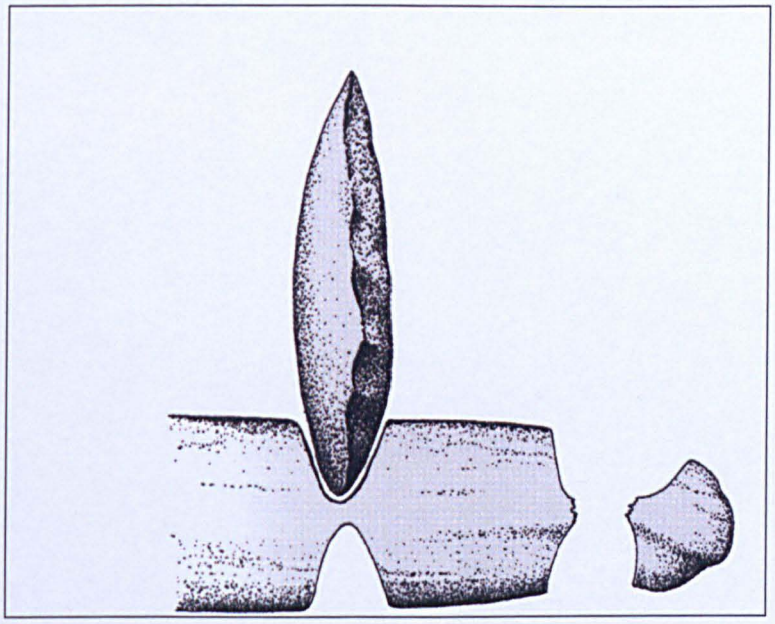


Plate 4.9 Sequence of steps of the sawing technique as indicated by unfinished examples in the Makriyalos assemblage (scale in cm).



a)



b)

Plate 4.10 Ethnographic examples of sawing: a) Maori sawing tools, b) reconstruction of sawing pounamu by creating two opposing grooves (after Beek with Maika Mason 2002).

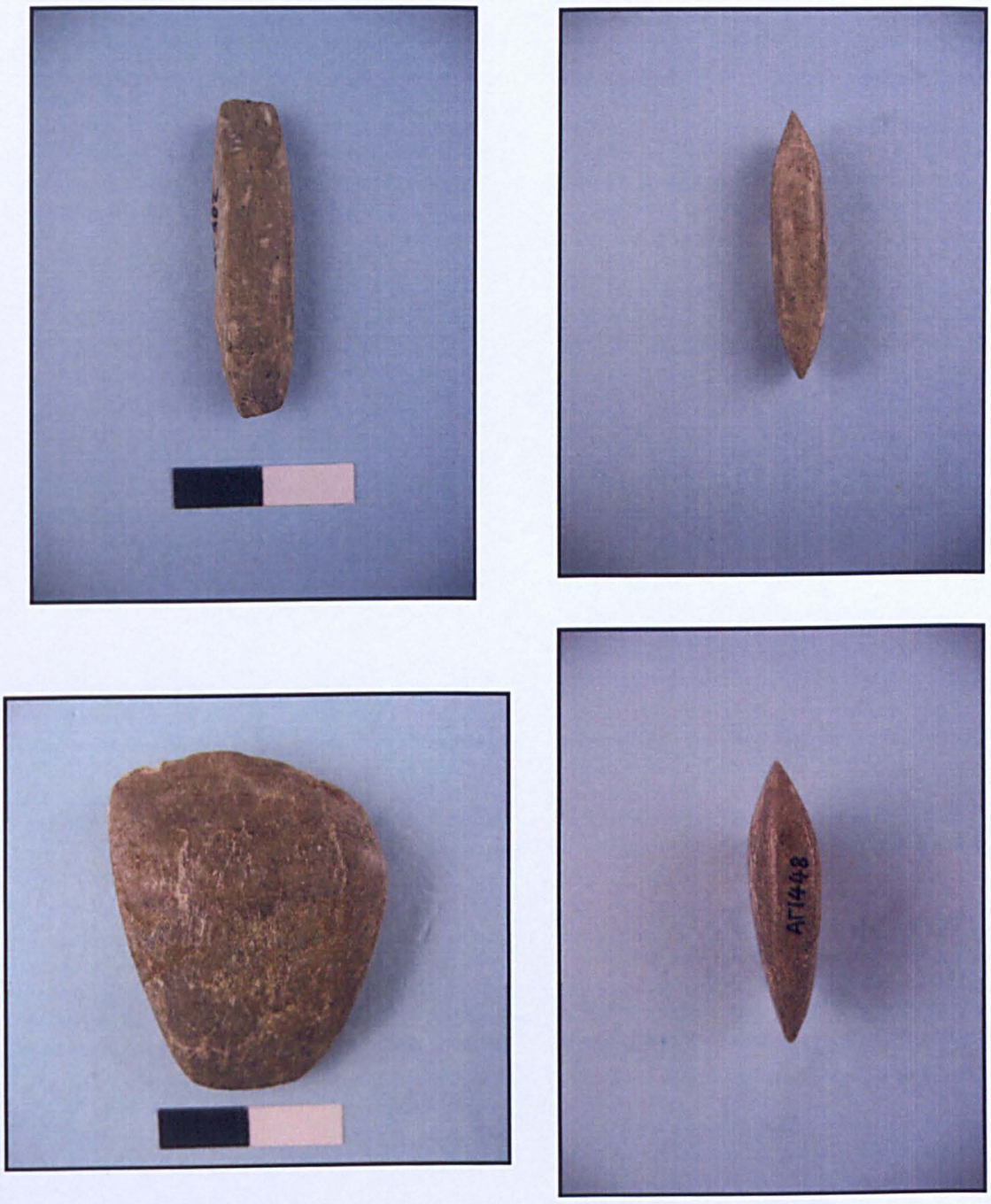


Plate 4.11 Edge tools with working edges on the bit and butt area (scale in cm).

Plate 4.12 Composite tool comprising an antler sleeve and the butt of the surviving edge tool (scale in cm).

Plate 4.13 Shaft-hole edge tool (scale in cm).

a)

b)

c)

d)

e)

Plate 4.14 Indirect evidence for hafting: a) rough surface on body created by pecking b, c) concavities on margins, d, e) vertical groove perpendicular to the long axis of the tool (scale in cm).

Plate 4.15 Edge tool with evidence of edge modification (resharpening). A bevel has been created by pecking.

Plate 4.16 Edge tool with evidence for sawing on body on both faces in order to repair fault (breakage) at the cutting edge (scale in cm).

a)

b)

c)

Plate 4.17 Grinding slabs: a) with flat use-face, b) with a rim c) with concave face (scale in cm).

Plate 4. 18 Pestles (scale in cm).

Plate 4.19 Mortars.

Plate 4. 20 'Drill base' (scale in cm).

Plate 4.21 Drill.

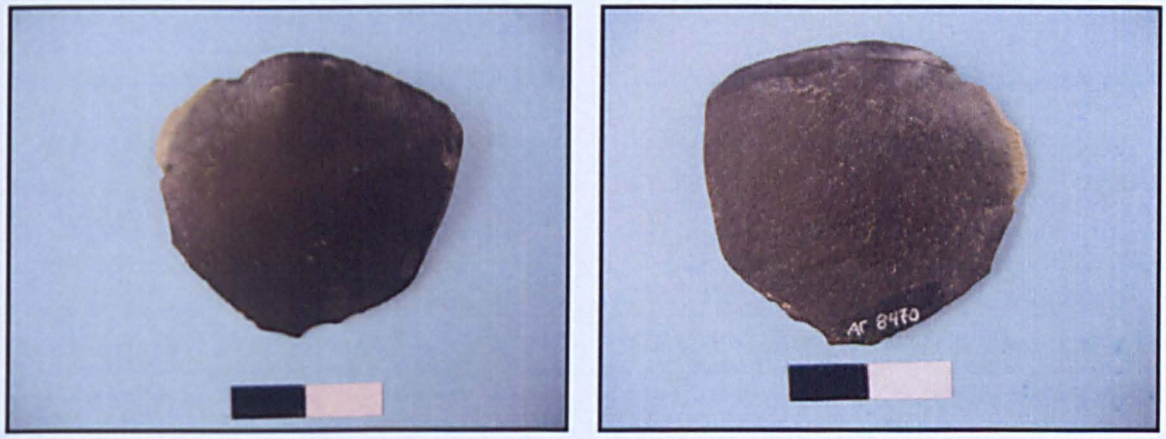
a)

b)

Plate 4.22 Drills.

Plate 4.23 Example of a weight.

a)



b)

Plate 4.24 Flakes from the modification of edge tools. Example A has irregularly retouched margins (scale in cm).

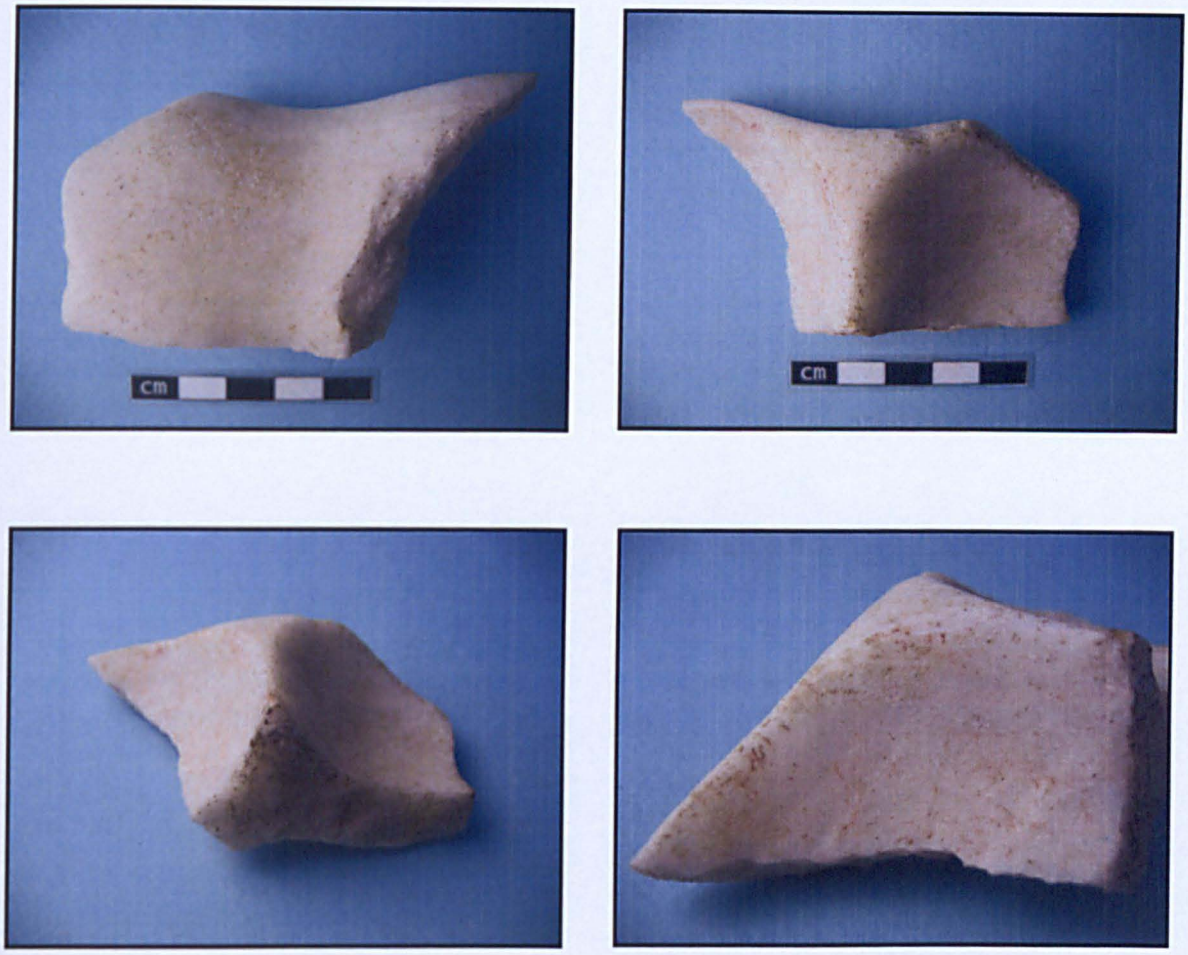


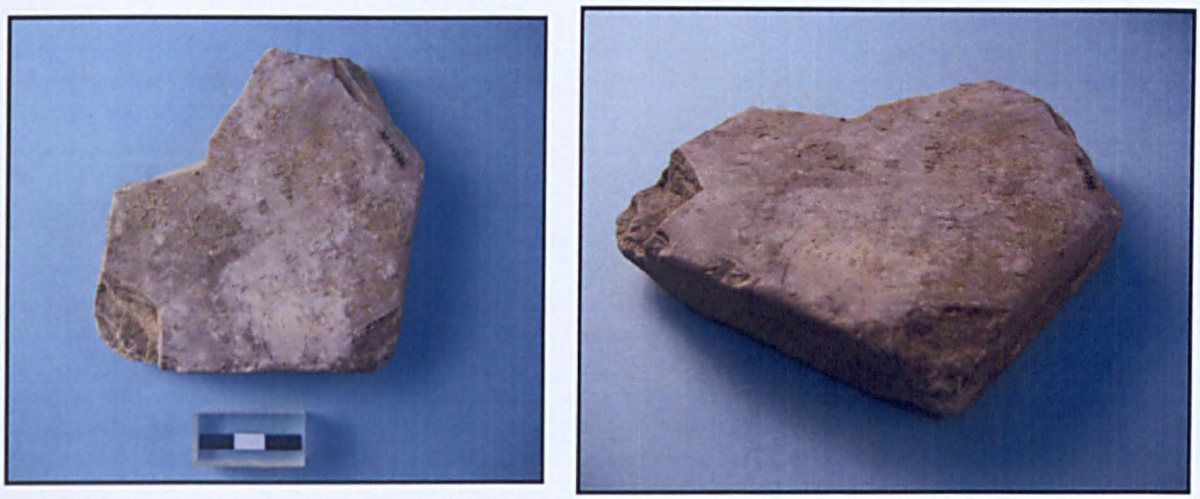
Plate 4.25 Double mortar with traces of red colour visible in the interior of the concave use-face.

Plate 5.1 Example of edge tool with curved cutting-edge, a result of deliberate modification by resharpening.

Plate 5.2 Edge tool with pointed use-face.

Plate 5.3 Edge tools showing chipping on their cutting edge.

Plate 5.4 Edge tool reused as a grooved abrader (groove located on dorsal surface of tool).



a)

b)

Plate 5.5 Grinding slabs used possibly in edge tool manufacture (polissoirs) a) marble, b) sandstone with tightly cemented grains (scale in cm).

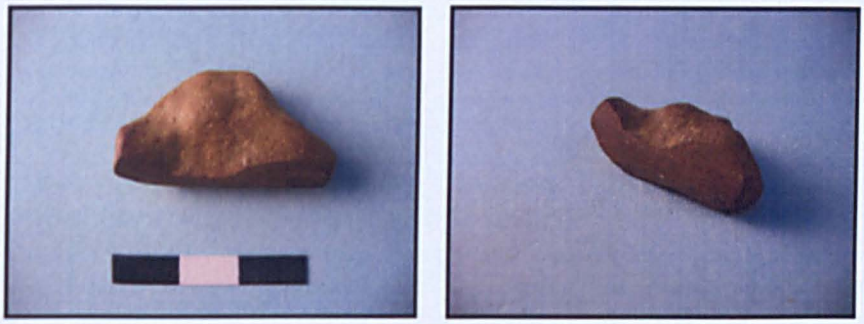
Plate 5.6 Grinder exhibiting traces of red colour on its use-face.

Plate 5.7 Grooved abrader with single groove (V-shaped).

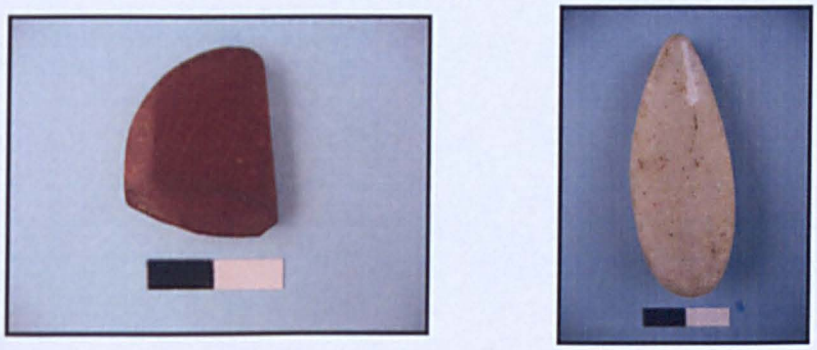
Plate 5.8 Grooved abrader with multiple grooves.

a)

b)



c)



d)

e)

Plate 5.9 a) Abrader, b-e) polishers (scale in cm).

Plate 5.10 Mace-head showing irregular percussive wear on its body (scale in cm).

Plate 5.11 Small-sized drill (ΑΓ 7310).

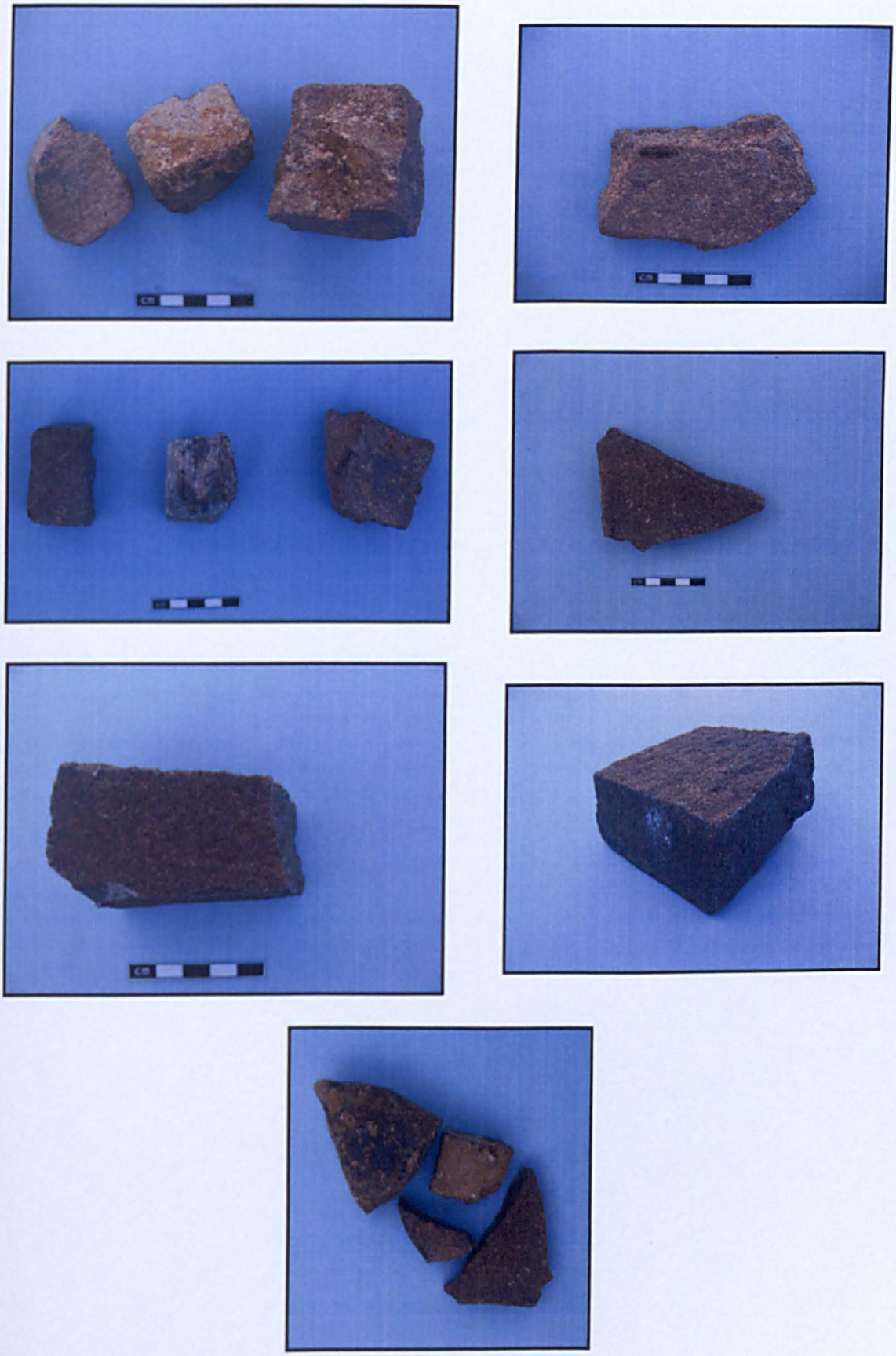


Plate 5.12 Fragmented grinding tools.

Plate 5.13 Schist slab used for cooking meat (S. France).

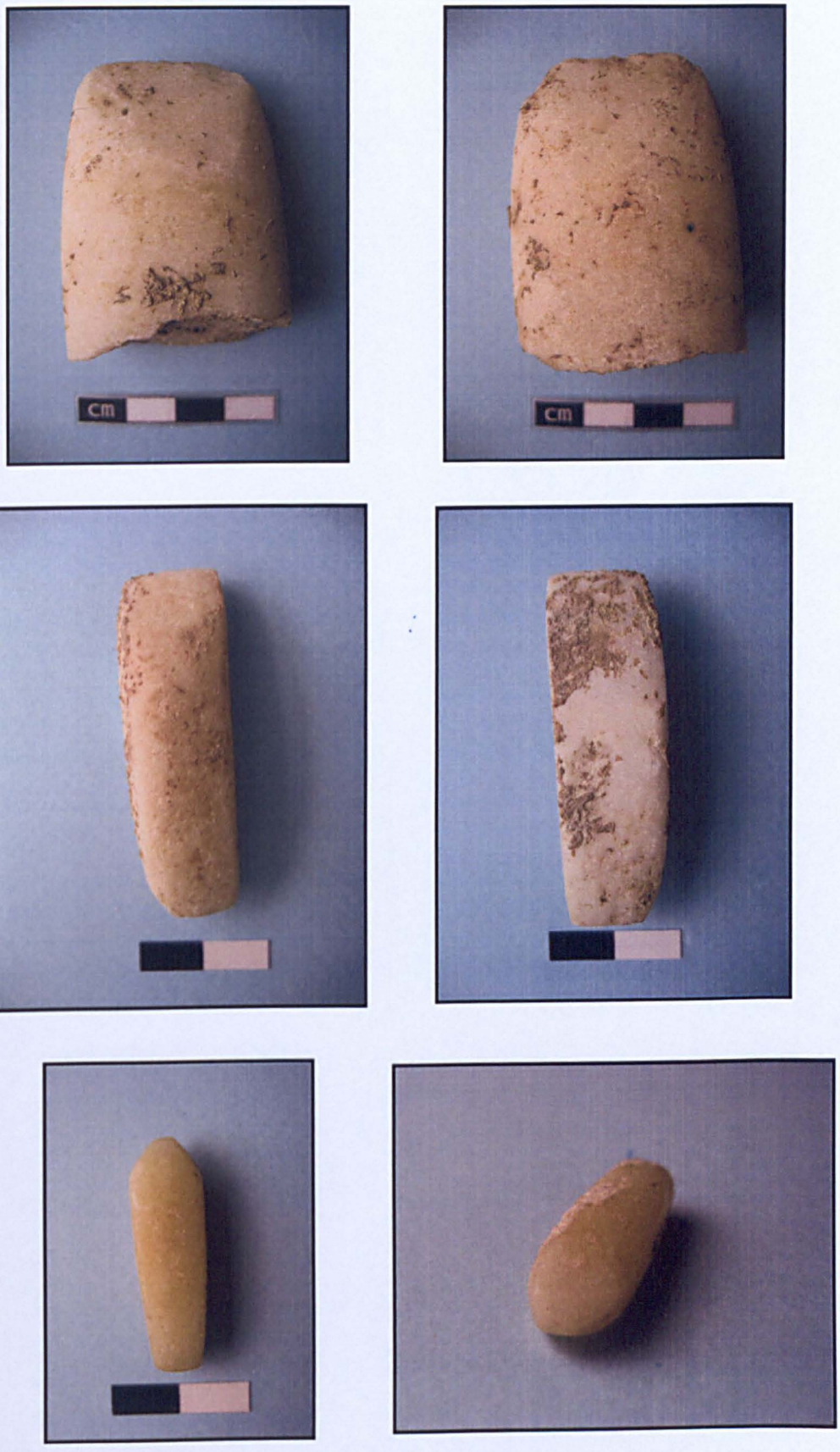


Plate 5.14 Marble edge tools (scale in cm).

Plate 5.15 Sandstone edge tool.

a)

b)

c)

Plate 5. 16 Contexts of grinding activities (source a & b: author, c) source Travel Photography by Sergio Pessolano, www.sergiopessolano.it).

Plate 5.17 Broken edge tool showing polishing in the damaged are (polishing indicated by arrows).

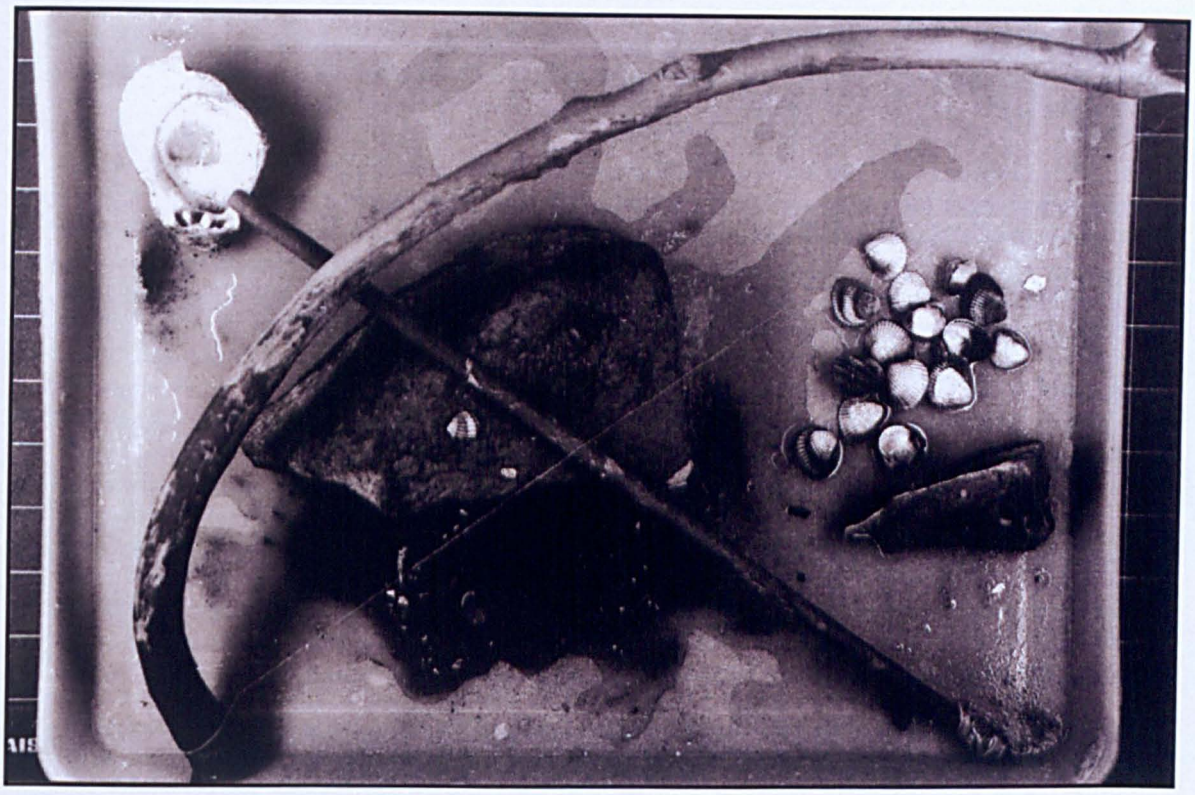


Plate 6.1 Experimental toolkit for the production of shell ornaments (from Miller 2002).

Plate 6.2 Pit 24 (from Pappa and Besios 1999b).