

SOM: Territoriality and the organization of technology during the Last Glacial Maximum in southwestern Europe

João Cascalheira (ICArEHB, University of Algarve, Faro, Portugal) jmcascalheira@ualg.pt

S1 - Blanks attribute frequency

	AMB II	AMB IV	AMB VI	PAP 4'00-4'75	PAP 4'75-5'25	PAP 5'25-6'25	VALM	VB A	VB B	VB C	Total
Platform type, n (%)											
Cortical	60 (11.3)	62 (11.7)	52 (12.9)	240 (9.2)	114 (17.5)	168 (19.4)	108 (17.7)	97 (20.6)	355 (21.2)	154 (18.6)	1410 (15.4)
Crushed	131 (24.7)	92 (17.4)	59 (14.6)	404 (15.5)	84 (12.9)	112 (12.9)	84 (13.7)	39 (8.3)	147 (8.8)	69 (8.3)	1221 (13.3)
Faceted	33 (6.2)	32 (6.1)	34 (8.4)	82 (3.2)	34 (5.2)	60 (6.9)	133 (21.8)	16 (3.4)	48 (2.9)	26 (3.1)	498 (5.4)
Plain	234 (44.2)	279 (52.8)	194 (48.1)	1474 (56.6)	314 (48.2)	394 (45.4)	200 (32.7)	221 (47.0)	817 (48.8)	416 (50.3)	4543 (49.6)
Other	72 (13.6)	63 (11.9)	64 (15.9)	402 (15.4)	106 (16.3)	134 (15.4)	86 (14.1)	97 (20.6)	307 (18.3)	162 (19.6)	1493 (16.3)
Cross section, n (%)											
Irregular	43 (8.1)	45 (8.5)	37 (9.2)	166 (6.4)	48 (7.4)	103 (11.9)	83 (13.6)	101 (21.5)	296 (17.7)	133 (16.1)	1055 (11.5)
Lenticular	24 (4.5)	48 (9.1)	23 (5.7)	117 (4.5)	70 (10.7)	94 (10.8)	32 (5.2)	70 (14.9)	247 (14.8)	82 (9.9)	807 (8.8)
Other	9 (1.7)	4 (0.8)	7 (1.7)	53 (2.0)	6 (0.9)	4 (0.5)	9 (1.5)	11 (2.3)	34 (2.0)	8 (1.0)	145 (1.6)
Trapezoidal	120 (22.6)	111 (21.0)	93 (23.1)	730 (28.1)	123 (18.9)	129 (14.9)	165 (27.0)	54 (11.5)	162 (9.7)	125 (15.1)	1812 (19.8)
Triangular	334 (63.0)	320 (60.6)	243 (60.3)	1536 (59.0)	405 (62.1)	538 (62.0)	322 (52.7)	234 (49.8)	935 (55.9)	479 (57.9)	5346 (58.3)
Profile, n (%)											
Curved	193 (36.4)	173 (32.8)	124 (30.8)	936 (36.0)	206 (31.6)	179 (20.6)	122 (20.0)	103 (21.9)	321 (19.2)	160 (19.3)	2517 (27.5)
Irregular	35 (6.6)	37 (7.0)	28 (6.9)	131 (5.0)	27 (4.1)	51 (5.9)	52 (8.5)	39 (8.3)	171 (10.2)	74 (8.9)	645 (7.0)
Straight	230 (43.4)	260 (49.2)	226 (56.1)	1267 (48.7)	361 (55.4)	572 (65.9)	355 (58.1)	286 (60.9)	1044 (62.4)	518 (62.6)	5119 (55.9)
Twisted	72 (13.6)	58 (11.0)	25 (6.2)	268 (10.3)	58 (8.9)	66 (7.6)	82 (13.4)	42 (8.9)	138 (8.2)	75 (9.1)	884 (9.6)
Dorsal pattern, n (%)											
Bidirectional	114 (21.5)	88 (16.7)	64 (15.9)	799 (30.7)	135 (20.7)	121 (13.9)	189 (30.9)	57 (12.1)	135 (8.1)	82 (9.9)	1784 (19.5)
Unidentifiable	76 (14.3)	77 (14.6)	53 (13.2)	364 (14.0)	123 (18.9)	173 (19.9)	98 (16.0)	100 (21.3)	451 (26.9)	185 (22.4)	1700 (18.5)
Unidirectional	324 (61.1)	340 (64.4)	264 (65.5)	1342 (51.6)	371 (56.9)	518 (59.7)	281 (46.0)	287 (61.1)	1039 (62.1)	529 (64.0)	5295 (57.8)
Other	16 (3.0)	23 (4.4)	22 (5.5)	97 (3.7)	23 (3.5)	56 (6.5)	43 (7.0)	26 (5.5)	49 (2.9)	31 (3.7)	386 (4.2)
Edge shape, n (%)											
Biconvex	19 (3.6)	28 (5.3)	31 (7.7)	154 (5.9)	64 (9.8)	64 (7.4)	44 (7.2)	17 (3.6)	82 (4.9)	41 (5.0)	544 (5.9)
Convergent	41 (7.7)	45 (8.5)	36 (8.9)	175 (6.7)	48 (7.4)	50 (5.8)	41 (6.7)	75 (16.0)	219 (13.1)	73 (8.8)	803 (8.8)
Divergent	91 (17.2)	89 (16.9)	82 (20.3)	331 (12.7)	148 (22.7)	178 (20.5)	143 (23.4)	102 (21.7)	333 (19.9)	206 (24.9)	1703 (18.6)
Irregular	139 (26.2)	160 (30.3)	110 (27.3)	824 (31.7)	149 (22.9)	285 (32.8)	239 (39.1)	135 (28.7)	516 (30.8)	255 (30.8)	2812 (30.7)
Parallel	174 (32.8)	141 (26.7)	106 (26.3)	836 (32.1)	177 (27.1)	206 (23.7)	131 (21.4)	112 (23.8)	429 (25.6)	208 (25.2)	2520 (27.5)
Other	66 (12.5)	65 (12.3)	38 (9.4)	282 (10.8)	66 (10.1)	85 (9.8)	13 (2.1)	29 (6.2)	95 (5.7)	44 (5.3)	783 (8.5)
Cortex %, n (%)											
0%	354 (66.8)	342 (64.8)	243 (60.3)	1705 (65.5)	364 (55.8)	418 (48.2)	381 (62.4)	289 (61.5)	912 (54.5)	486 (58.8)	5494 (59.9)
1-25%	65 (12.3)	76 (14.4)	53 (13.2)	394 (15.1)	99 (15.2)	128 (14.7)	85 (13.9)	52 (11.1)	157 (9.4)	88 (10.6)	1197 (13.1)
26-75%	84 (15.8)	70 (13.3)	72 (17.9)	337 (13.0)	106 (16.3)	232 (26.7)	104 (17.0)	61 (13.0)	288 (17.2)	138 (16.7)	1492 (16.3)
76-100%	27 (5.1)	40 (7.6)	35 (8.7)	166 (6.4)	83 (12.7)	90 (10.4)	41 (6.7)	68 (14.5)	317 (18.9)	115 (13.9)	982 (10.7)
Termination, n (%)											
Feathered	463 (87.4)	468 (88.6)	357 (88.6)	2321 (89.2)	574 (88.0)	786 (90.6)	521 (85.3)	361 (76.8)	1385 (82.7)	698 (84.4)	7934 (86.6)
Pointed	41 (7.7)	26 (4.9)	20 (5.0)	220 (8.5)	44 (6.7)	40 (4.6)	54 (8.8)	76 (16.2)	211 (12.6)	81 (9.8)	813 (8.9)
Other	26 (4.9)	34 (6.4)	26 (6.5)	61 (2.3)	34 (5.2)	42 (4.8)	36 (5.9)	33 (7.0)	78 (4.7)	48 (5.8)	418 (4.6)
Elongation, M (SD)	2.34 (1.16)	1.83 (0.86)	1.80 (0.88)	2.42 (1.12)	1.73 (0.94)	1.46 (0.67)	1.68 (0.87)	1.54 (0.67)	1.46 (0.71)	1.46 (0.72)	1.86 (1.00)
Flattening, M (SD)	4.40 (2.14)	4.52 (2.19)	4.04 (1.80)	4.02 (1.61)	4.48 (2.22)	4.27 (1.98)	4.29 (1.78)	3.92 (2.21)	3.95 (2.32)	3.98 (2.13)	4.12 (2.01)

S2 - Elongated blanks attribute frequency

	AMB II	AMB IV	AMB VI	PAP 4'00-4'75	PAP 4'75-5'25	PAP 5'25-6'25	VALM	VB A	VB B	VB C	Total
Platform type, n (%)											
Cortical	18 (6.1)	12 (6.7)	4 (3.4)	89 (5.7)	20 (11.8)	10 (8.3)	9 (5.1)	10 (10.8)	33 (11.4)	14 (9.8)	219 (6.9)
Crushed	79 (26.9)	44 (24.4)	28 (23.7)	273 (17.4)	23 (13.6)	24 (19.8)	32 (18.2)	13 (14.0)	44 (15.2)	18 (12.6)	578 (18.3)
Dihedral	5 (1.7)	5 (2.8)	4 (3.4)	31 (2.0)	3 (1.8)	0 (0.0)	3 (1.7)	6 (6.5)	12 (4.2)	10 (7.0)	79 (2.5)
Faceted	18 (6.1)	18 (10.0)	6 (5.1)	33 (2.1)	10 (5.9)	8 (6.6)	65 (36.9)	3 (3.2)	9 (3.1)	3 (2.1)	173 (5.5)
Other	32 (10.9)	15 (8.3)	15 (12.7)	212 (13.5)	27 (16.0)	10 (8.3)	22 (12.5)	21 (22.6)	63 (21.8)	28 (19.6)	445 (14.1)
Plain	142 (48.3)	86 (47.8)	61 (51.7)	933 (59.4)	86 (50.9)	69 (57.0)	45 (25.6)	40 (43.0)	128 (44.3)	70 (49.0)	1660 (52.6)
Cross section, n (%)											
Trapezoidal	78 (26.5)	41 (22.8)	45 (38.1)	588 (37.4)	65 (38.5)	32 (26.4)	80 (45.5)	19 (20.4)	48 (16.6)	33 (23.1)	1029 (32.6)
Triangular	207 (70.4)	135 (75.0)	67 (56.8)	940 (59.8)	100 (59.2)	87 (71.9)	90 (51.1)	68 (73.1)	214 (74.0)	103 (72.0)	2011 (63.8)
Other	9 (3.1)	4 (2.2)	6 (5.1)	43 (2.7)	4 (2.4)	2 (1.7)	6 (3.4)	6 (6.5)	27 (9.3)	7 (4.9)	114 (3.6)
Profile, n (%)											
Curved	118 (40.1)	65 (36.1)	45 (38.1)	665 (42.3)	79 (46.7)	57 (47.1)	57 (32.4)	20 (21.5)	68 (23.5)	38 (26.6)	1212 (38.4)
Irregular	17 (5.8)	6 (3.3)	4 (3.4)	72 (4.6)	5 (3.0)	4 (3.3)	6 (3.4)	4 (4.3)	9 (3.1)	4 (2.6)	131 (4.2)
Straight	114 (38.8)	82 (45.6)	54 (45.8)	627 (39.9)	62 (36.7)	41 (33.9)	71 (40.3)	55 (59.1)	171 (59.2)	78 (54.5)	1355 (43.0)
Twisted	45 (15.3)	27 (15.0)	15 (12.7)	207 (13.2)	23 (13.6)	19 (15.7)	42 (23.9)	14 (15.1)	41 (14.2)	23 (16.1)	456 (14.5)
Dorsal pattern, n (%)											
Bidirectional	93 (31.6)	60 (33.3)	33 (28.0)	681 (43.3)	87 (51.5)	38 (31.4)	96 (54.5)	10 (10.8)	51 (17.6)	28 (19.6)	1177 (37.3)
Other	27 (9.2)	7 (3.9)	5 (4.2)	137 (8.7)	13 (7.7)	15 (12.4)	17 (9.7)	9 (9.7)	34 (11.8)	10 (7.0)	274 (8.7)
Unidirectional	174 (59.2)	113 (62.8)	80 (67.8)	753 (47.9)	69 (40.8)	68 (56.2)	63 (35.8)	74 (79.6)	204 (70.6)	105 (73.4)	1703 (54.0)
Edge shape, n (%)											
Biconvex	7 (2.4)	9 (5.0)	2 (1.7)	81 (5.2)	14 (8.3)	8 (6.6)	9 (5.1)	2 (2.2)	21 (7.3)	7 (4.9)	160 (5.1)
Convergent	30 (10.2)	24 (13.3)	22 (18.6)	127 (8.1)	20 (11.8)	8 (6.6)	20 (11.4)	31 (33.3)	67 (23.2)	19 (13.3)	368 (11.7)
Divergent	19 (6.5)	19 (10.6)	9 (7.6)	115 (7.3)	13 (7.7)	6 (5.0)	16 (9.1)	11 (11.8)	30 (10.4)	12 (8.4)	250 (7.9)
Irregular	66 (22.4)	47 (26.1)	29 (24.6)	466 (29.7)	37 (21.9)	40 (33.1)	71 (40.3)	15 (16.1)	51 (17.6)	29 (20.3)	851 (27.0)
Parallel	123 (41.8)	66 (36.7)	48 (40.7)	643 (40.9)	75 (44.4)	55 (45.5)	60 (34.1)	34 (36.6)	119 (41.2)	74 (51.7)	1297 (41.1)
Other	49 (16.7)	15 (8.3)	8 (6.8)	139 (8.8)	10 (5.9)	4 (3.3)	0 (0.0)	0 (0.0)	1 (0.3)	2 (1.4)	228 (7.2)
Cortex %, n (%)											
0%	246 (83.7)	145 (80.6)	89 (75.4)	1270 (80.8)	125 (74.0)	76 (62.8)	141 (80.1)	57 (61.3)	199 (68.9)	104 (72.7)	2452 (77.7)
1-25%	31 (10.5)	19 (10.6)	16 (13.6)	212 (13.5)	31 (18.3)	25 (20.7)	16 (9.1)	19 (20.4)	39 (13.5)	20 (14.0)	428 (13.6)
26-75%	14 (4.8)	14 (7.8)	12 (10.2)	77 (4.9)	10 (5.9)	16 (13.2)	14 (8.0)	15 (16.1)	38 (13.1)	12 (8.4)	222 (7.0)
76-100%	3 (1.0)	2 (1.1)	1 (0.8)	12 (0.8)	3 (1.8)	4 (3.3)	5 (2.8)	2 (2.2)	13 (4.5)	7 (4.9)	52 (1.6)
Termination, n (%)											
Feathered	240 (81.6)	151 (83.9)	93 (78.8)	1325 (84.3)	138 (81.7)	103 (85.1)	135 (76.7)	41 (44.1)	170 (58.8)	100 (69.9)	2496 (79.1)
Pointed	39 (13.3)	21 (11.7)	15 (12.7)	205 (13.0)	26 (15.4)	17 (14.0)	34 (19.3)	46 (49.5)	107 (37.0)	33 (23.1)	543 (17.2)
Other	15 (5.1)	8 (4.4)	10 (8.5)	41 (2.6)	5 (3.0)	1 (0.8)	7 (4.0)	6 (6.5)	12 (4.2)	10 (7.0)	115 (3.6)
Elongation, M (SD)	3.11 (0.95)	2.75 (0.69)	2.88 (0.74)	3.13 (0.81)	3.00 (0.83)	2.71 (0.67)	2.79 (0.68)	2.45 (0.50)	2.55 (0.59)	2.59 (0.69)	2.96 (0.81)
Flattening, M (SD)	3.66 (1.18)	3.76 (1.18)	3.60 (1.14)	3.60 (1.10)	3.88 (2.29)	3.42 (1.15)	3.95 (1.30)	2.86 (1.31)	3.15 (1.43)	3.19 (1.28)	3.56 (1.28)

S3 - Cores attribute frequency

	AMB II	AMB IV	AMB VI	PAP 4'00-4'75	PAP 4'75-5'25	PAP 5'25-6'25	VALM	VB A	VB B	VB C	Total
Core type, n (%)											
Prismatic	7 (77.8)	10 (71.4)	8 (61.5)	84 (74.3)	6 (54.5)	3 (20.0)	18 (32.7)	12 (60.0)	11 (23.9)	18 (58.1)	177 (54.1)
Simple	1 (11.1)	2 (14.3)	2 (15.4)	24 (21.2)	4 (36.4)	10 (66.7)	26 (47.3)	5 (25.0)	33 (71.7)	9 (29.0)	116 (35.5)
Other	1 (11.1)	2 (14.3)	3 (23.1)	5 (4.4)	1 (9.1)	2 (13.3)	11 (20.0)	3 (15.0)	2 (4.3)	4 (12.9)	34 (10.4)
Platforms, n (%)											
1 Platform	2 (22.2)	5 (35.7)	8 (61.5)	40 (35.4)	8 (72.7)	7 (46.7)	20 (36.4)	7 (35.0)	32 (69.6)	20 (64.5)	149 (45.6)
2 crossed platforms	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.7)	1 (1.8)	0 (0.0)	0 (0.0)	1 (3.2)	3 (0.9)
2 isolated platforms	0 (0.0)	1 (7.1)	0 (0.0)	3 (2.7)	1 (9.1)	1 (6.7)	9 (16.4)	5 (25.0)	8 (17.4)	1 (3.2)	29 (8.9)
2 oposed and 1 isolated platforms	0 (0.0)	1 (7.1)	0 (0.0)	3 (2.7)	0 (0.0)	0 (0.0)	3 (5.5)	1 (5.0)	1 (2.2)	0 (0.0)	9 (2.8)
2 oposed platforms	5 (55.6)	6 (42.9)	2 (15.4)	64 (56.6)	1 (9.1)	5 (33.3)	14 (25.5)	4 (20.0)	5 (10.9)	6 (19.4)	112 (34.3)
Multiple platforms	2 (22.2)	1 (7.1)	3 (23.1)	3 (2.7)	1 (9.1)	1 (6.7)	8 (14.5)	3 (15.0)	0 (0.0)	3 (9.7)	25 (7.6)
Core section, n (%)											
Circular	1 (11.1)	2 (14.3)	1 (7.7)	9 (8.0)	3 (27.3)	0 (0.0)	3 (5.5)	3 (15.0)	0 (0.0)	1 (3.2)	23 (7.0)
Irregular	3 (33.3)	5 (35.7)	4 (30.8)	43 (38.1)	5 (45.5)	2 (13.3)	24 (43.6)	5 (25.0)	13 (28.3)	16 (51.6)	120 (36.7)
Quadrangular	5 (55.6)	4 (28.6)	6 (46.2)	39 (34.5)	2 (18.2)	10 (66.7)	22 (40.0)	10 (50.0)	21 (45.7)	11 (35.5)	130 (39.8)
Triangular	0 (0.0)	3 (21.4)	2 (15.4)	22 (19.5)	1 (9.1)	3 (20.0)	6 (10.9)	2 (10.0)	12 (26.1)	3 (9.7)	54 (16.5)
Blank type, n (%)											
Elongated product	7 (77.8)	7 (50.0)	5 (38.5)	83 (73.5)	3 (27.3)	6 (40.0)	6 (10.9)	1 (5.0)	9 (19.6)	7 (22.6)	134 (41.0)
Flakes	1 (11.1)	2 (14.3)	6 (46.2)	10 (8.8)	7 (63.6)	9 (60.0)	32 (58.2)	11 (55.0)	27 (58.7)	10 (32.3)	115 (35.2)
Mixed	1 (11.1)	5 (35.7)	2 (15.4)	20 (17.7)	1 (9.1)	0 (0.0)	17 (30.9)	8 (40.0)	10 (21.7)	14 (45.2)	78 (23.9)
Cortex %, n (%)											
0%	1 (11.1)	5 (35.7)	3 (23.1)	17 (15.0)	7 (63.6)	2 (13.3)	7 (12.7)	7 (35.0)	10 (21.7)	7 (22.6)	66 (20.2)
1-25%	4 (44.4)	4 (28.6)	5 (38.5)	41 (36.3)	1 (9.1)	3 (20.0)	19 (34.5)	7 (35.0)	19 (41.3)	12 (38.7)	115 (35.2)
26-75%	4 (44.4)	5 (35.7)	5 (38.5)	49 (43.4)	3 (27.3)	10 (66.7)	28 (50.9)	6 (30.0)	16 (34.8)	9 (29.0)	135 (41.3)
76-100%	0 (0.0)	0 (0.0)	0 (0.0)	6 (5.3)	0 (0.0)	0 (0.0)	1 (1.8)	0 (0.0)	1 (2.2)	3 (9.7)	11 (3.4)
Weight, M (SD)	40.3 (34.0)	37.6 (21.4)	31.7 (19.2)	14.3 (10.0)	11.5 (6.2)	16.2 (4.7)	30.2 (21.2)	25.1 (29.3)	19.5 (14.8)	22.3 (12.4)	21.5 (18.1)
Elongation, M (SD)	1.20 (0.30)	1.30 (0.52)	1.12 (0.43)	1.35 (0.37)	1.01 (0.33)	1.24 (0.44)	0.95 (0.37)	1.01 (0.37)	1.03 (0.39)	1.20 (0.44)	1.17 (0.42)
Flattening, M (SD)	1.54 (0.36)	1.43 (0.56)	1.34 (0.30)	1.41 (0.45)	1.27 (0.48)	1.51 (0.68)	2.04 (0.78)	1.74 (0.71)	1.77 (0.72)	1.49 (0.52)	1.59 (0.64)