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SURVEYS AND EXCAVATIONS IN THE ROHRI HILLS (SINDH -PAKISTAN): A PRELIMINARY REPORT ON THE 1993 CAMPAIGN

PREFACE

The aim of this paper is to give preliminary information on the results of the first year of investigations carried out by the Italo-Pakistani Rohri Hills Joint Project (Biagi and Shaikh, 1993) in the area of Shadee Shaheed. For several years, it has been known that the Rohri Hills were exploited by Harappan flintworkers (Allchin, 1976; 1979) and that some specific types of artefacts from the hills were traded to the most important cities of the Indus Valley (Allchin and Allchin, 1982: 183; Cleland, 1987; Dales, 1989; Inizan and Lechevallier, 1990). This article considers the results from the survey and excavations carried out in January 1993.

THE 1993 SURVEY

The Rohri survey was carried out between January 6th and 26th. The campaign centred on the hills in the neighbourhood of the shrine of Shadee Shaheed (fig.1) and covered an area of some 2.5 square kilometers (fig.2). It led to the discovery of 794 structures, mainly pits, pits associated with workshops and single workshops, scattered along the edges of the westernmost terraces. A complete list of the structures so far recorded is given in Appendix A. A great number of archaeological features had already been observed in the central part of the hills during a preliminary visit in January 1992, and the presence of Harappan quarries in the surroundings of Shadee Shaheed had been noted also during the survey of March 1986 (Biagi and Cremaschi, 1991).

The territory of fig.2 was surveyed by a team of three persons. Each feature (pit, trench, platform, workshop, etc.) was numbered with waterproof red paint and recorded. Every structure with peculiar characteristics was also accurately described and photographed. The 1993 fieldwork produced a first typological list of the structures and contributed to a preliminary understanding of the various archaeological complexes according to the different areas of investigation. Unfortunately some parts of the eastern terrace covered by the survey had already been destroyed for industrial purposes, as can be seen from fig.2.

The flint quarries and workshops, mainly scattered along the edges of the mesas, are sometimes grouped together. They consist of single pits with round openings (fig.3), or aligned pits or trenches often associated with workshops or groups of artefacts, mainly waste flakes, as well as traces of scratchings along the terrace edge. The prehistoric quarrying produced heaps of limestone blocks, visible from great distances, that give the mesas an unnatural, weaving profile.

While only a restricted number of structures are distributed along the northern edge of the terrace in question, one of its south-western fringes produced an extreme thick concentration (fig.2) of structures and

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workshops, almost covering its entire surface. Rectangular or square-walled platforms are also documented for this area (fig.4); they are partly covered with heaps of flint *debitage*.

Some parts of the surveyed territory, where the natural flint nodules lie on the surface, show no traces of quarrying activities, but only small groups of flint scatters, mainly composed of large and medium-sized waste flakes. Only a few pits contained potsherds of painted and unpainted Harappan ware.

The flint workshops have preliminarily been subdivided into the following types: 1) scatters of *debitage*, characterised by large amounts of waste flakes; 2) more articulated workshops with scatters of long blade cores and other debris including small pressure-reduction technique, subconical narrow bladelet cores (bullet-cores). Another case is represented by 3) single workshops surrounding empty spaces, probably to be related to various stages of the working chain (for example: preliminary knapping of the nodules, flaking of the pre-cores, and the presence of decortication flakes, subconical, opposite and adjacent blade cores obtained with the percussion technique, subconical, narrow bladelet cores or bullet-cores obtained by pressure). One single workshop had three squared limestone blocks most probably employed as seats by the prehistoric knappers. Decortication areas were also observed along the edge of some workshops.

THE EXCAVATION OF SITE 58

Site 58, lay slightly in the interior of the terrace (fig. 5). It consisted of flint scatters covering some 150 square metres. Some well-defined concentrations of tools were distributed around an almost empty, oval-shaped spot of eolic sand very poor in flint artefacts and limestone pebbles. The site was subdivided into square metres, each labelled by one letter and one number. The grid was oriented in a N-S direction with the numbers on the N-S axis and the letters on the E-W one (fig. 6 and 7). Before collecting the finds, each square metre was photographed (fig. 8). All the artefacts lay on the surface, sometimes covered with a few centimetres of eolic sand. A small trial-trench revealed that a sterile deposit was just beneath the surface with the archaeological material.

THE FLINT ASSEMBLAGE FROM SITE 58

Methods of recovery and analysis

The flint industry from site 58 was collected square metre by square metre. Its total weight is 101.73 kilograms (fig. 7). The assemblage includes 211 cores, 6903 blades and flakes, 42 core trimming flakes and 10 instruments. The flint has slightly weathered surfaces of brown colour (10YR 4/3).

It has been studied according to these criteria:

- 1) space distribution of the cores, of the unretouched artefacts and of the raw material weight.
- 2) typometrical and lithotechnical analyses of the complete artefacts, of the fragments and of the blade negatives taken from the cores. The study has been conducted subdividing the finds from two main areas (workshop 1 and workshop 2) according to point 1);
- 3) comparison of the data and considerations of the various technological aspects.

1) Space distribution

The analysis has the scope to verify the presence/absence of activity areas inside the site or of different workshops. As regards the core distribution, two different clusters have been recognized (fig.9). They have been called workshop 1 and workshop 2.

The larger workshop 1 covers the squares from 1 to 10 and B to H. The main cluster falls into E5 and the surrounding squares. Workshop 2, in squares 2-9 and GG-A, is composed of two groups of cores separated by strip 6 from which no cores have been recorded. Workshop 1 and 2 are separated by the above-mentioned spot of eolic sand. Also the histograms of the artefacts show higher density in the southern part of the site (fig. 11). This might indicate the presence of a specific area where small-sized artefacts were manufactured.

2) Typometry and lithotechnic

An analysis was done following Bagolini's method (Bagolini, 1968), that is measuring the length, width and thickness of the complete, unretouched artefacts. The length/width diagrams and histograms of figs. 12-14 show the characteristics of the chipping modules. The elongation (length/width) and carination (length or width/thickness) indexes have been calculated for each workshop (figs. 15 and 16) and for the entire site 58 (fig.17).

The diagrams of the unretouched artefacts of workshop 1 show a higher percentage of flakes (32.24%) followed by blade-flakes (22.63%) (fig.15, top). The blade index is 19.87. The carination diagram has a very high percentage of flat artefacts (48.55%) followed by very flat (22.89%) and thick (17.5%) types (fig.15, bottom). The assemblage is composed of normoliths (32.6%), hyper-microliths (30.8%), macroliths (23.7%) and microliths (12.8%) in descending order (fig. 18)

The diagrams of the unretouched artefacts of workshop 2 show a predominance of flakes (30.43%) and wide flakes (22.72%) (fig.16, top). The blade index is 16.84. The carination diagram indicates a very high percentage of flat artefacts (50.3%) followed by very flat (17.85%) and thick (16.02%) tools (fig.16, bottom). The assemblage consists of hypermicroliths (40.6%), normoliths (27.4%), macroliths (21.9%) and microliths (10.2%) in descending order.

Cores and instruments

Site 58 yielded 211 cores (fragments included). They have been measured to develop the diagrams of fig. 19, from which two distinct clusters can be observed. Workshop 1 has almost exclusively large cores (fig.19A), while workshop 2 has a higher number of small, narrow bladelet cores (fig. 19B). The distribution areas of these two classes are even better represented in the diagram of fig. 19C, developed from the data of both workshops together.

Most of the cores are, blade or bladelet types. Two main classes have been recognized, according to the measurements represented in the diagrams of fig. 19, namely: 1) large cores and 2) small cores.

The large cores are subconical and of more or less regular shape, with flat striking platform (fig.20). The blades have been struck off with the percussion technique from one or two surfaces. Broken specimens are relatively frequent (fig. 21, 2). Many have one large flaked surface indicating the preliminary pre-core retouch (fig.21, 1). The technique employed for obtaining the pre-cores is illustrated in figs. 22). Only a few specimens have opposite (fig.23) or adjacent platforms (fig.24), whilst in a few cases, flakes have been refitted to the original nodule (fig.25) or core surfaces (fig.26 and 27).

The small cores are of the so-called bullet type (fig.28 and 29/1 and 2). They have very regular, elongated shape with prepared striking platform. They have been obtained with pressure-flaking from regular, bifacial pre-cores such as those of fig. 30, according to the technique described by Biagi and Cremaschi (1991: 100).

The assemblage from site 58 includes only two medium-sized specimens (fig.31/2 and 3).

The instruments are represented by one long end scraper (fig 29/3), two truncation on flake (fig.

29/4 and 5), one blade with simple, inverse retouch, with sinuous edge (fig. 29/6), two tanged blades (fig. 29/7 and 8), one notched blade (fig. 29/9), one backed retouched flakelet (fig. 29/10) one side scraper with simple inverse retouch (fig. 29/11) and one transverse scraper on a flake with a thick patina of yellowish red colour (5YR 4/6) (fig. 29/12)

The flint assemblage from site 58 is almost exclusively composed of cores, waste flakes and blades. This indicates that the site was connected with the production of semi-worked artefacts ready to be "exported". The remarkable number of unexhausted or partly utilized cores and the thousands of unretouched artefacts collected from the surface, indicate that only a very specialized category of artefacts of well-defined dimension was manufactured for exportation. The diagrams of figs. 32 and 33 and the histogram of fig. 34 represent the measurements taken from three classes of artefacts, namely blade fragments (A), complete blades (B) and negatives of blades measured from the cores (C). The length/width diagrams and the histograms demonstrate that the complete blades, comprised 80-125 millimetres long, are almost absent from the site. This indicates that the purpose of Site 58 had been the production of blades at least 80 millimetres long.

THE EXCAVATION OF SITE 59

Site 59 is located some 70 metres to the NNE of site 58. It belongs to a group of structures including pits and workshops, lying close to the edge of the mesa. The site comprises one large circular pit and one workshop, located just to the SW of the pit (fig. 35). The research was restricted to the excavation of a trial trench, 5.40 metres long and 1 metre wide, crossing the pit in NW-SE direction and to the collection of the flint tools from the central area of the workshop. The trench (fig. 36) revealed the following stratigraphy: 1) layer of sand of brown colour (7,5YR 5/4), some 65-70 centimetres thick, rich in limestone blocks, derived from the excavation of the quarry in Harappan times; 2) layer of eolic sand of pale brown colour (10YR 6/3), 40 centimetres thick; this layer is separated from layer 3), by a thin level of land snails. Layer 3) of light yellowish brown colour (10YR 6/4), some 15 centimetres thick, lies above the bedrock.

The excavation gave no archaeological finds with the exception of a discontinuous level of flints in the northern edge of the trench, just above the bedrock, probably indicating the existence of a previous workshop. A few flint artefacts were also collected from the bottom of layer 2, in the southern edge of the trench (fig. 37).

The excavation demonstrated that the quarry had been opened to reach the vein of flint nodules some 60-70 centimetres below the platform of the mesa. The limestone blocks resulting from the deepening of the pit were heaped together around the northern side of its opening. The pit was later abandoned and some of the block fell down and partly refilled it. The archaeological sequence is closed by a thick layer of eolic sand that started to accumulate after the abandonment of the quarry.

THE FLINT ASSEMBLAGE FROM SITE 59

Methods of recovery and analysis

The flint workshop located to the SE of the pit was investigated over a surface of only 2 square metres. The deposit was some 15 centimetres thick. The surface finds were collected independently from those of the lower level (level 1) composed of sand lying on the rubified bedrock, rich in not patinated artefacts. The Table below summarizes the main characteristics of the assemblage from site 59 collected by square metre and level.

	C2 surface	C2 level 1	C3 surface	C3 level 1
Weight (grams)	3170	5820	2870	5100
Cores (n°)	2	-	4	-
Unretouched artefacts, complete (n°)	102	538	235	462
Unretouched artefacts, broken (n°)	484	2737	482	2762
Trimming flakes (n°)	5	10	2	13

Typometry and lithotechnic

The unretouched artefacts have been studied following Bagolini's method (Bagolini, 1968). The diagrams of fig. 38 -40 have been developed from the measurements taken from the complete, unretouched finds from the surface and from level 1. The flakes (31.12%) are predominant in the surface level, followed by wide flakes (21.75%) and blade-flakes (19.03%); the blade index is 19.34 (fig. 41). Level 1 has a high percentage of flakes (27.07%) followed by blade-flakes (17.74%) and blades (17.17%). Its blade index is 30.99. The flat artefacts from the surface level have a high percentage (48.34%). They are followed by the very flat ones (23.62%); while flat artefacts prevail in level 1 (43.55%); followed by very flat (35.37%) tools (fig.42).

It is important to note the high number of unretouched narrow bladelets from level 1 (12.9%) and that of the very flat tools. The number of narrow bladelets (fig.44/1-16) is lower in the surface level (3.93%) as shown in figs. 38-43. This might suggest that some activity connected with the chipping of bladelets from small subconical and bullet-cores was practised in square C2 and C3. The cores were probably prepared in nearby area of the same site, so far unexcavated. The characteristics of this site will be more clear as soon as the structure is excavated on a wider surface.

The macroliths predominate in the surface level (32.3%) and the normoliths in Level 1 (44.1%). The diagrams also show that the small artefacts are more abundant in Level 1 (fig.45).

CONCLUSIONS

An incredible number of structural remains related to the quarrying of flint were discovered during the 1993 survey on the hills surrounding Shadee Shaheed. Two of these sites have been excavated. They provided the first detailed information on the extraction and flint-knapping activities carried out in the region. Some of the results obtained from the study of the flint assemblages from these nearby sites (58 and 59) are summarized in the histograms of fig. 46. It is evident from these data that the production was centred on the manufacture of unretouched artefacts with different characteristics. Site 58, rich in cores, was related to the preparation of narrow blades and blades of normolithic and hypermacrolithic size. The distribution of specific types of cores should indicate that it was organized into two separate workshops. Site 59, on the contrary, might have been connected with the production of blades and narrow blades of normolithic size. The comparison between the two assemblages is not easy mainly because site 58 was excavated in full, while site 59 was only tested over a surface of 2 square metres. Nevertheless the

differences between the two industries are undoubtedly to be attributed to the various stages of the working chain that took place in that area of the hills.

Apart from the observation derived from the study of the two sites, the general impression is that the archaeological area visited in January 1993, shows no traces of retouched instruments and that structural remains attributable to hut foundations or houses are totally absent. All the sites so far discovered seem to be attributable to the same large-scale industrial activity that took place, broadly speaking, in Harappan times. This consideration is mainly supported by the presence of Harappan potsherds on the surface of some of the pits. At present it is not possible to outline a defined chronology of the periods of exploitation of the various quarries, even though one might suggest that the extractive activity began in pre-Harappan times. Preliminary observations made on a small collection of artefacts from the sites of Mohen-jodaro, Harappa and Kot Diji, do not suggest strong differences between the unretouched artefacts from these industries and those from the Rohri Hills around Shadee Shaheed. In fact the only variation consists in the quality of the raw material employed for the chipping of the artefacts that seem to vary according to the flint source exploited. This datum might help understanding the chronology of the exploitation of the several raw material outcrops distributed over a very wide territory, between Rohri, to the north and the neighbourhood of territory, between Rohri, to the north and the neighbourhood of Kot Diji, to the South.

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Appendix A

Archaeological features recorded during the 1993 survey. The features are listed in progressive order of discovery from 1 to 794.

<u>Number</u>	<u>Feature</u>
1	Long trench with workshops
2	Single pit and workshop
3	Single pit
4	Single pit
5	Single pit
6	Composite pit
7	Single pit and two workshops
8	Single pit and artefacts
9	Single pit
10	Single pit and workshop
11	Single pit and artefacts
12	Single pit and artefacts
13	Single pit
14	Single pit and artefacts
15	Single pit and artefacts
16	Single pit and small workshop
17	Single pit and workshop
18	Composite pit
19	Composite pit and workshop
20	Trench and artefacts
21	Single pit and flint artefacts
22	Single pit and artefacts
23	Trench, artefacts and small workshop
24	Trench, artefacts and small workshop
25	Composite pit, artefacts and two small workshops
26	Single pit and artefacts
27	Single pit and small workshop
28	Single pit, artefacts and two small workshops
29	Single pit, and two workshops
30	Composite pit, artefacts and three small workshops
31	Long trench, artefacts and two workshops
32	Single pit, and artefacts
33	Single pit and workshop
34	Single pit and small workshop
35	Trench and artefacts
36	Single pit and small workshop
37	Single pit and artefacts
38	Single pit and artefacts
39	Single pit, artefacts and small workshop
40	Single pit, artefacts and small workshop
41	Long trench and artefacts
42	Trench or line of pits partly damaged and small workshops
43	Single pit and artefacts and two small workshops
44	Single pit and artefacts
45	Single pit and artefacts
46	Workshops along terrace edge
47	Single pit and small workshops
48	Single pit and three small workshops
49	Single pit and artefacts
50	Single pit and one small and one large workshop
51	Single pit and small workshop

52	Single pit
53	Single pit and workshop
54	Single pit and three workshops
55	Single pit and two workshops
56	Single pit and two workshops
57	Single pit, artefacts and two workshops
58	Workshops
59	Single pit and workshop
60	Single pit, artefacts and workshop
61	Single pit and two small workshops
62	Single pit and workshop
63	Single pit
64	Single pit and artefacts
65	Single pit
66	Single pit, artefacts and two small workshops
67	Small trench and workshop
68	Single pit and workshop
69	Trench and workshop
70	Single pit and workshop
71	Trench and workshop
72	Single pit
73	Single pit, and artefacts and two workshops
74	Single pit, and artefacts and three workshops
75	Single pit, and artefacts and workshop
76	Single pit, and artefacts and workshop
77	Single pit, and artefacts and workshop
78	Composite pit and three workshops
79	Composite pit and workshop
80	Single pit and artefacts
81	Workshop
82	Single pit and artefacts
83	Single pit and artefacts
84	Single pit and workshop
85	Single pit
86	Single pit and workshop
87	Single pit and workshop
88	Single pit and workshop
89	Single pit and workshop
90	Trench, artefacts and workshop
91	Trench and workshop
92	Single pit and workshop
93	Single pit and workshop
94	Single pit and workshop
95	Small trench, artefacts and four workshops
96	Trench and five workshops
97	Trench, artefacts and workshop
98	Trench and workshop
99	Single pit and artefacts
100	Trench and artefacts
101	Workshop
102	Large workshop and associated small one
103	Workshop
104	Small workshop
105	Long trench, artefacts and workshop
106	Single pit and small workshop
107	Composite pit and small workshop

108	Single pit and workshop
109	Composite pit and three workshops
110	Small trench, workshop and heaps of decortication flakes
111	Composite pit and workshop (stone seats)
112	Single pit and two workshops
113	Single pit and workshop
114	Single pit, artefacts and small workshop
115	Small trench artefacts and workshops
116	Single pit and artefacts
117	Small workshop
118	Long trench and workshops
119	Large workshop
120	Workshop
121	Workshop
122	Small workshop
123	Workshop
124	Workshop
125	Small workshop
126	Workshop with decortication flakes
127	Single pit and workshop
128	Single pit and two workshops
129	Single pit and workshop
130	Single pit and workshop
131	Single pit and workshop
132	Single pit and workshop
133	Single pit and workshop
134	Single pit and workshop
135	Single pit and workshop
136	Single pit and workshop
137	Long trench and twelve workshops
138	Single pit and artefacts
139	Workshop
140	Workshop
141	Single pit and workshop
142	Trench and workshop
143	Workshop
144	Single pit and workshop
145	Single pit and workshop
146	Single pit and workshop
147	Single pit and artefacts
148	Single pit and workshop
149	Single pit and two workshops
150	Single pit and workshop
151	Single pit and workshop
152	Single pit and workshop
153	Trench and workshops
154	Trench and workshops
155	Composite pit and workshop
156	Single pit and workshop
157	Composite pit and two workshops
158	Composite pit and artefacts
159	Composite pit and artefacts
160	Composite pit and workshop
161	Three workshops
162	Single pit and two workshops
163	Single pit and two small workshops

164	Single pit and workshop
165	Single pit, artefacts and two workshops
166	Single pit and two workshops
167	Single pit and workshop
168	Single pit and artefacts
169	Single pit and workshop
170	Single pit and two workshops (one small)
171	Workshop (many pre-cores and blade cores)
172	Single pit and artefacts
173	Single pit and small workshop
174	Single pit and two workshops
175	Single pit and two workshops
176	Single pit and workshop
177	Single pit and workshop
178	Single pit and workshop
179	Workshop
180	Workshop
181	Composite pit and small workshop
182	Single pit and two workshops
183	Single pit and three workshops
184	Small workshop
185	Small workshop
186	Small workshop
187	Small workshop
188	Two contiguous workshops
189	Workshop
190	Workshop
191	Workshop
192	Workshop with three specialised areas
193	Workshop
194	Workshop
195	Single pit and workshop
196	Large workshop
197	Single pit and workshop
198	Single pit and small workshop
199	Small workshop
200	Large workshop
201	Single pit and two workshops
202	Single pit and workshop
203	Single pit and workshop
204	Single pit and workshop
205	Single pit and small workshop
206	Single pit and large workshop
207	Single pit and large workshop
208	Single pit and small workshop
209	Two small workshops
210	Workshop
211	Single pit and workshop
212	Single pit and two workshops
213	Single pit and workshop
214	Single pit and two workshops
215	Composite pit and workshop
216	Single pit and two workshops
217	Single pit and workshop
218	Trench and workshops
219	Single pit and workshop

220	Single pit and workshop
221	Single pit and workshop
222	Single pit and workshop
223	Single pit and two workshops
224	workshop
225	Single pit and workshop with blade cores
226	Single pit and workshop with blade cores
227	Single pit and workshop
228	Stone alignment covered with artefacts
229	Single pit, large workshop and stone alignment
230	Single pit and workshop
231	Single pit and workshop
232	Single pit and workshop
233	Single pit and workshop
234	Single pit and two workshops
235	Long trench, artefacts and workshops
236	Single pit and workshop
237	Workshop
238	Workshop
239	Trench and workshop
240	Trench, artefacts and workshop (partly damaged)
241	Small trench and workshop
242	Small trench and three workshops
243	Small trench, artefacts and workshop
244	Small trench and three workshops
245	Trench and two workshops
246	Small trench and workshop
247	workshop
248	Single pit and workshop
249	Single pit and workshop
250	Single pit and small workshop
251	Long trench and four small workshops
252	Large workshop
253	Workshop
254	Single pit and workshop
255	Trench and workshops
256	Single pit and two workshops
257	Single pit and workshops
258	Single pit and three workshops
259	Single pit and three workshops
260	Single pit and two workshops
261	Single pit and workshop
262	Single pit, artefacts and workshop
263	Large workshop
264	Single pit and workshop
265	Single pit and workshop
266	Single pit and two workshops
267	Single pit and workshop
268	Single pit and workshop
269	Trench and workshops
270	Single pit and workshop
271	Single pit and workshop
272	Small workshop
273	Small workshop
274	Trench and workshop
275	Workshop

276	Long trench and workshops
277	Single pit and workshop
278	Single pit and workshop
279	Single pit and workshop
280	Single pit and workshop
281	Single pit and workshop
282	Single pit and workshop
283	Single pit and workshop
284	Single pit and workshop
285	Trench and workshops
286	Long trench and workshops
287	Trench and workshops
288	Long trench and workshops
289	Trench
290	Workshop
291	Workshop
292	Single pit and two workshops
293	Single pit and workshop
294	Single pit and workshop (partly damaged)
295	Single pit and workshop (partly damaged)
296	Four pits and workshops
297	Large workshop (partly damaged)
298	Single pit and two workshops
299	Single pit and workshop
300	Two pits and workshop
301	Single pit and two workshops
302	Single pit and workshop
303	Single pit and workshop (damaged)
304	Single pit
305	Single pit and workshop
306	Single pit and two workshops
307	Single pit and workshop
308	Single pit and two workshops
309	Workshop
310	Workshop
311	Single pit and two workshop
312	Single pit and workshop (partly damaged)
313	Single pit and workshop (partly damaged)
314	Single pit and workshop
315	Single pit and workshop (damaged)
316	Single pit and workshop
317	Single pit and workshop
318	Large workshop
319	Long trench and workshops
320	Long trench and three workshops
321	workshop
322	workshop
323	Trench
324	Workshop
325	Workshop
326	Long trench, artefacts and four workshops
327	workshop
328	Three pits and workshop
329	workshop
330	Long trench and artefacts
331	Single pit and small workshop

Surveys and Excavations

332	Single pit and workshop
333	Small trench and workshop
334	Trench and workshop
335	Single pit and artefacts
336	Single pit and workshop
337	Single pit and workshop
338	Single pit and workshop
339	Single pit and workshop
340	Small trench and workshop
341	Single pit and workshop
342	Single pit and workshop
343	Single pit and two workshops
344	Single pit and workshop
345	Workshop
346	Single pit and workshop
347	Workshop
348	Workshop
349	Workshop
350	Workshop
351	Workshop
352	Single pit and workshop
353	Workshop
354	Workshop
355	Single pit and workshop
356	Single pit and workshop
357	Single pit and workshop
358	Workshop
359	Single pit and two workshops
360	Single pit and workshop
361	Workshop
362	Workshop
363	Workshop
364	Workshop
365	Workshop
366	Single pit and workshop
367	Single pit and artefacts
368	Workshop
369	Long trench and seven workshops
370	Long trench and four workshops
371	Single pit and two workshops
372	Single pit and workshop
373	Single pit and workshop
374	Single pit and workshop
375	Trench and three workshops
376	Trench and two workshops
377	Single pit and three workshops
378	Single pit and two workshops
379	Single pit and workshop
380	Single pit and two workshops
381	Workshop
382	Workshop
383	Workshop
384	Single pit and workshop
385	Single pit and artefacts
386	Single pit
387	Single pit and artefacts

388	Single pit and workshop
389	Single pit and workshop
390	Single pit and workshop
391	Single pit and workshop
392	Workshop
393	Workshop
394	Workshop
395	Workshop
396	Trench and two workshops
397	Single pit and artefacts
398	Trench and artefacts
399	Long trench and seven workshops
400	Workshop
401	Workshop
402	Workshop
403	Trench and four workshop
404	Workshop
405	Workshop
406	Workshop
407	Single pit and workshop
408	Workshop
409	Workshop
410	Workshop
411	Workshop
412	Workshop
413	Workshop
414	Workshop
415	Workshop
416	Workshop
417	Workshop
418	Workshop
419	Single pit
420	Single pit and workshop
421	Single pit and workshop
422	Small workshop
423	Workshop
424	Workshop
425	Workshop
426	Workshop
427	Workshop
428	Workshop
429	Workshop
430	Workshop
431	Two workshops
432	Workshop
433	Workshop
434	Single pit and two workshops
435	Single pit and artefacts
436	Workshop
437	Single pit and two workshops
438	Workshop
439	Single pit and workshop
440	Single pit and two workshops
441	Single pit and two workshops
442	Single pit and two workshops
443	Single pit and two workshops

444	Single pit and two workshops
445	Single pit and two workshops
446	Single pit and workshop
447	Single pit and workshop
448	Single pit and workshop
449	Trench and three workshops
450	Workshop
451	Single pit and workshop
452	Ring-shaped pit
453	Single pit and artefacts
454	Single pit and two workshops
455	Single pit and workshop
456	Single pit and artefacts
457	Workshop
458	Workshop
459	Workshop
460	Single pit and workshop
461	Single pit and workshop
462	Single pit
463	Single pit and two workshops
464	Single pit and two workshops
465	Composite pit and workshop
466	Composite pit and small workshop
467	Single pit and two workshops
468	Single pit and workshop
469	Single pit and two workshops
470	Single pit and two workshops
471	Single pit and artefacts
472	Single pit
473	Single pit, artefacts and workshop
474	Single pit and two workshops
475	Single pit and workshop
476	Single pit and two workshops
477	Single pit and workshop
478	Single pit and workshop
479	Workshop
480	Bladelet workshop
481	Single pit
482	Single pit and workshop
483	Composite pit
484	Single pit and workshop
485	Single pit and workshop
486	Workshop
487	Single pit and workshop
488	Single pit and workshop
489	Single pit and workshop
490	Single pit and artefacts
491	Composite pit and artefacts
492	Single pit and three small workshops
493	Single pit and artefacts
494	Workshop
495	Artefacts
496	Single pit and artefacts
497	Single pit
498	Single pit and artefacts
499	Single pit and small workshop

500	Single pit and small workshop
501	Single pit and three workshops
502	Single pit and artefacts
503	Single pit and three workshops
504	Single pit and two small workshops
505	Single pit
506	Single pit and artefacts
507	Single pit and small workshops
508	Single pit and small workshop
509	Workshop
510	Workshop
511	Single pit
512	Composite pit and artefacts
513	Ring-shaped pits and artefacts
514	Single pit and workshop
515	Single pit and three workshops
516	Single pit and workshop
517	Single pit and two workshops
518	Single pit and artefacts
519	Single pit and two workshops
520	Single pit and workshop
521	Single pit and two workshops
522	Single pit and artefacts
523	Single pit, artefacts and workshop
524	Single pit, artefacts and small workshop
525	Single pit and small workshop
526	Single pit and workshop
527	Single pit and artefacts
528	Composite pit, artefacts and small workshop
529	Single pit and large bladelet workshop
530	Single pit and workshop
531	Single pit and workshop
532	Composite pit and workshop
533	Composite pit
534	Single pit and workshop
535	Composite pit and four workshops
536	Single pit and small workshop
537	Single pit and workshop
538	Single pit and artefacts
539	Single pit and workshop
540	Single pit and workshop
541	Single pit and workshop
542	Single pit and workshop
543	Single pit and small workshop
544	Composite pit and workshop
545	Single pit and workshop
546	Single pit
547	Single pit and small workshop
548	Single pit and workshop
549	Single pit
550	Composite pit and two workshops
551	Single pit
552	Single pit
553	Single pit and two workshops
554	Single pit
555	Composite pit and two workshops

556	Single pit and workshops
557	Single pit and workshop
558	Single pit and small workshop
559	Single pit and small workshop
560	Single pit and platform
561	Single pit, platform and two workshop
562	Single pit
563	Single pit, two workshops, platform with decortication flakes
564	Single pit and two workshops
565	Composite pit, workshop and platform
566	Single pit and two workshop
567	Single pit and three workshops
568	Single pit and workshop
569	Single pit and two workshops
570	Single pit and two workshops
571	Single pit
572	Single pit and two workshops
573	Single pit and two workshops
574	Single pit and two workshops
575	Single pit and two workshops
576	Single pit and three workshops
577	Single pit and workshop
578	Single pit and two workshops
579	Single pit
580	Single pit and workshop
581	Single pit and artefacts
582	Single pit and small workshop
583	Single pit
584	Composite pit and artefacts
585	Single pit, three workshops and platform
586	Single pit and artefacts
587	Single pit and two workshops
588	Single pit, small workshop and artefacts
589	Single pit
590	Single pit and artefacts
591	Composite pit, workshop and platform
592	Single pit and small workshop
593	Single pit and artefacts
594	Single pit and artefacts
595	Single pit and small workshop
596	Single pit and artefacts
597	Single pit
598	Single pit and workshop
599	Single pit and artefacts
600	Single pit and workshop
601	Single pit
602	Single pit and artefacts
603	Single pit and two small workshops
604	Single pit and small workshop
605	Single pit and artefacts
606	Single pit and workshop
607	Single pit and artefacts
608	Single pit and two small workshops
609	Single pit
610	Single pit and two workshops
611	Single pit

612	Single pit
613	Single pit and two workshops
614	Single pit and workshop
615	Single pit and artefacts
616	Single pit
617	Single pit and two workshops
618	Single pit and workshop
619	Single pit
620	Large workshop
621	Single pit and artefacts
622	Single pit and workshop
623	Single pit and artefacts
624	Workshop
625	Workshop
626	Single pit and large workshop
627	Single pit and workshop
628	Single pit and small workshop
629	Single pit and two workshops
630	Composite pit and small workshop
631	Single pit and small workshop
632	Single pit and workshop
633	Single pit and small workshop
634	Single pit
635	Single pit and two small workshops
636	Composite pit
637	Single pit and workshop
638	Single pit and two small workshops
639	Single pit and three workshops
640	Single pit and workshop
641	Single pit and workshop
642	Composite pit and workshop
643	Single pit and workshop
644	Single pit, artefacts and workshop
645	Single pit and three workshops
646	Single pit and two workshops
647	Single pit and small workshop
648	Single pit, artefacts and workshop
649	Single pit and two workshops
650	Single pit and workshop
651	Spot of Buddhist pottery
652	Single pit and workshop
653	Single pit, artefacts and workshop
654	Single pit, artefacts and small workshop
655	Single pit and workshop
656	Single pit and platform
657	Single pit and small workshop
658	Single pit artefacts and platform
659	Single pit, workshop and squared platform
660	Single pit, artefacts and workshop
661	Single pit, artefacts and platform
662	Single pit, artefacts, small workshop and platform
663	Single pit, artefacts and two small workshops
664	Single pit and workshop
665	Composite pit, workshop and platform
666	Single pit, artefacts and small workshop
667	Single pit and small workshop

668	Single pit and small workshop
669	Single pit with pottery
670	Single pit, artefacts and workshop
671	Single pit and large workshop
672	Single pit and two workshops
673	Composite pit and workshop
674	Single pit and workshops
675	Two small adjacent pits and small workshops
676	Single pit, workshop and platform
677	Single pit, artefacts and workshop
678	Single pit and two small workshops
679	Single pit and small workshop
680	Composite pit and two small workshops
681	Single pit and workshop
682	Single pit and workshop
683	Single pit and workshop
684	Single pit and artefacts
685	Single pit and workshop
686	Single pit and artefacts
687	Single pit and workshop
688	Single pit and workshop
689	Single pit
690	Single pit and two workshops
691	Single pit and workshop
692	Single pit and three workshops
693	Single pit and workshop
694	Composite pit and workshop
695	Single pit, workshop and platform
696	Single pit and workshop
697	Single pit and artefacts
698	Single pit and artefacts
699	Single pit, small workshop and platform
700	Single pit and artefacts
701	Single pit and small workshop
702	Composite pit and workshop
703	Composite pit and workshop
704	Single pit and two workshops
705	Single pit and workshop
706	Single pit and artefacts
707	Single pit and large workshop
708	Single pit, artefacts and workshop
709	Single pit and workshop
710	Single pit and workshop
711	Single pit and workshop
712	Single pit and artefacts
713	Composite pit and two workshops
714	Single pit and workshop
715	Single pit and two workshops
716	Single pit and three workshops
717	Single pit
718	Single pit and workshop
719	Single pit and workshop
720	Single pit
721	Single pit and workshop
722	Single pit and two workshops
723	Single pit and artefacts

724	Single pit and artefacts
725	Single pit and small workshop
726	Single pit and artefacts
727	Single pit and small workshop
728	Single pit and artefacts
729	Single pit
730	Single pit and artefacts
731	Composite pit
732	Single pit and two workshops
733	Three workshops
734	Single pit and workshop
735	Single pit
736	Single pit and artefacts
737	Composite pit and small bladelet workshop
738	Single pit
739	Single pit
740	Single pit and artefacts
741	Single pit and workshop
742	Single pit and two workshops
743	Single pit
744	Single pit
745	Single pit and two workshops
746	Single pit and two workshops
747	Single pit and workshop
748	Single pit and workshop
749	Single pit and workshop
750	Single pit
751	Single pit and two workshops
752	Single pit and two workshops
753	Single pit and two workshops
754	Single pit
755	Single pit and platform
756	Single pit and workshop
757	Single pit and workshop
758	Single pit and artefacts
759	Single pit and artefacts
760	Single pit
761	Composite pit and small workshop
762	Single pit and two workshops
763	Single pit and workshop
764	Single pit and workshop
765	Single pit
766	Single pit and workshop
767	Single pit and two workshops
768	Large workshop
769	Single pit and workshop
770	Single pit and two workshops
771	Single pit and two workshops
772	Single pit and workshop
773	Single pit, workshop and pottery
774	Single pit, workshop and platform
775	Single pit and workshop
776	Single pit
777	Single pit and two workshops
778	Single pit and workshop
779	Single pit

- 780 Single pit and workshop
- 781 Single pit and two workshops
- 782 Single pit and two workshops
- 783 Single pit and workshop
- 784 Composite pit and workshop
- 785 Single pit, workshop and platform
- 786 Single pit and workshop
- 787 Single pit with pottery
- 788 C-shaped pit, two workshops and platform
- 789 C-shaped pit and workshop
- 790 Single pit and workshop
- 791 Single pit and workshop
- 792 Single pit and workshop
- 793 Large workshop
- 794 Workshop

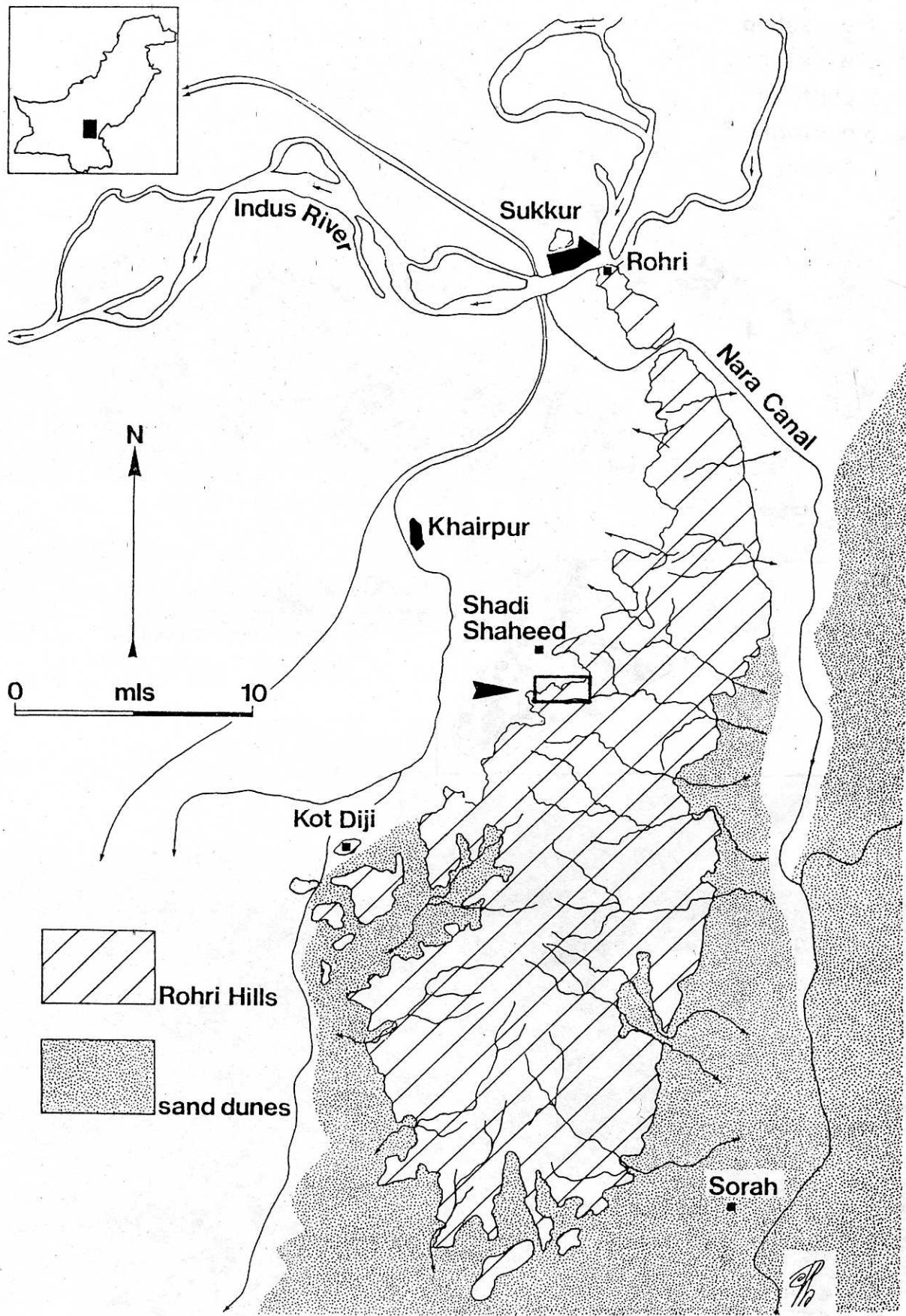


Fig.1. Rohri Hills. Location of the area surveyed in January 1993 (arrow) (drawn by P.Biagi).

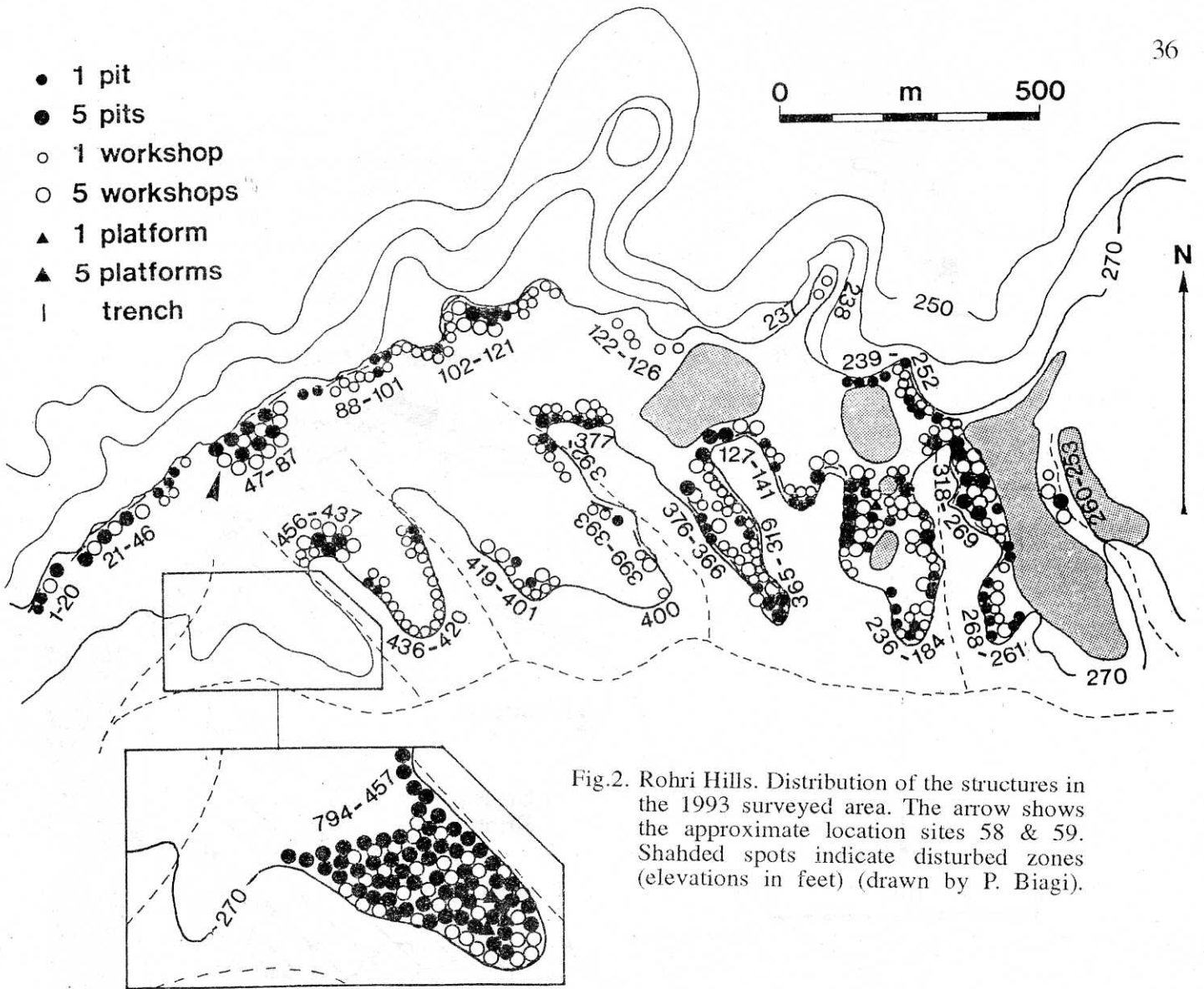


Fig.2. Rohri Hills. Distribution of the structures in the 1993 surveyed area. The arrow shows the approximate location sites 58 & 59. Shaded spots indicate disturbed zones (elevations in feet) (drawn by P. Biagi).

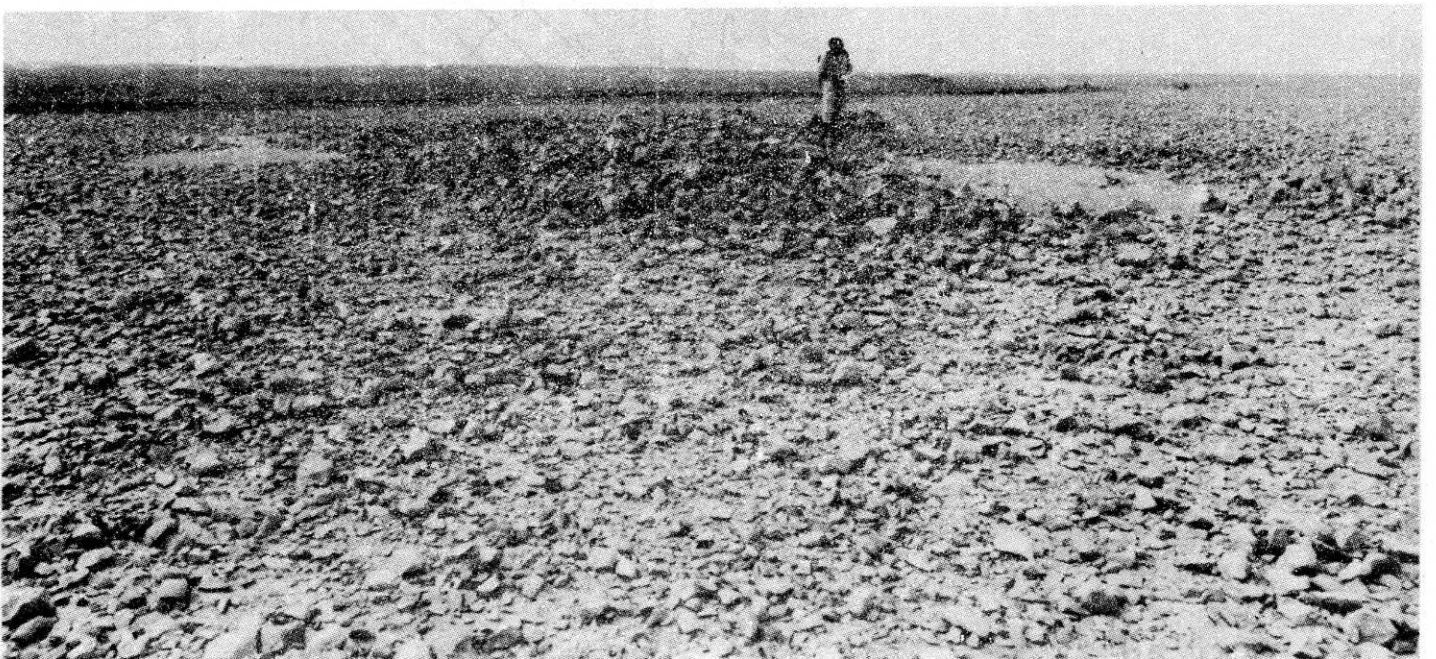


Fig.3. Rohri Hills, 1993. Single pit with heap of limestone blocks (photo by P.Biagi).



Fig.4. Rohri Hills, 1993. Platform with flint debitage (photo by P.Biagi).

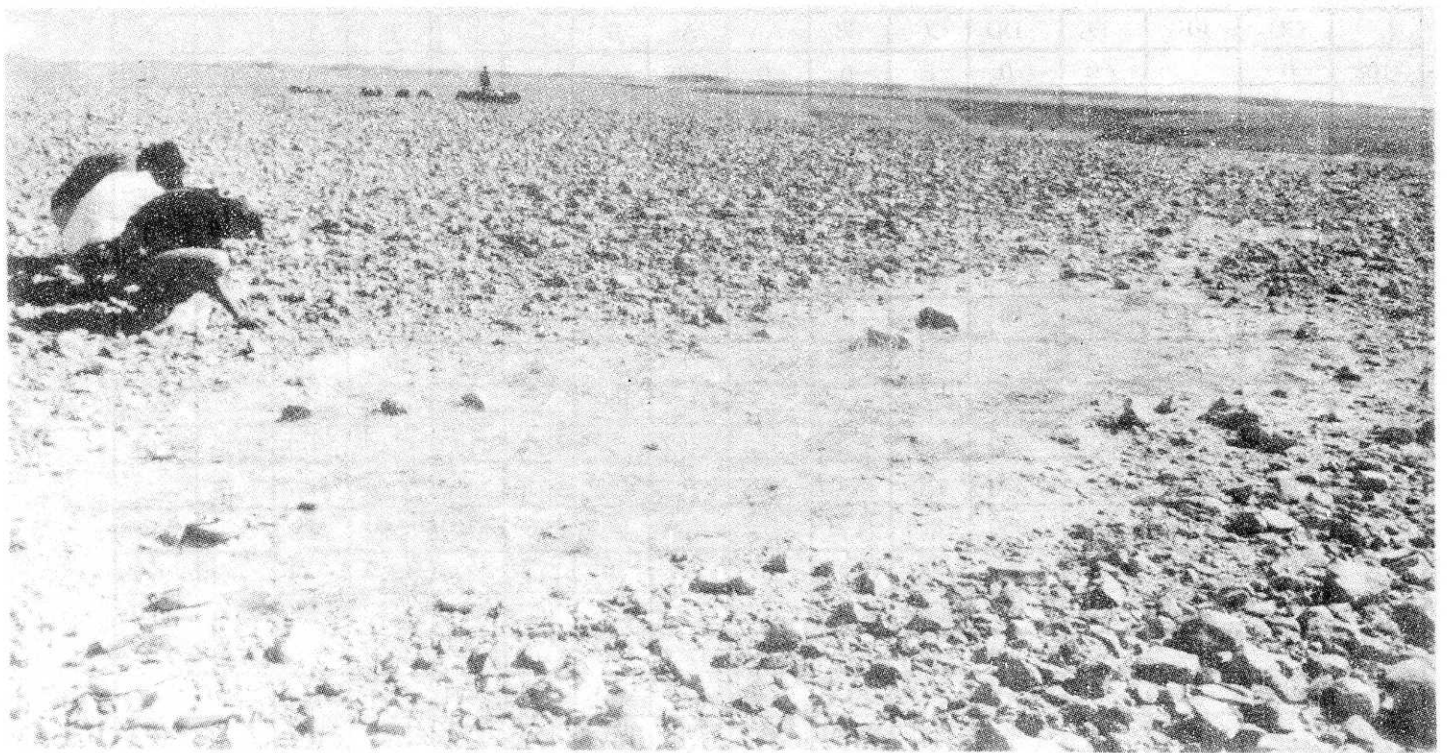


Fig.5. Site 58 (photo by P.Biagi).

	GG	FF	EE	DD	CC	BB	AA	A	B	C	D	E	F	G	H
108	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	36	4	3	0	0	0	0
101	0	0	0	0	31	50	0	0	0	2	0	0	0	0	0
1	0	6	7	13	90	94	5	0	40	74	28	0	11	11	0
2	0	2	16	25	98	103	1	0	47	118	43	26	21	17	0
3	0	13	14	34	98	140	8	0	65	118	111	88	42	19	4
4	0	13	15	56	134	172	28	3	37	253	205	195	46	30	0
5	0	61	13	66	112	169	34	2	9	181	128	79	38	38	13
6	0	23	42	0	113	133	97	7	5	76	157	78	32	19	26
7	0	24	30	38	67	62	112	57	77	24	100	3	34	33	0
8	0	10	30	35	57	91	69	175	106	74	44	57	42	32	0
9	0	15	24	17	42	65	77	83	91	83	91	66	35	14	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0

FIG. 6. Site 58. Artefacts distribution (weight).

	GG	FF	EE	DD	CC	BB	AA	A	B	C	D	E	F	G	H
108	0	0	0	0	0	0	0	1220	0	0	0	0	0	0	0
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	1090	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	790	600	60	0	0	0	0
101	0	0	0	0	470	380	0	0	0	70	0	0	0	0	0
1	0	20	180	50	1150	900	20	0	190	490	170	0	110	70	0
2	0	30	120	420	650	670	1	0	370	1060	1190	920	570	950	0
3	0	20	320	470	720	660	20	0	150	2070	1670	3900	4170	655	470
4	0	320	750	950	1810	880	170	10	180	1660	5700	10990	1650	980	0
5	0	1350	250	160	690	720	90	20	30	1520	3350	4950	1053	880	450
6	0	20	1020	180	1380	2220	580	20	5	700	1000	1150	1370	370	1110
7	0	100	500	1450	1120	1570	720	150	600	270	300	150	330	140	0
8	0	70	450	400	800	2600	1280	800	360	160	500	250	320	70	0
9	5	5	40	40	600	1180	180	240	310	150	240	280	190	700	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	750	0

FIG. 7. Site 58. Artefacts distribution (weight).



Fig.8. Site 58. Surface in square D4.

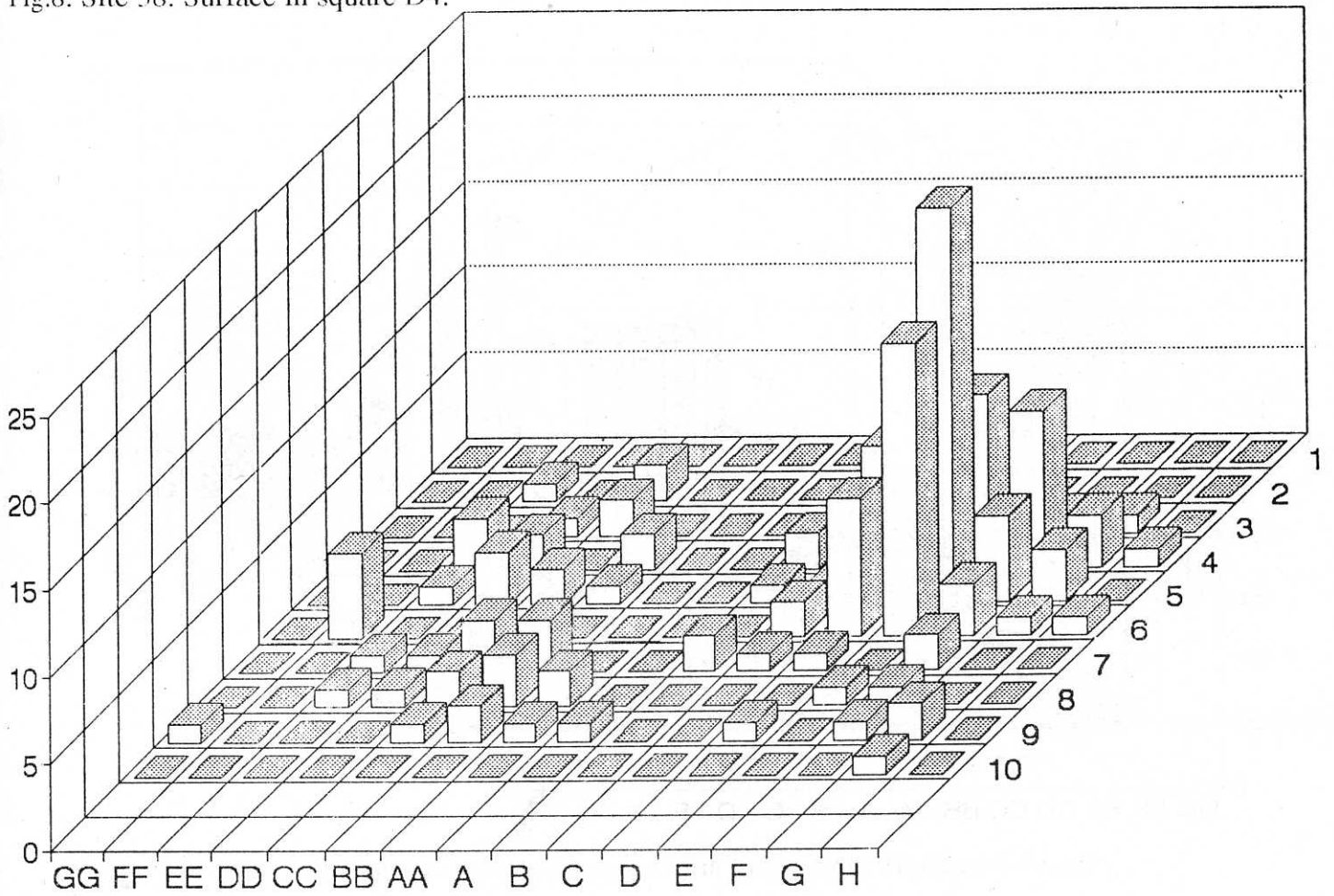


Fig.9. Site 58. Histograms of cores number.

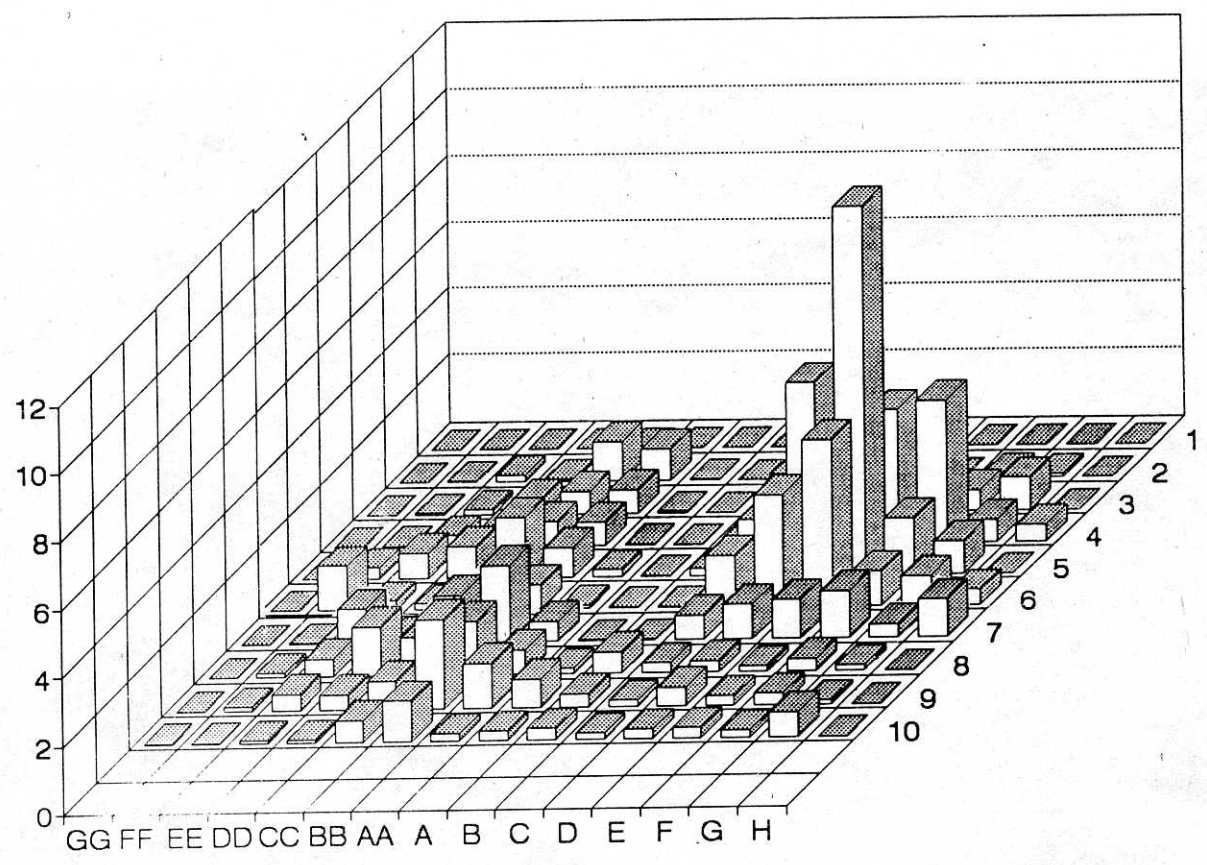


Fig.10. Site 58. Histograms of artefacts weight in Kilograms.

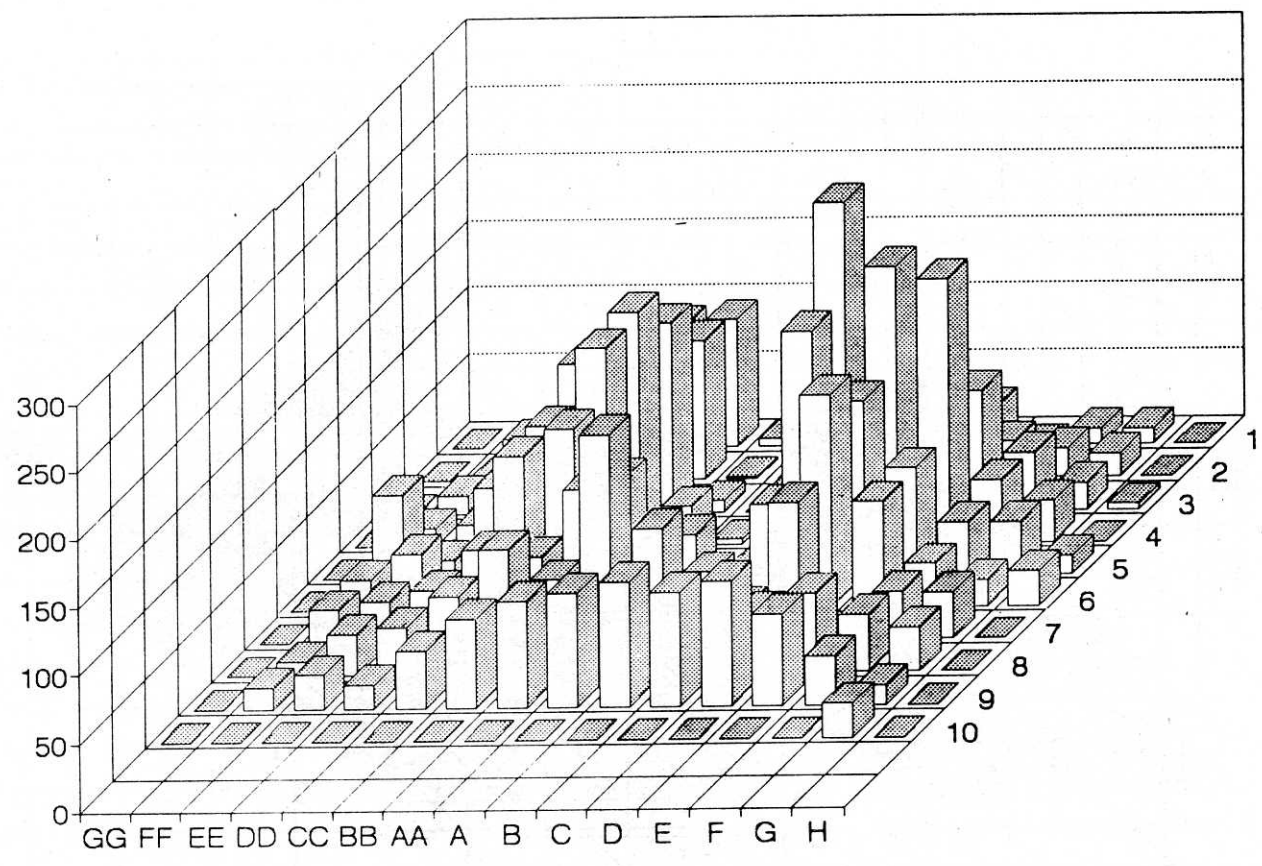


Fig.11. Site 58. Histograms of artefacts number, cores excluded.

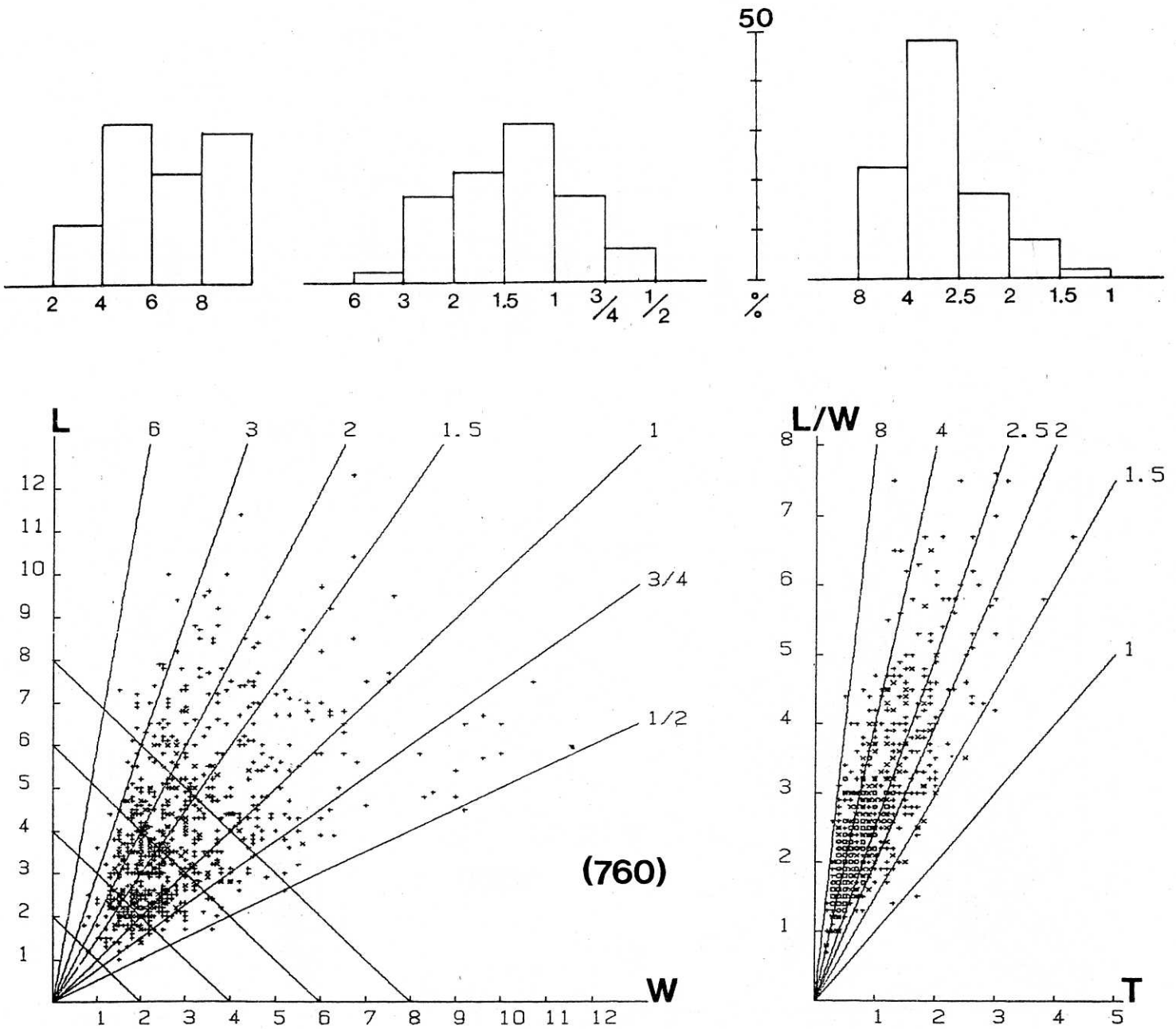


Fig.12. Site 58. Length/width and length-width/thickness diagrams of the complete unretouched artefacts from workshop 1.

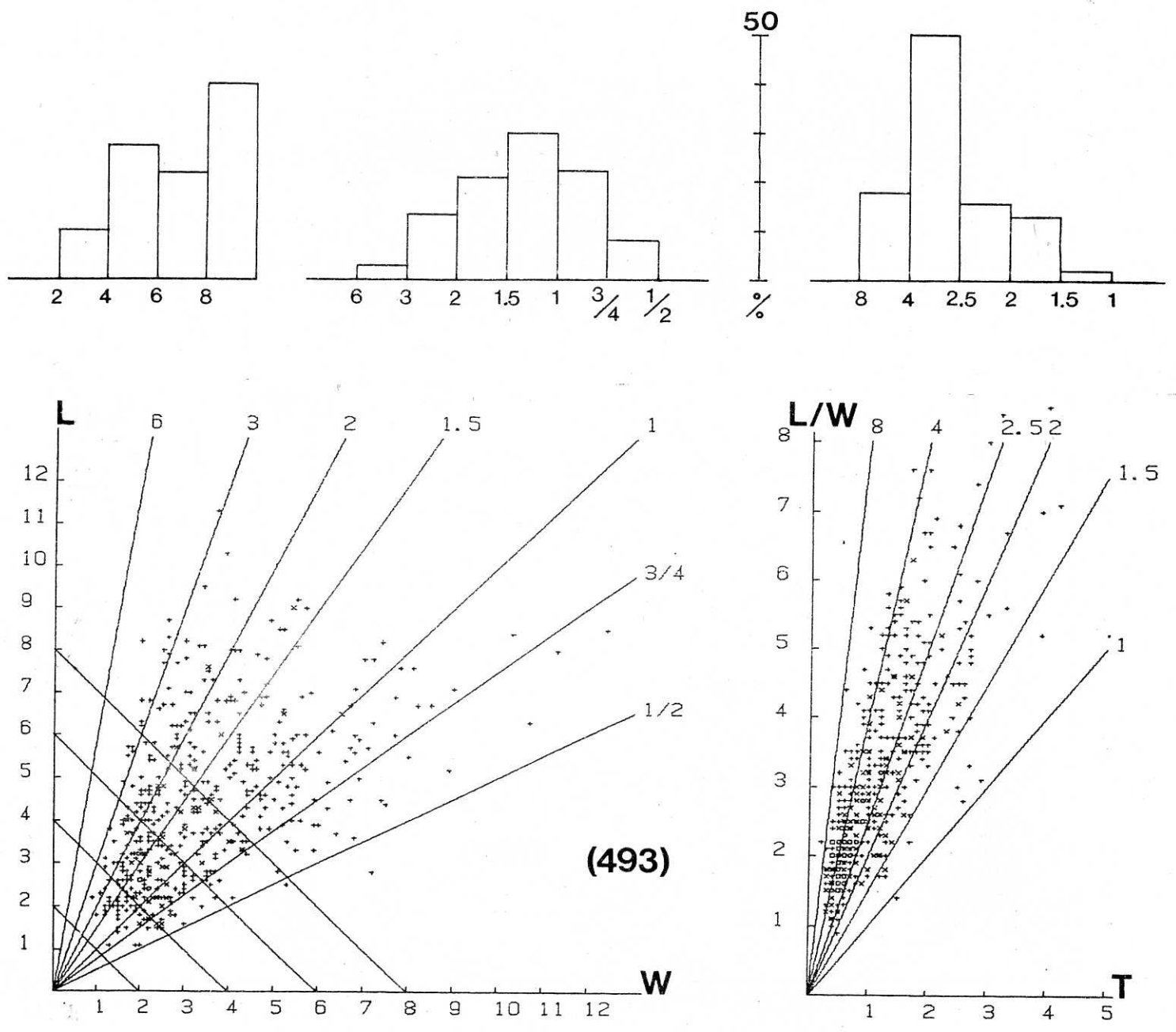


Fig.13. Site 58. Length/width and length-width/thickness diagrams of the complete unretouched artefacts from workshop 2.

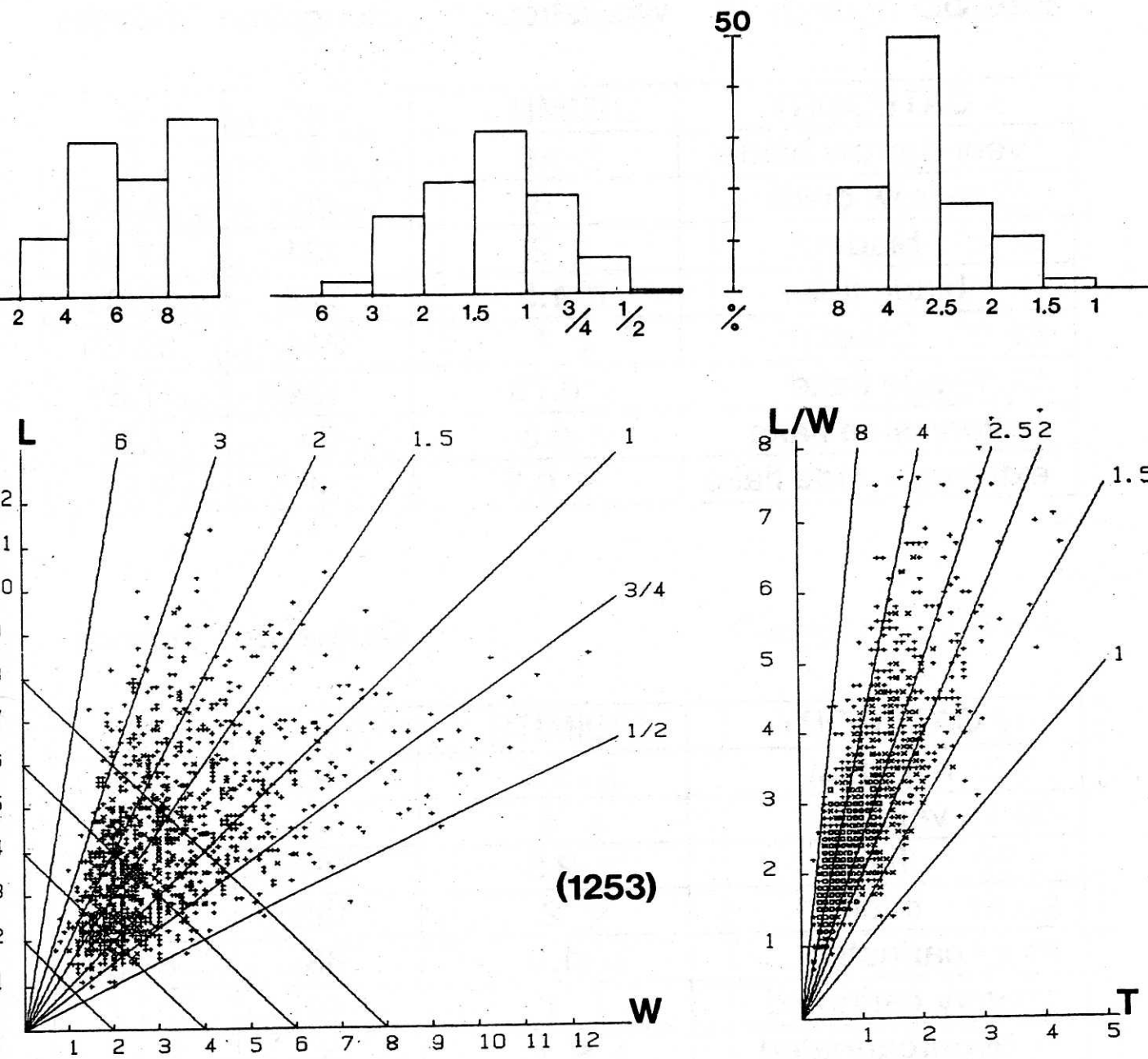


Fig.14. Site 58. Length/width and length-width/thickness diagrams of the complete unretouched artefacts from the whole site.

Site 58 Workshop 1 Elongation Indexes

CATEGORY	LIMITS	n	%
very narrow blade	>6	0	0
narrow blade	3	20	2.63
blade	2	131	17.24
blade flake	1.5	172	22.63
flake	1	245	32.24
wide flake	0.75	134	17.63
very wide flake	0.5	54	7.11
extremely wide flake	< 0.5	4	0.53

Carination Indexes

CATEGORY	LIMITS	n	%
hyperflat	>8	2	0.26
very flat	4	174	22.89
flat	2.5	369	48.55
thick	2	133	17.5
carinated	1.5	63	8.29
very carinated	1	18	2.37
hypercarinated	< 1	1	0.13

Fig.15. Site 58. Elongation and carination indexes of the complete, unretouched artefacts from Workshop 1.

Site 58

Workshop 2

Elongation Indexes

CATEGORY	LIMITS	n	%
very narrow blade	>6	0	0
narrow blade	3	16	3.25
blade	2	67	13.59
blade flake	1.5	104	21.1
flake	1	150	30.43
wide flake	0.75	112	22.72
very wide flake	0.5	42	8.52
extremely wide flake	< 0.5	2	0.41

Carination Indexes

CATEGORY	LIMITS	n	%
hyperflat	>8	1	0.2
very flat	4	88	17.85
flat	2.5	248	50.3
thick	2	79	16.02
carinated	1.5	65	13.18
very carinated	1	11	2.23
hypercarinated	< 1	1	0.2

Fig.16. Site 58. Elongation and carination indexes of the complete, unretouched artefacts from Workshop 2.

Site 58

Elongation Indexes

CATEGORY	LIMITS	n	%
very narrow blade	> 6	0	0
narrow blade	3	36	2.87
blade	2	197	15.72
blade flake	1.5	279	22.27
flake	1	397	31.68
wide flake	0.75	243	19.39
very wide flake	0.5	95	7.58
extremely wide flake	<0.5	6	0.48

Carination Indexes

CATEGORY	LIMITS	n	%
hyperflat	>8	3	0.24
very flat	4	258	20.59
flat	2.5	617	49.24
thick	2	212	16.92
carinated	1.5	133	10.61
very carinated	1	28	2.23
hypercarinated	< 1	2	0.16

Fig.17. Site 58. Elongation and carination index of the complete unretouched artefacts from the whole site.

SITE 58

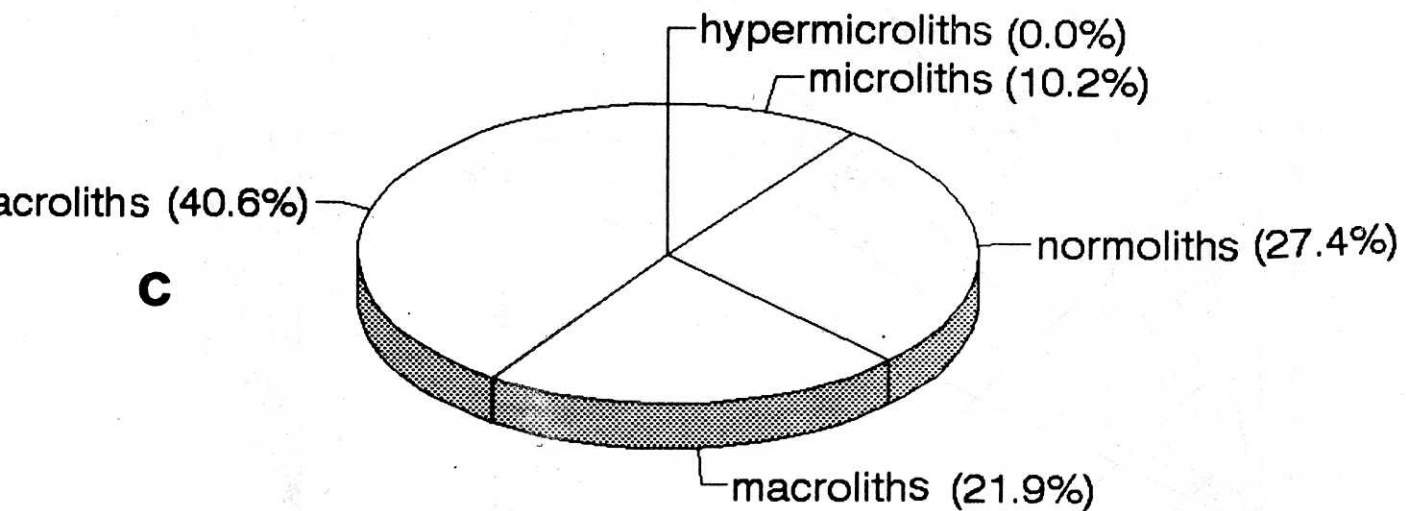
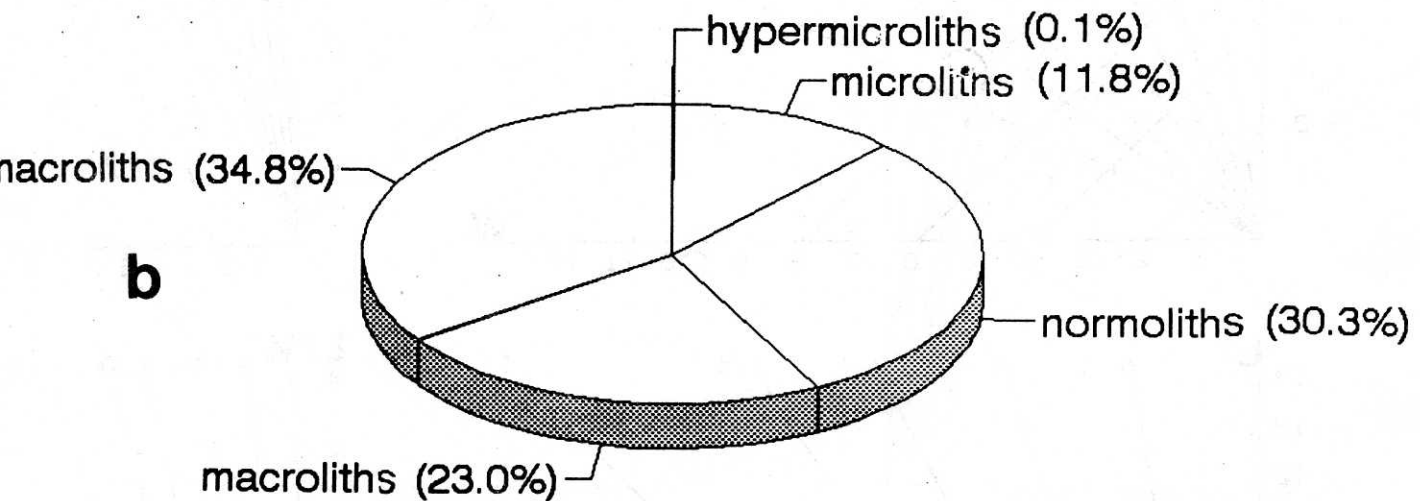
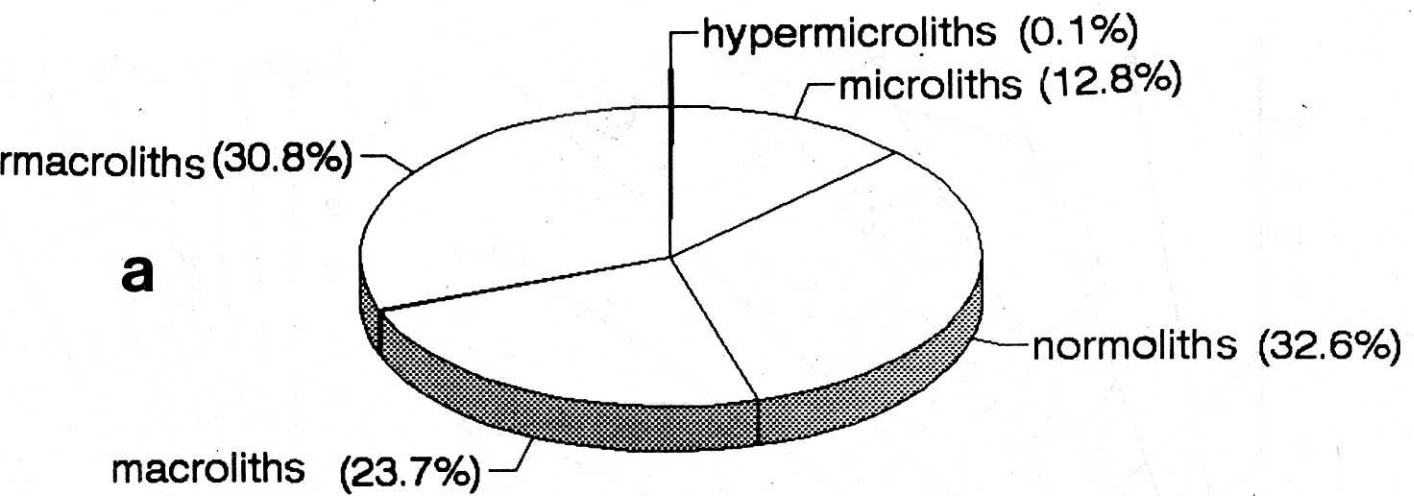
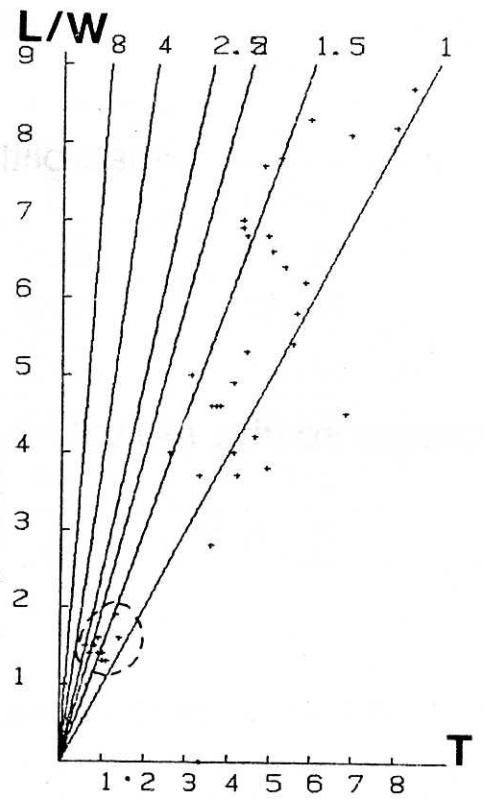
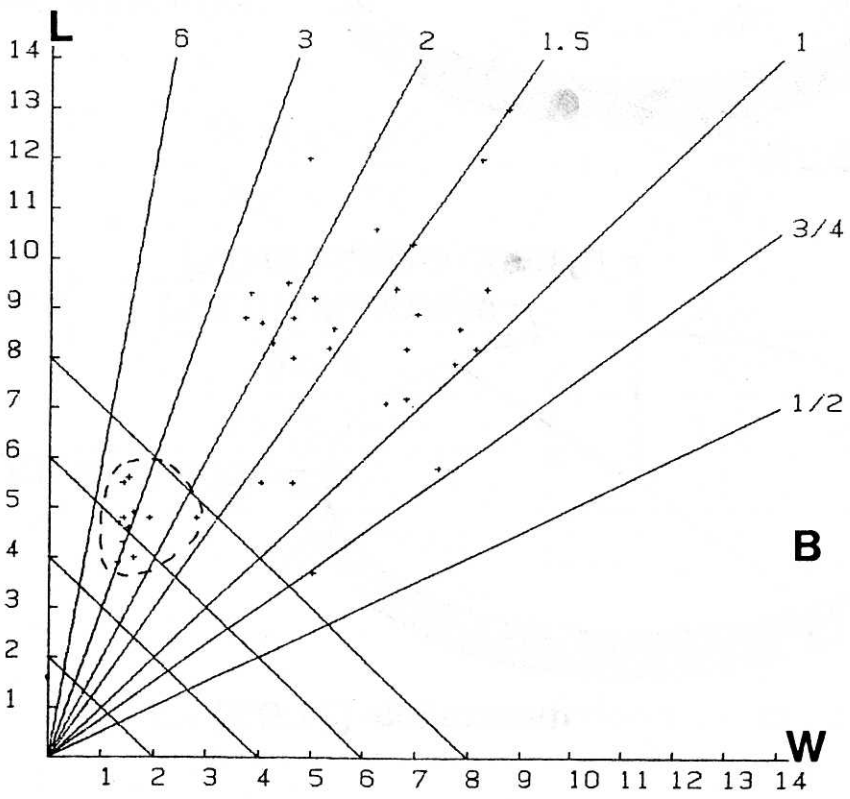
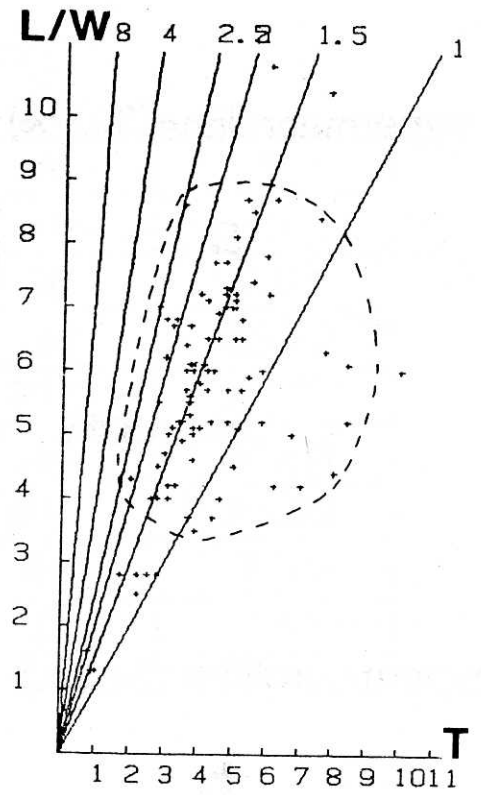
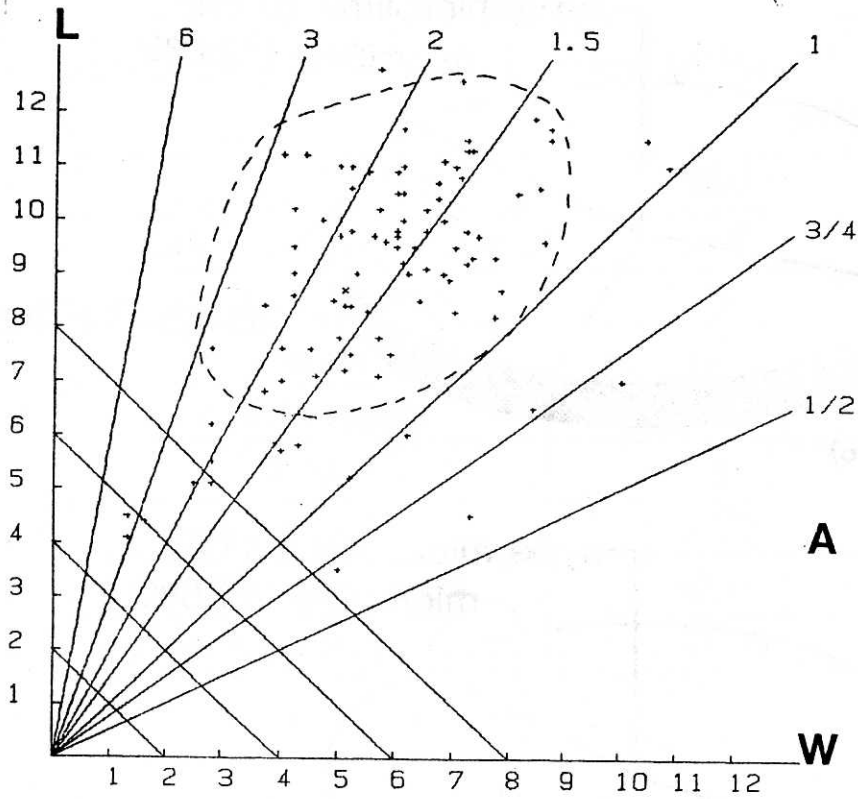


Fig. 18. Site 58. Dimensional diagrams of the complete, unretouched artefacts from Workshop 1 (a), Workshop 2 (b) and the whole site (c).



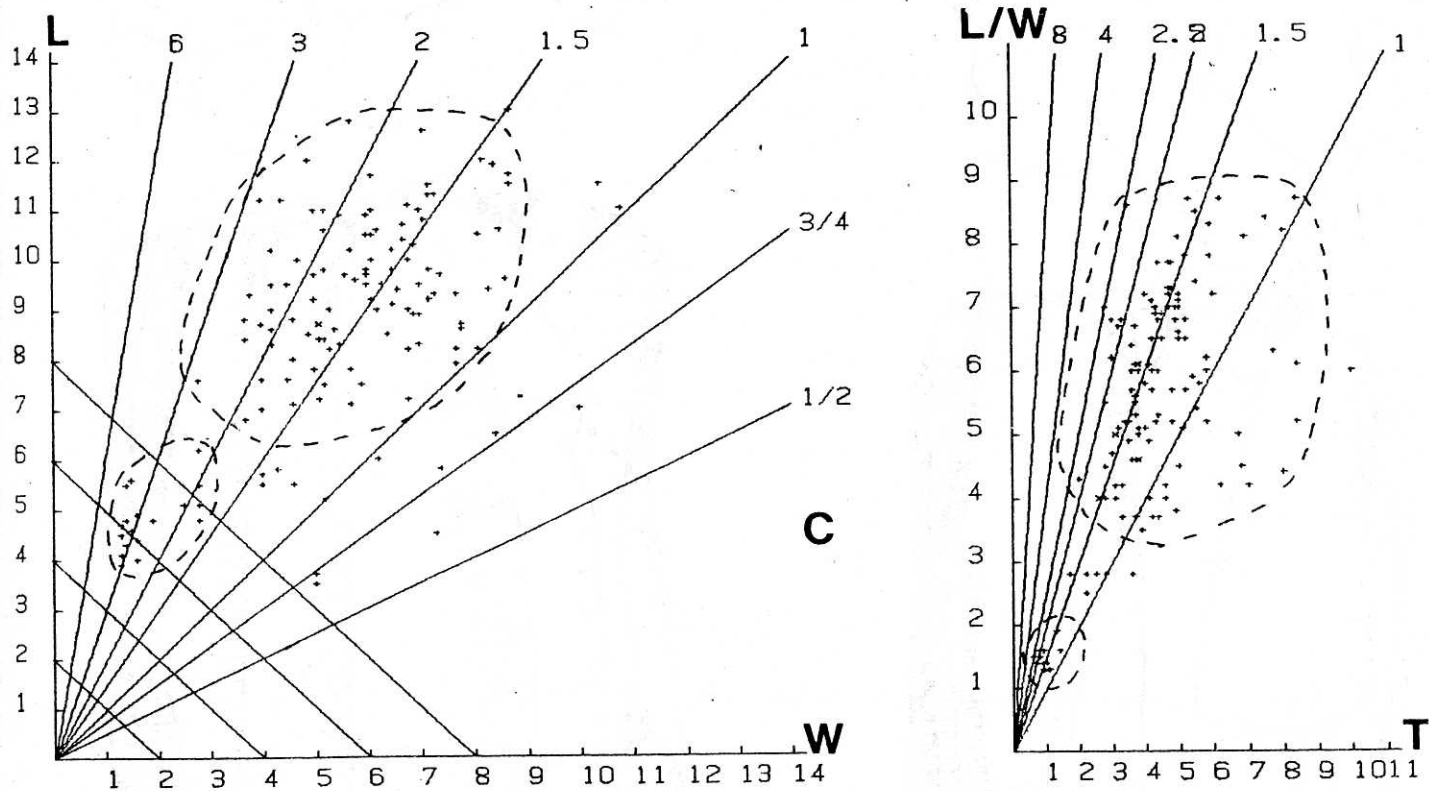


Fig.19. Site 58. Length/width and length-width/thickness diagrams of the cores from Workshop 1 (A), Workshop 2 (B) and the whole site (C). The dashed lines delineate the two size groups of cores.

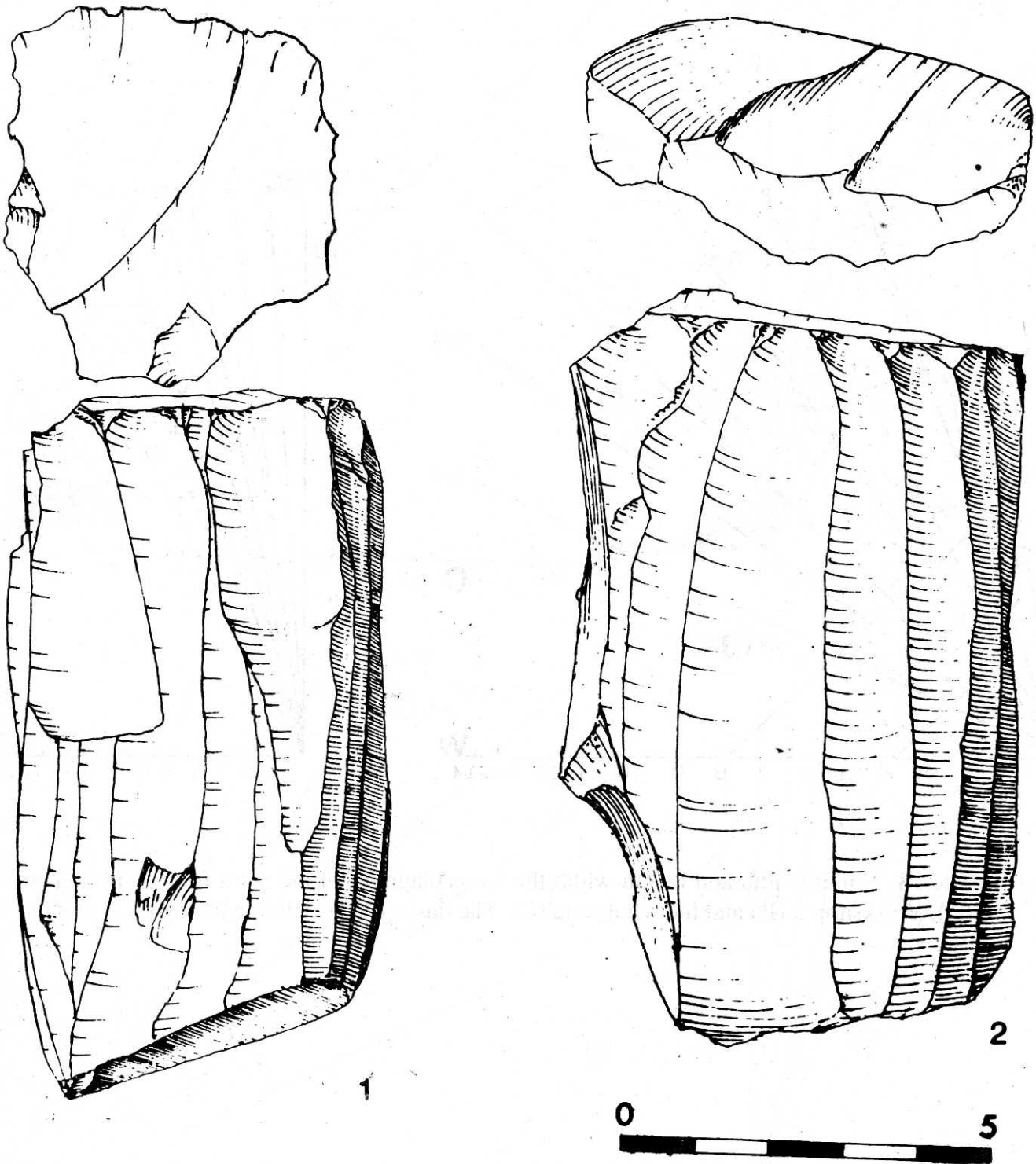


Fig.20. Site 58. Subconical cores from square C6 (1) and FF5 (2) (drawn by G.Almerigogna).

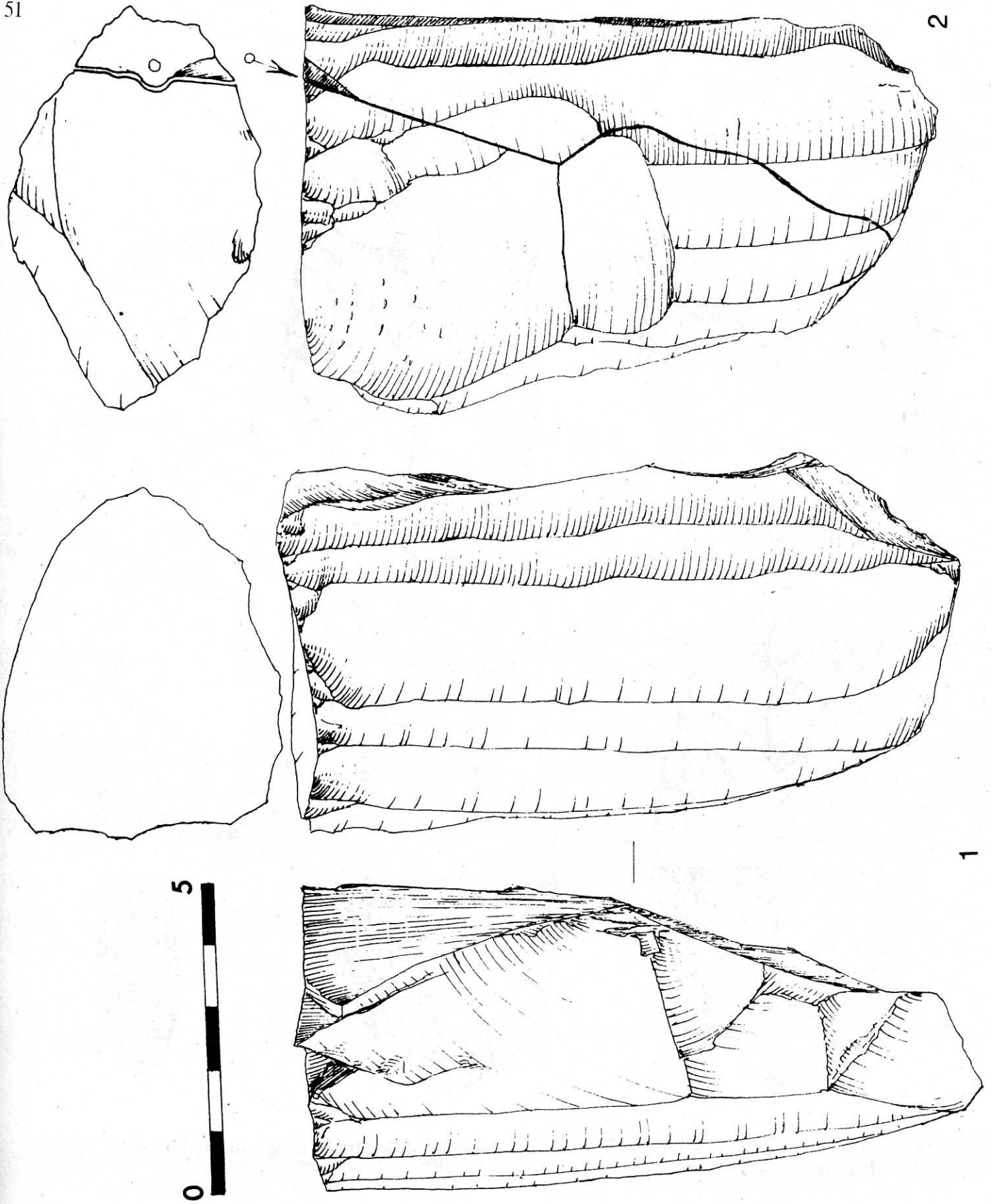


Fig.21. Site 58. Subconical cores from squares H5 (1) and E4 (2) (drawn by G.Almerigogna).

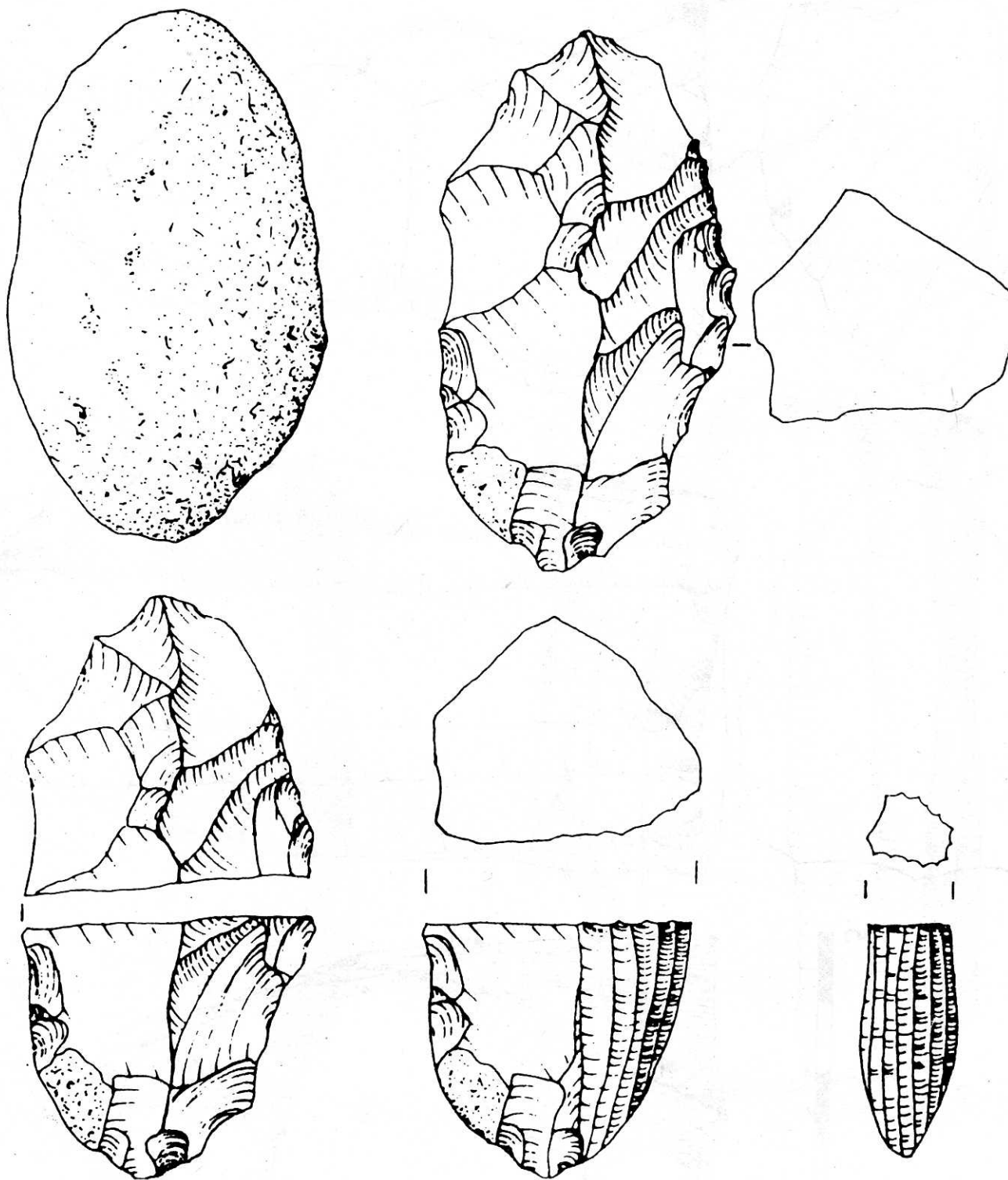


Fig.22. Site 58. Stage of Manufacture of a Harrappan core (from Biagi and Cremaschi, 1991 Fig.6).

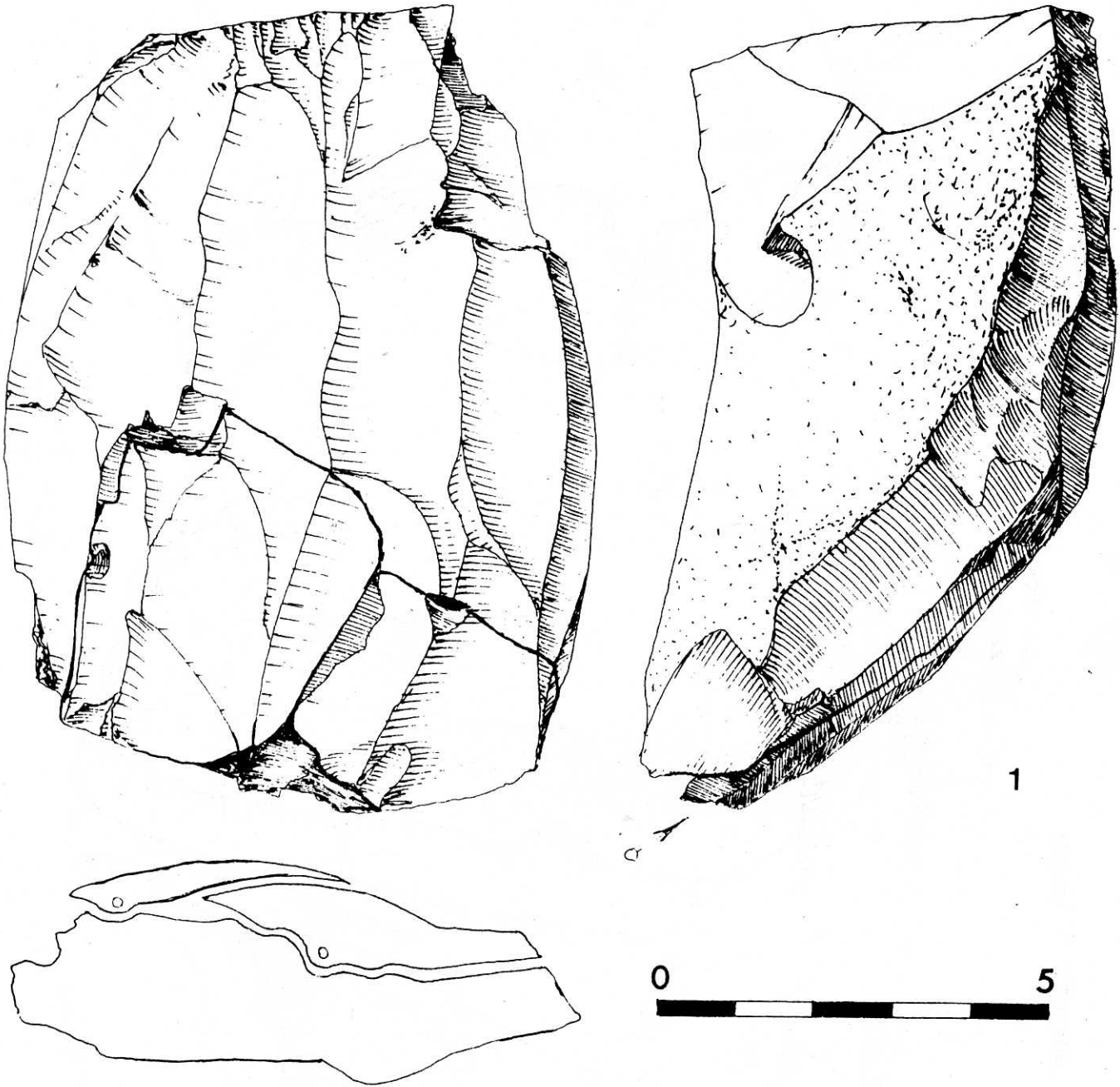


Fig.23. Site 58. Core with opposite platforms from square E6 (core) and E5 (flakes) (drawn by G.Almerigogna).

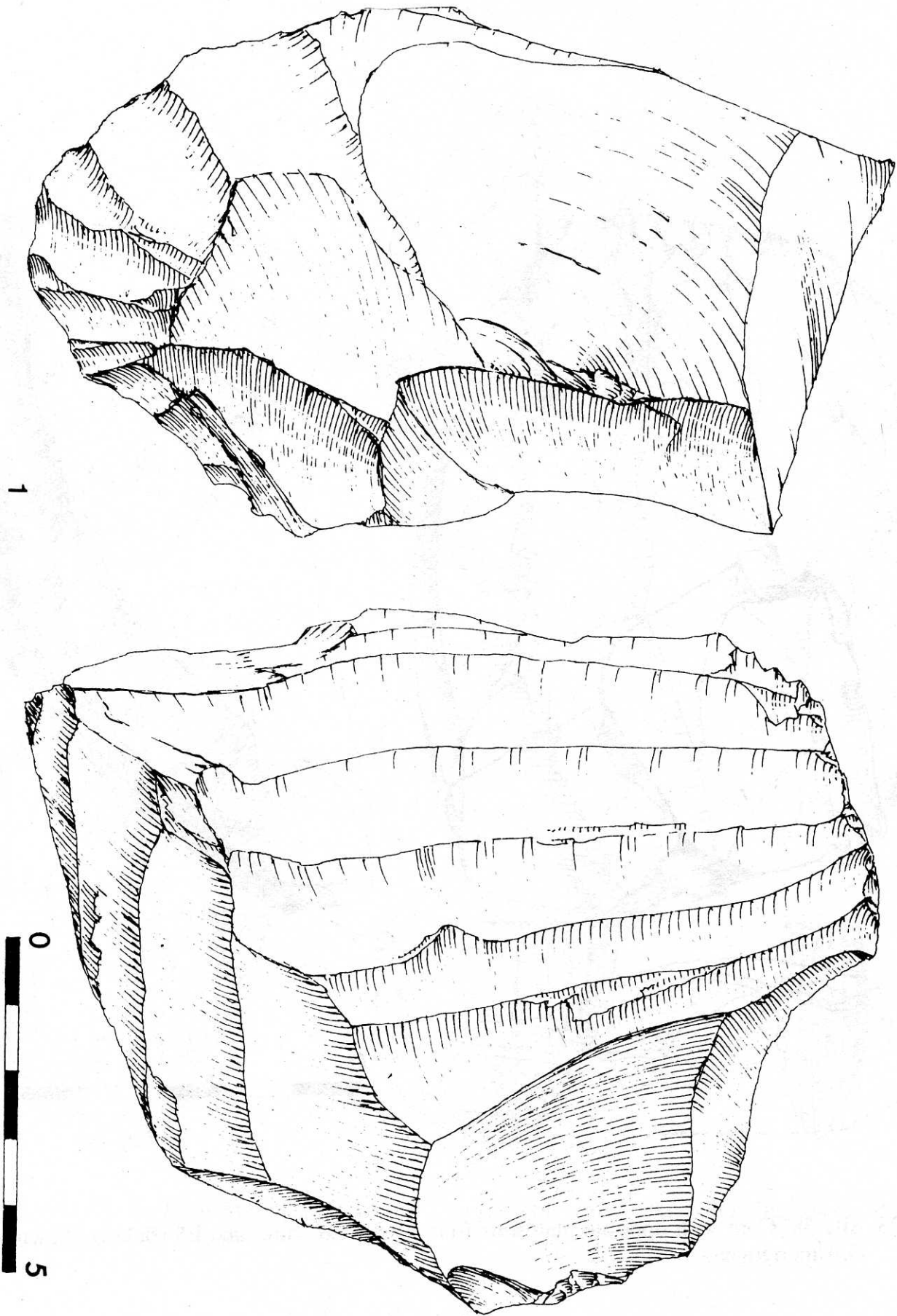


Fig.24. Site 58. Core with adjacent platforms from square C3 (drawn by G.Almerigogna).

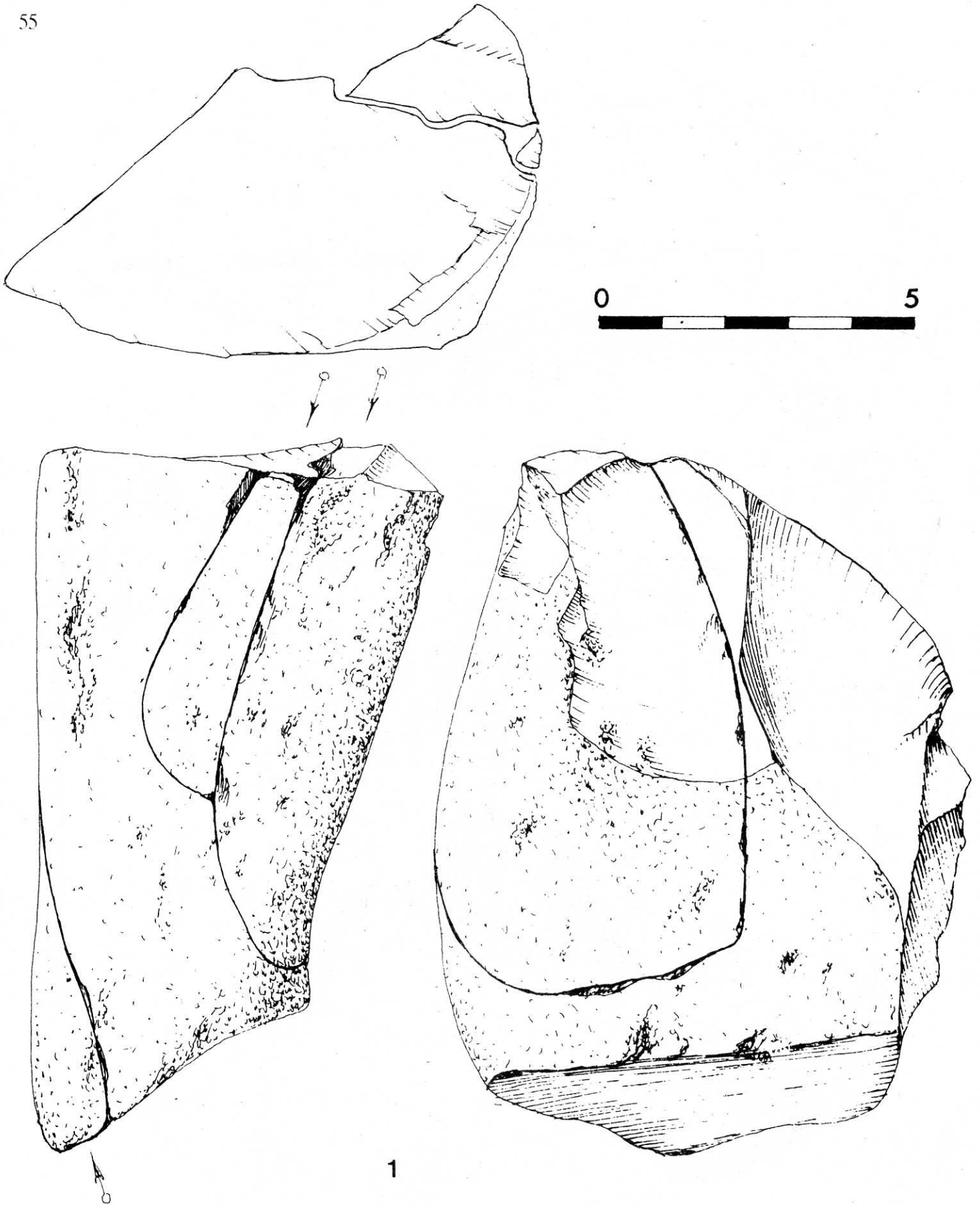


Fig.25. Site 58. Nodule with refitted flakes from square E4 (drawn by G.Almerigogna).

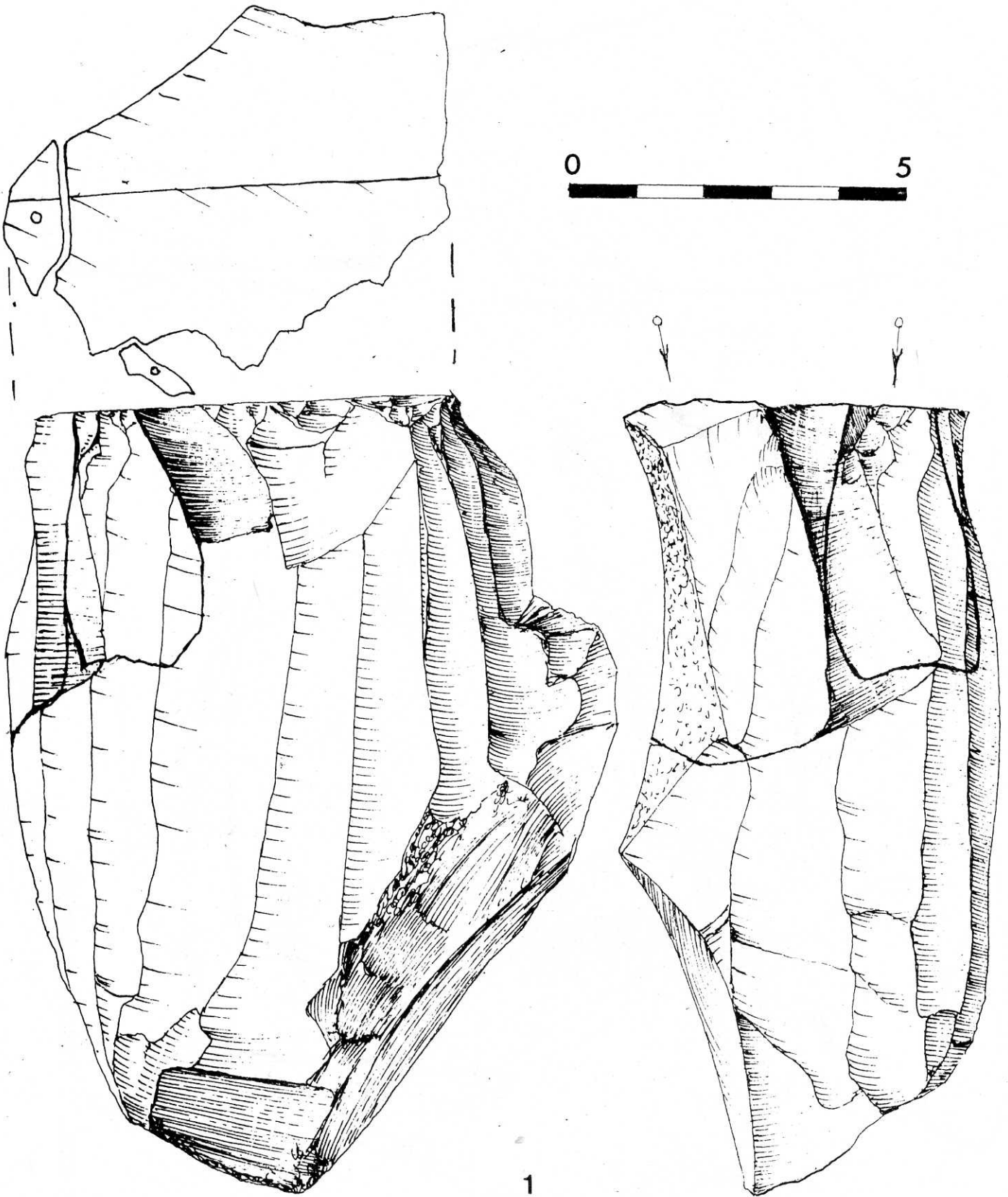


Fig.26. Site 58. Subconical core with refitted flakes from square F6 (drawn by G.Almerigogna).

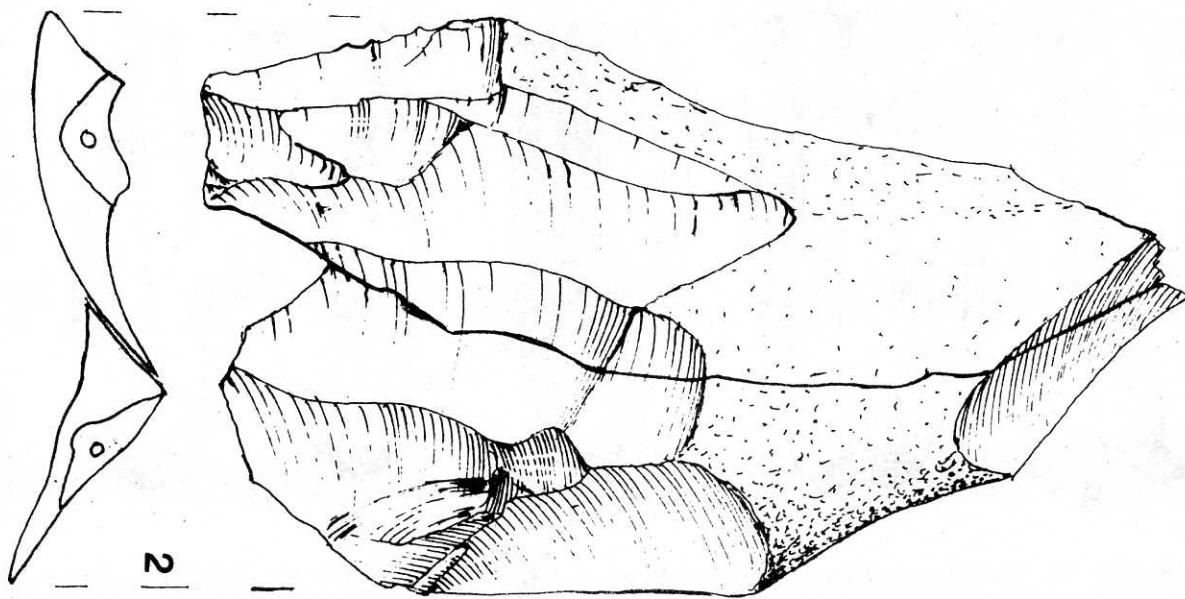
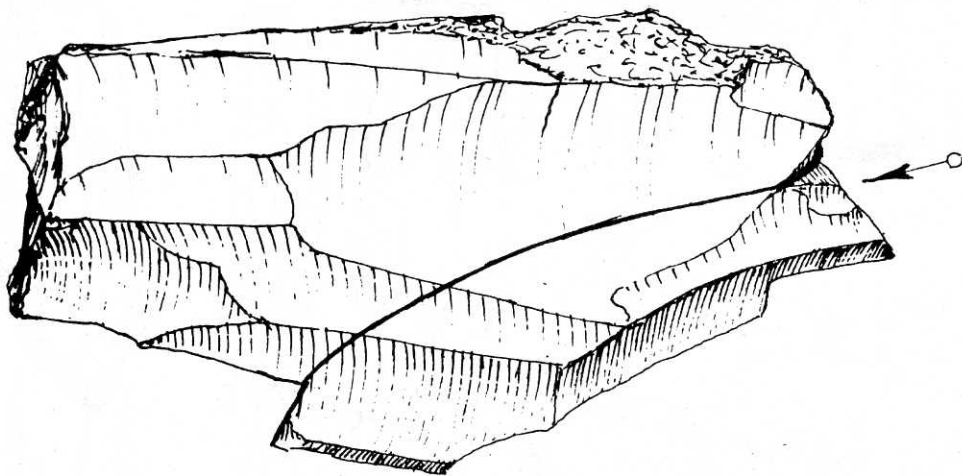
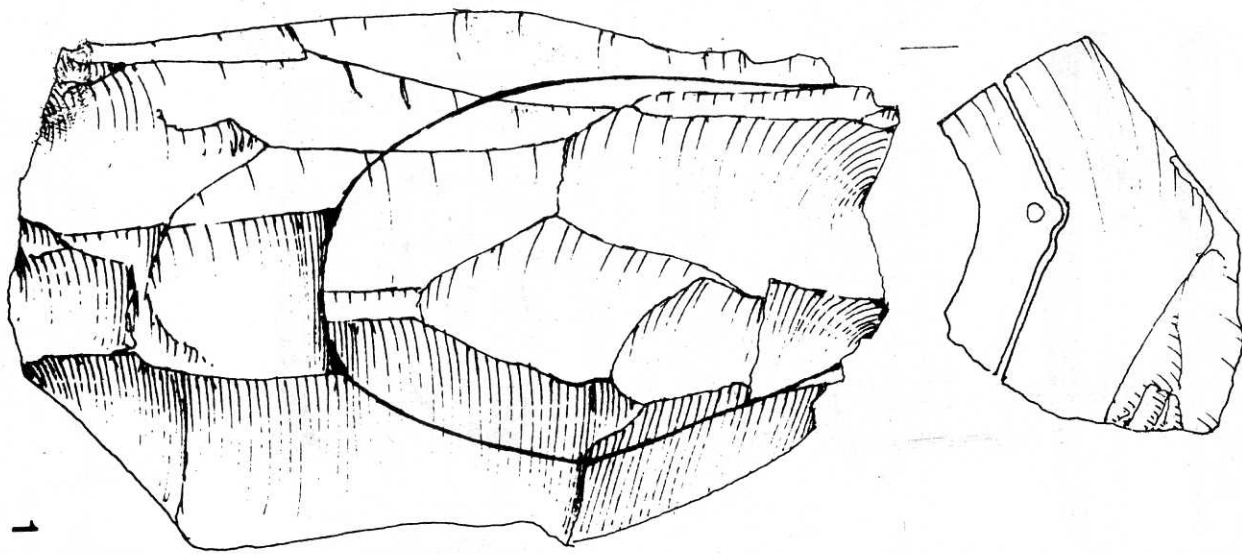


Fig.27. Site 58. Refitted flake cores from squares E5 (drawn by G.Almerigogna).

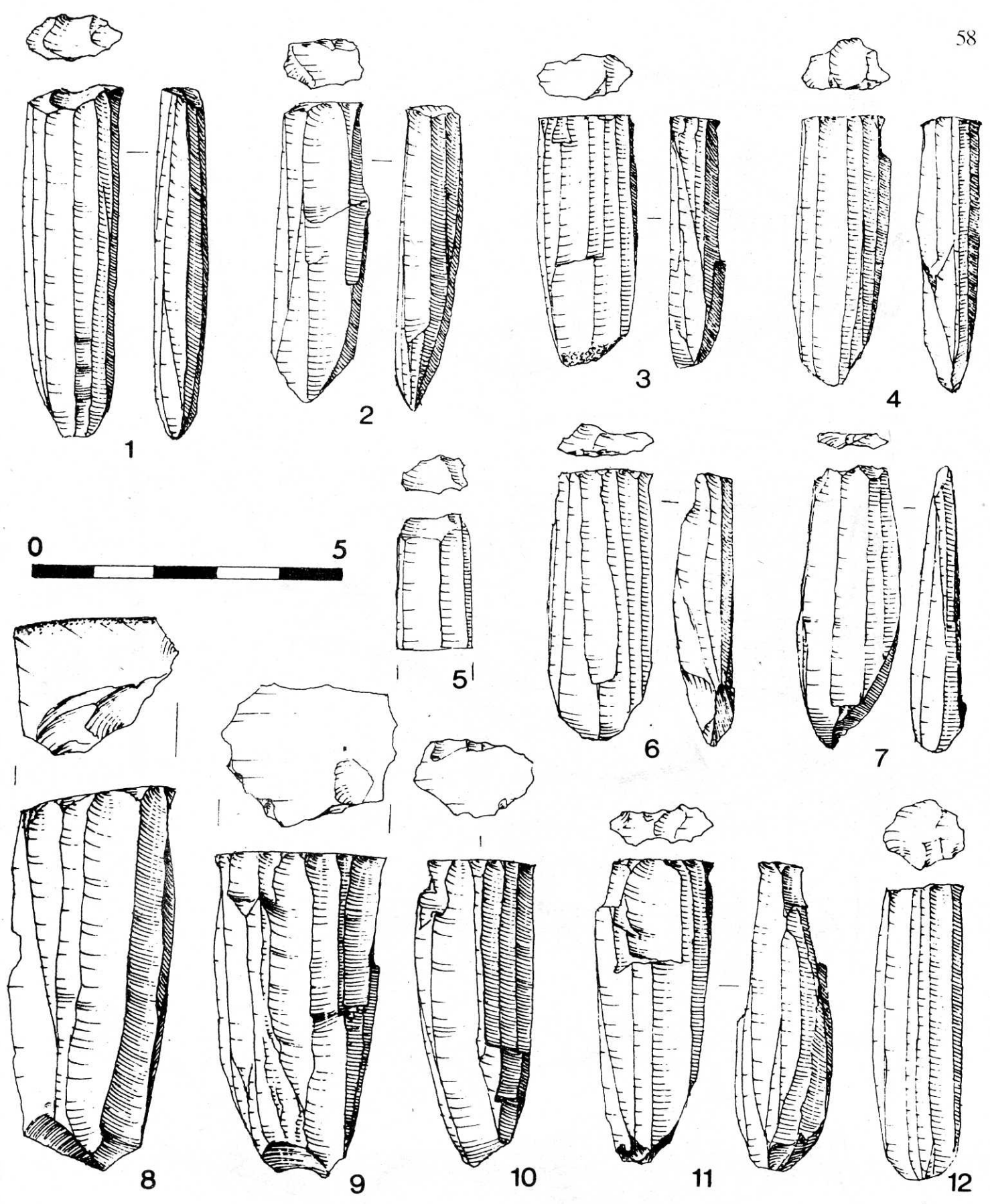


Fig.28. Site 58. Bullet-cores from squares BB3 (1) and CC6 (2), EE3 (3), BB101 (4) BB7 (5), G3 (6), CC4 (7), D102 (8), E2 (9), CC7 (10), BB7 (11) and A9 (12) (drawn by G.Almerigogna).

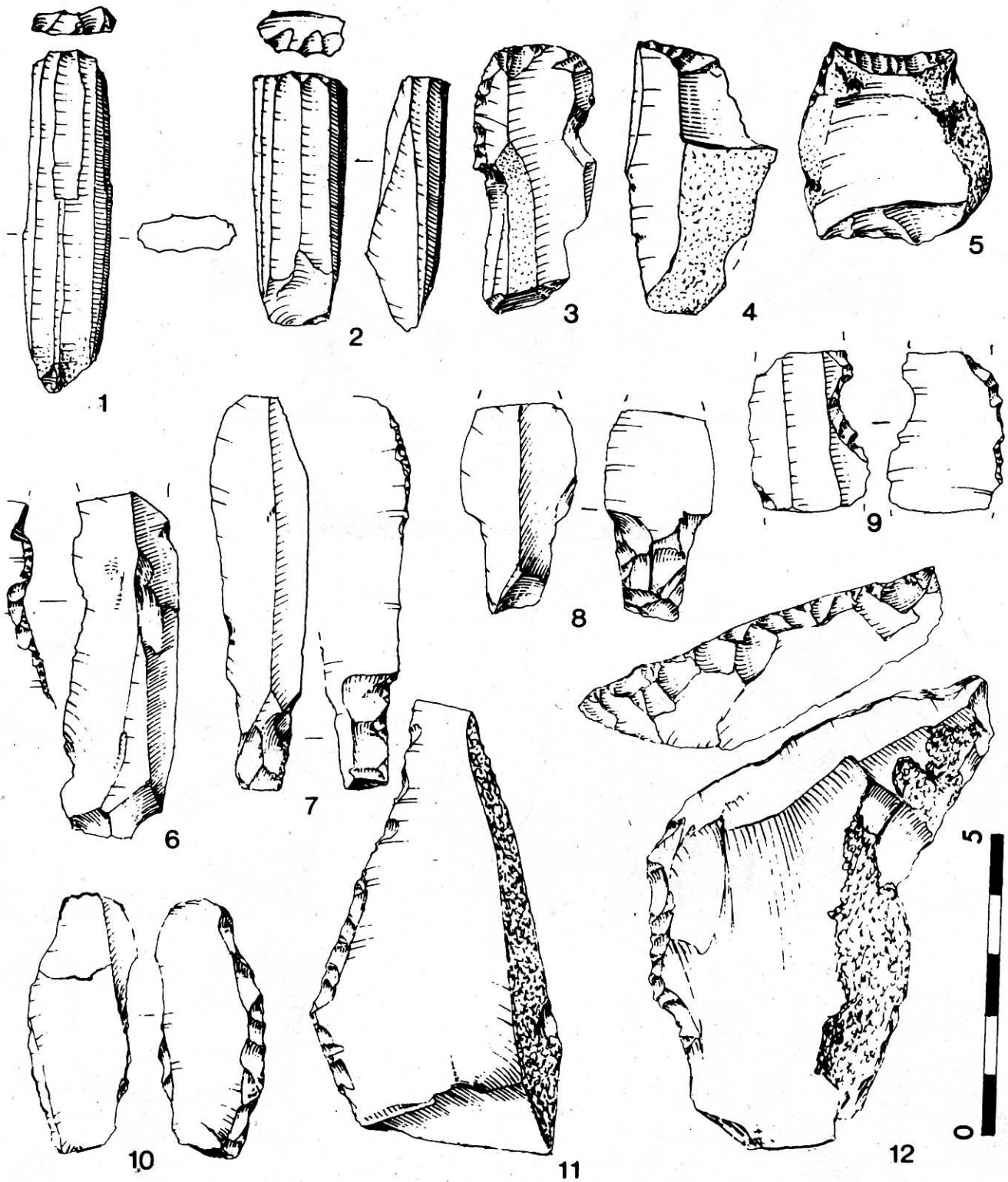


Fig.29. Site 58. Bullet-cores from squares BB4 (1) and C1 (2), end scraper from BB4 (3), truncations from B8 (4) and A9 (5), retouched blade from CC1 (6), tanged blades from E4 (7 & 8), notched blade from C8 (9), backed flake from E4 (10), side scraper from BB8 (11) and transverse scraper from CC5 (12) (drawn by G.Almerigogna).

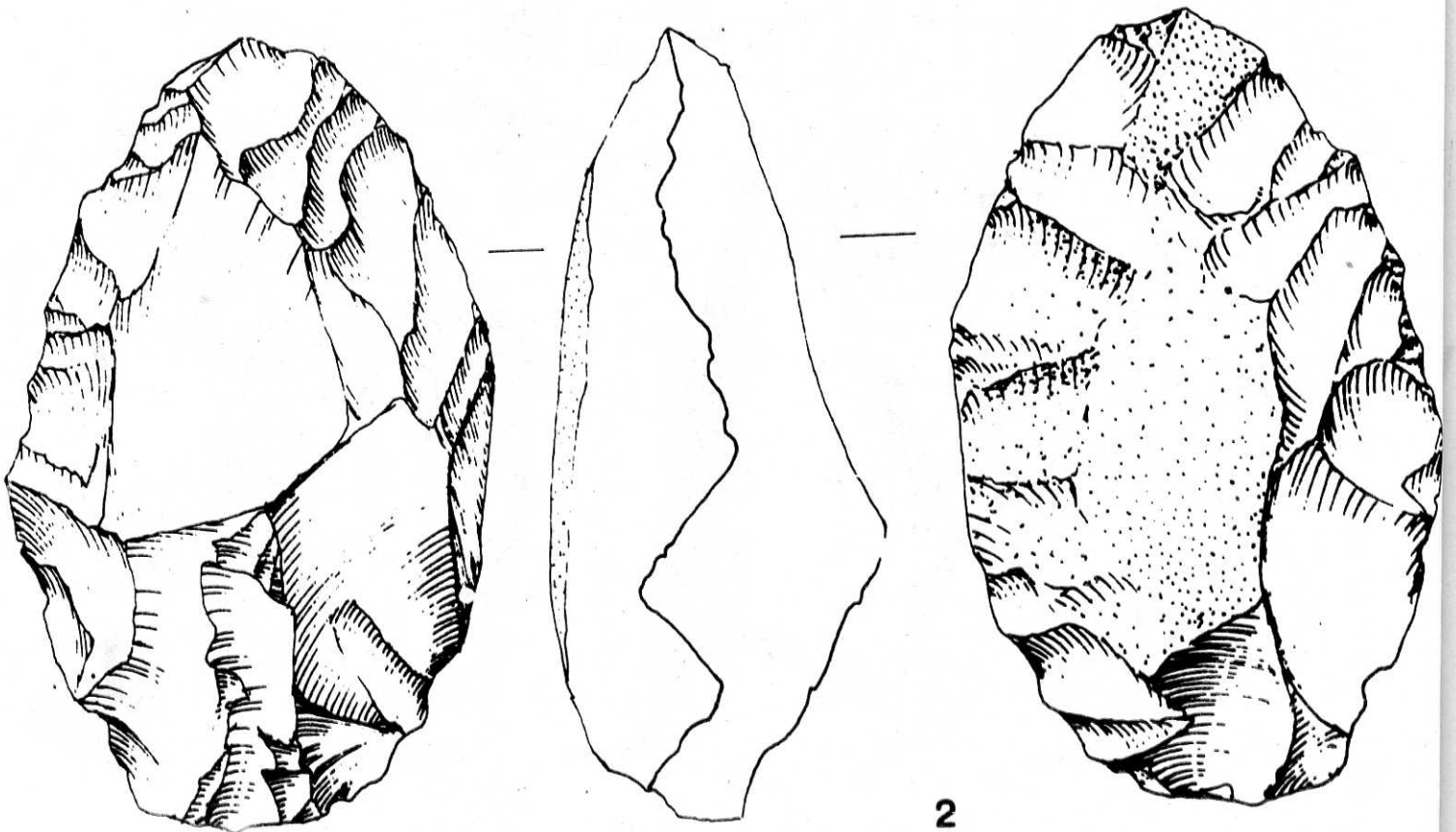
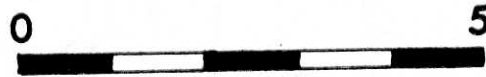
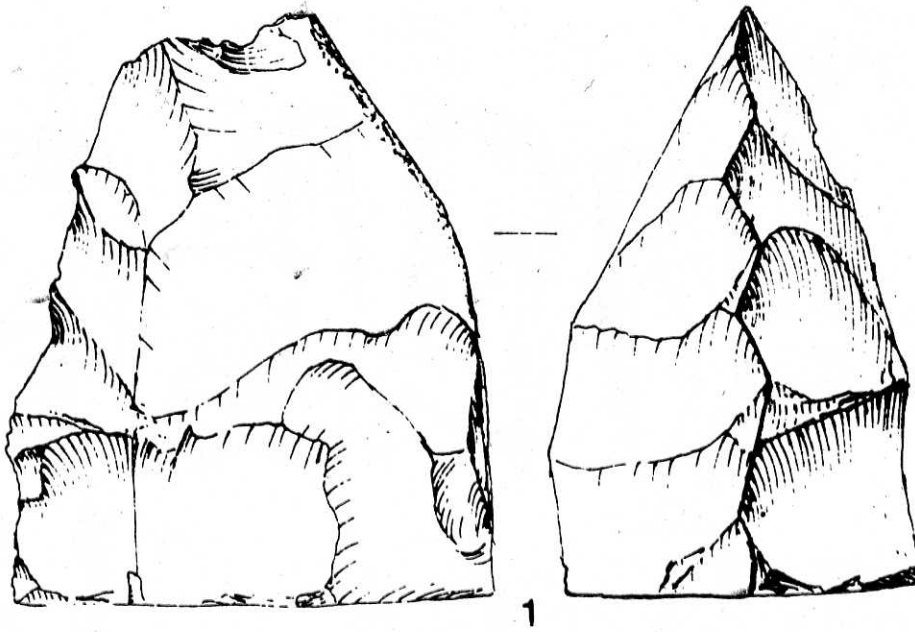


Fig.30. Site 12 (1) and site 58, square E2 (2). Pre-cores (drawn by G.Almerigogna).

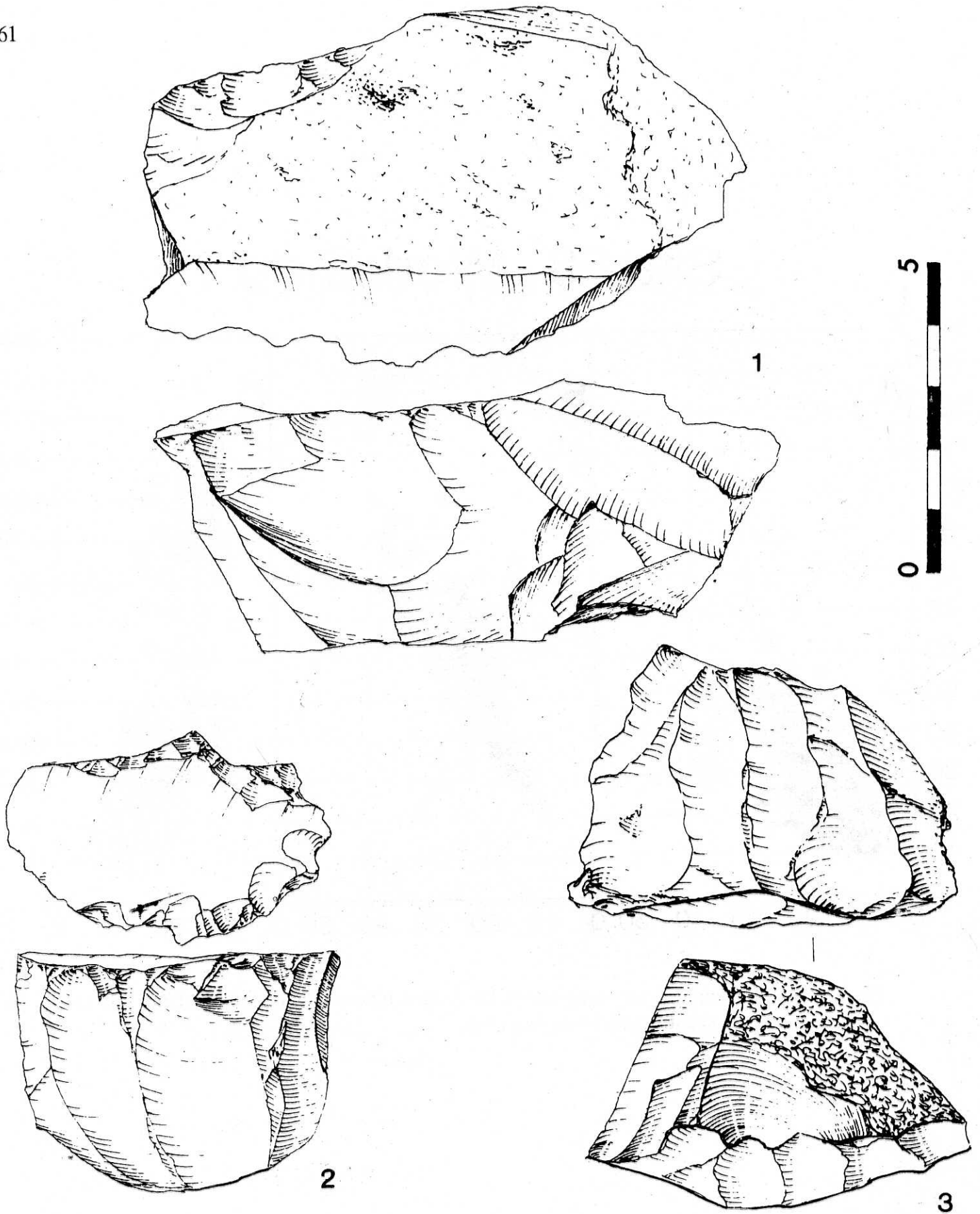


Fig.31. Site 58. Pre-core from square E1 (1) and mediun-size cores from FF5 (2) and F5 (3) (drawn by G.Almerigogna).

Site 58 Workshop 1

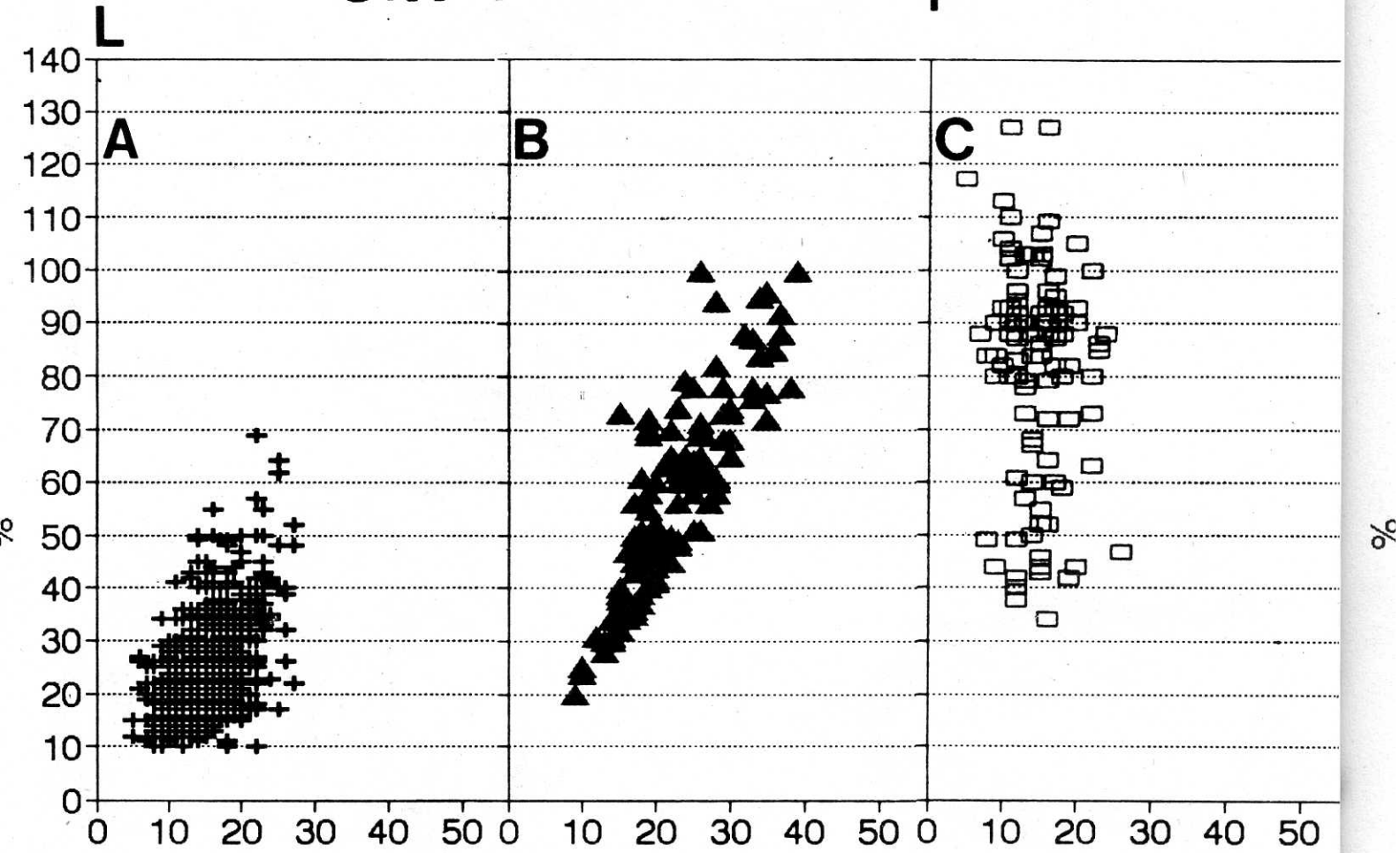


Fig.32. Site 58. Length/width diagram of the broken blades (A), complete blades (B) and of the core blade negatives (c) from workshop 1.

Site 58 Workshop 2

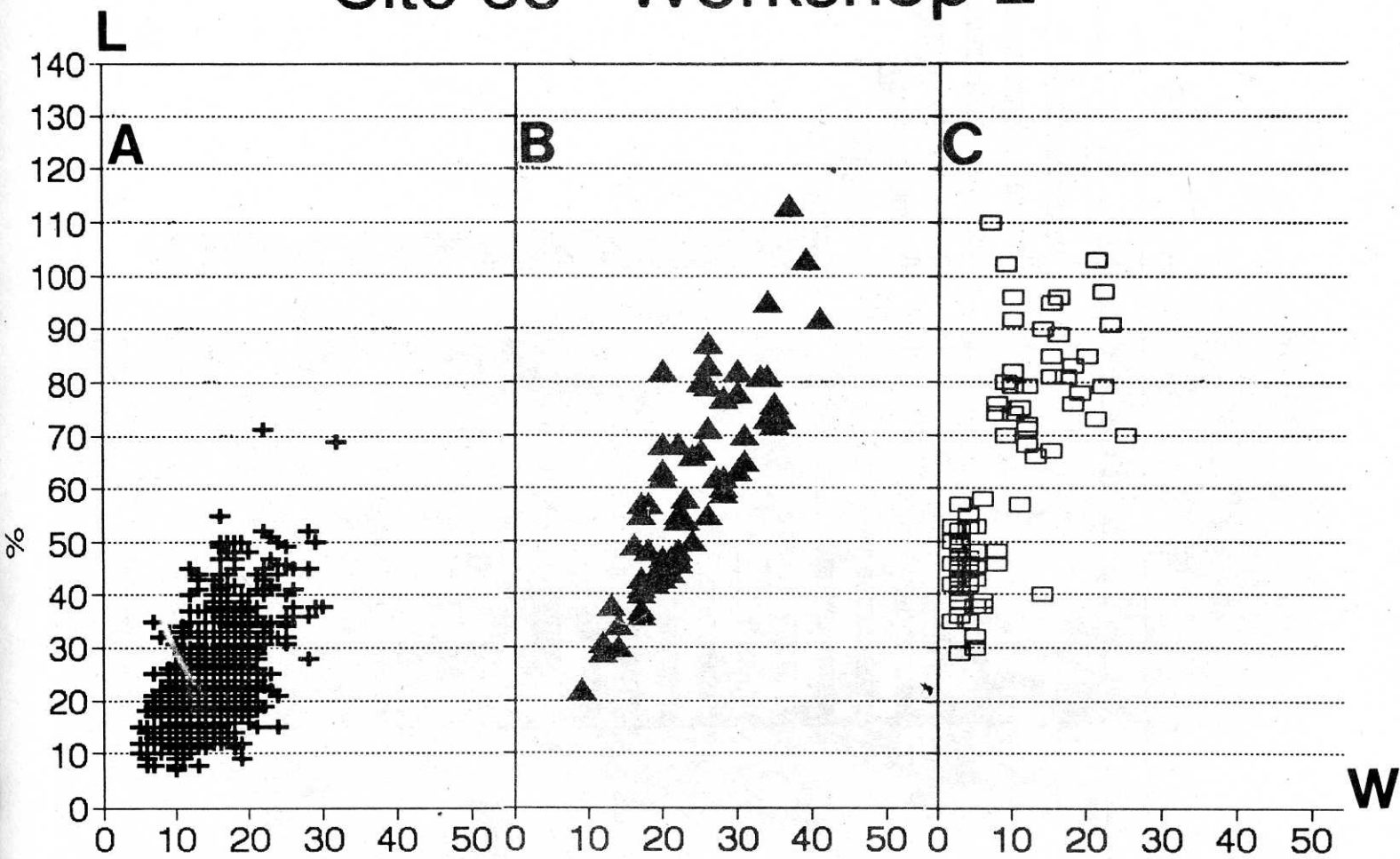


Fig.33. Site 58. Length/width diagram of the broken blades (A), complete blades (B) of the core blade negatives (C) from workshop 2.

Site 58 Workshop 1

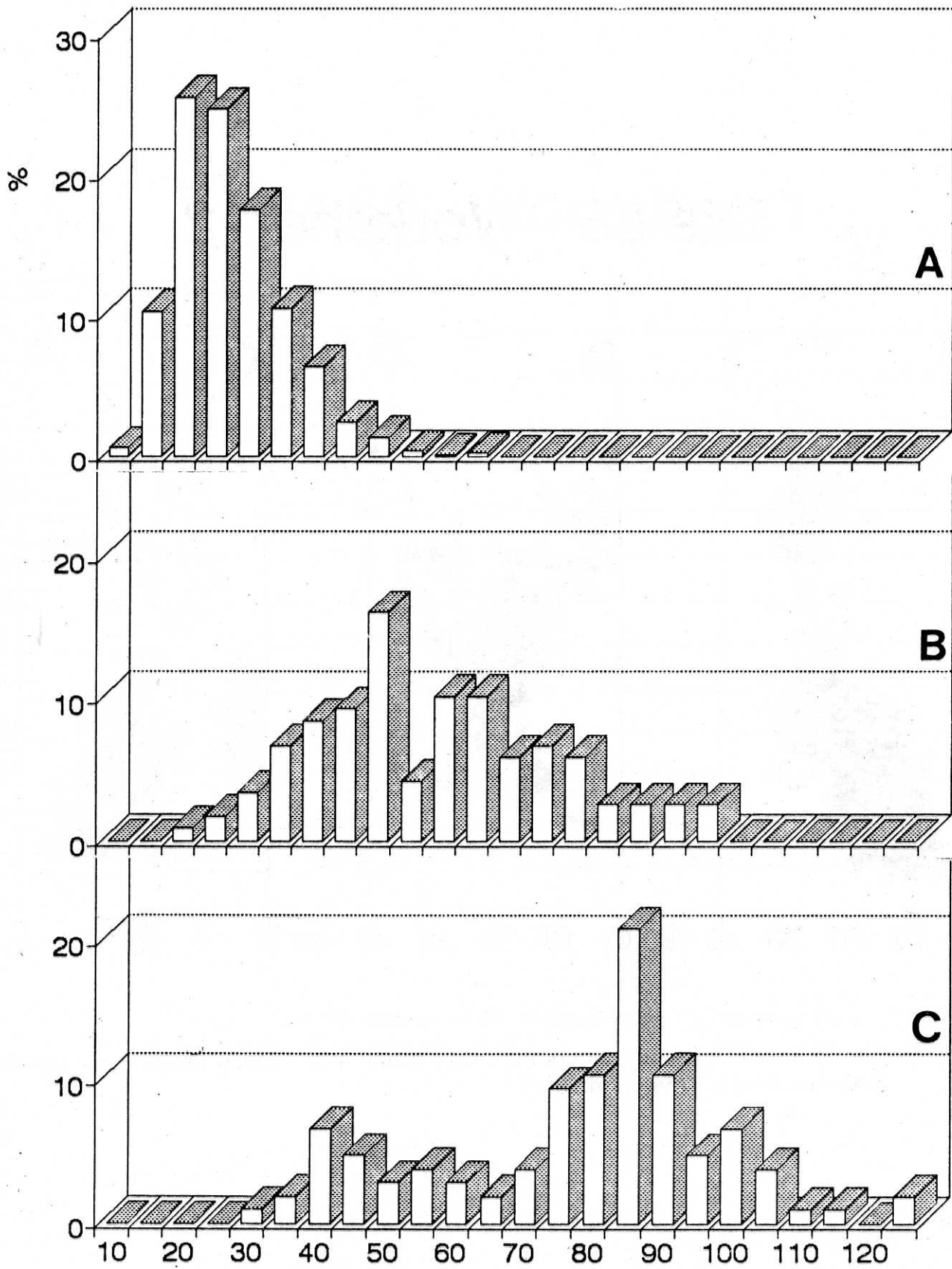


Fig.34. Site 58. Dimensional classes of the broken blades (A), complete blade (B) and of the core blade negatives (C) from workshop 1.

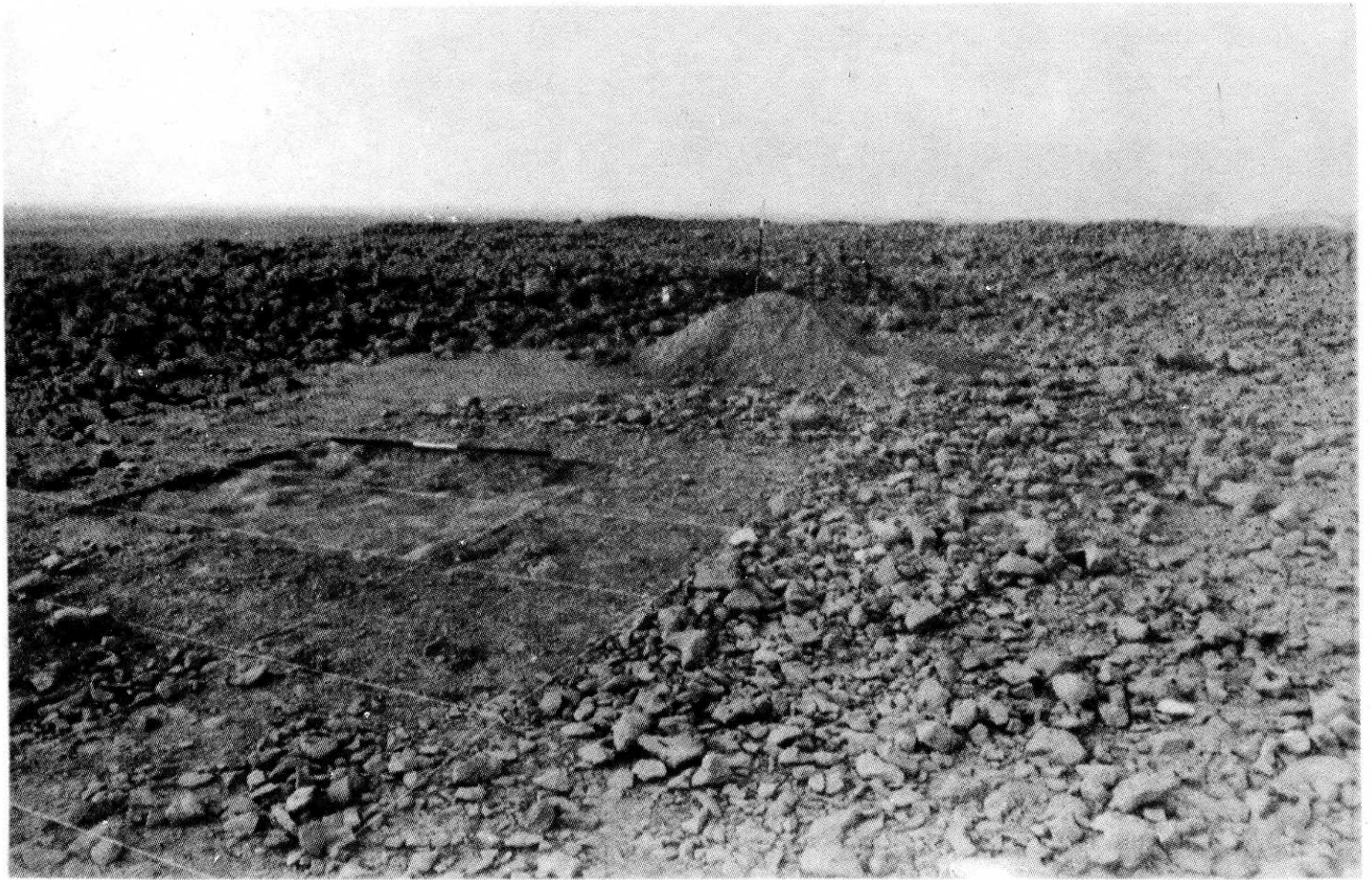


Fig.35. Site 59. (photo by P.Biagi).



Fig.36. Site 59. Trench through the quarry pit (a) and particular of the NW section, level 1 (b) (photo by P.Biagi).

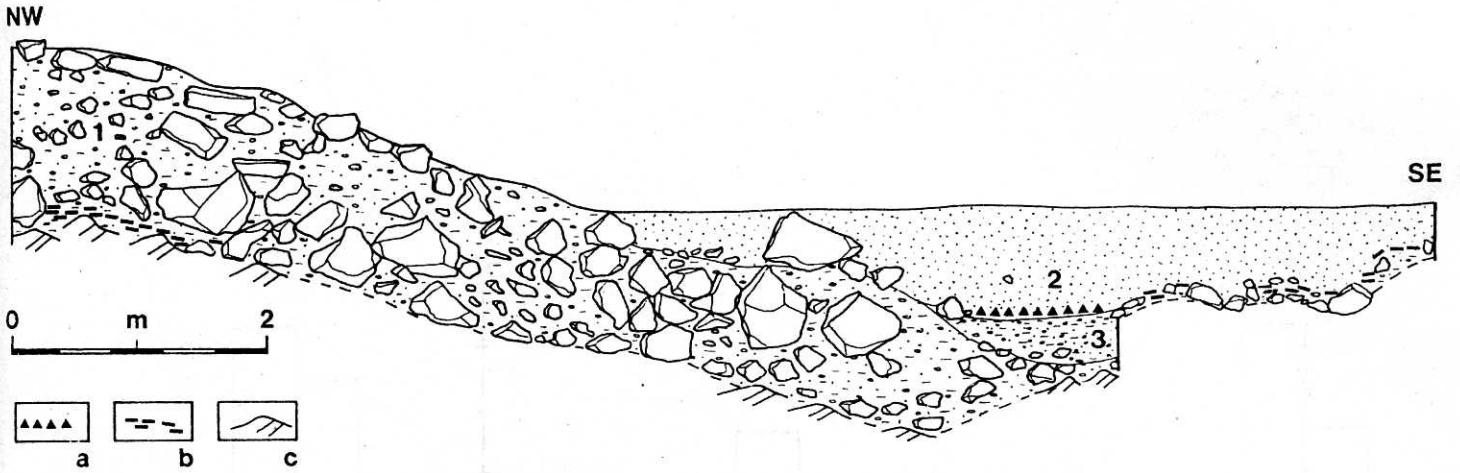


Fig. 37- Site 59. Section through the deposits. Level of land snails(a), flint artefacts(b), bedrock(c)

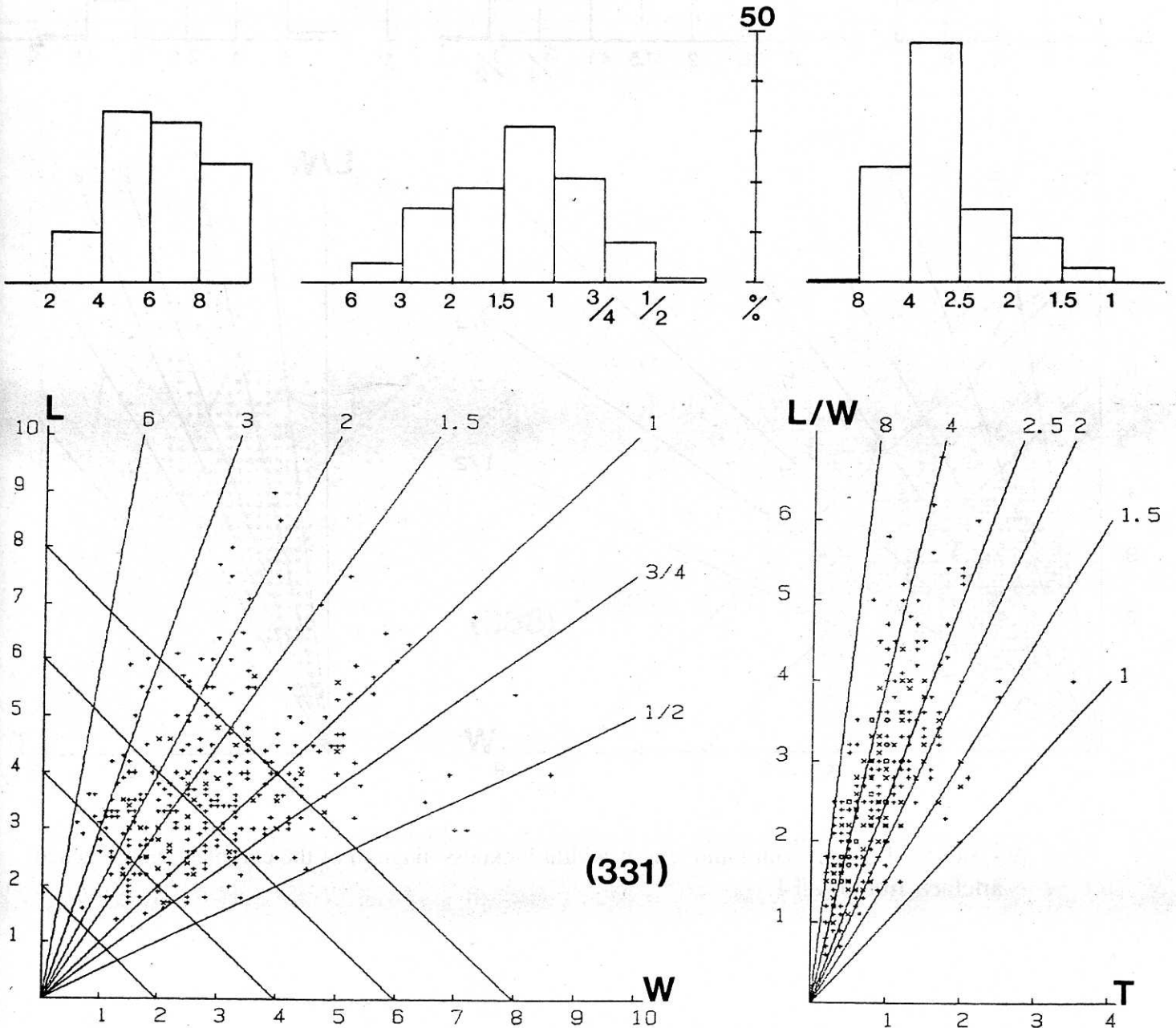


Fig. 38 - Site 59. Length /width and length-width/thickness diagram of the complete, unretouched artefacts from the surface.

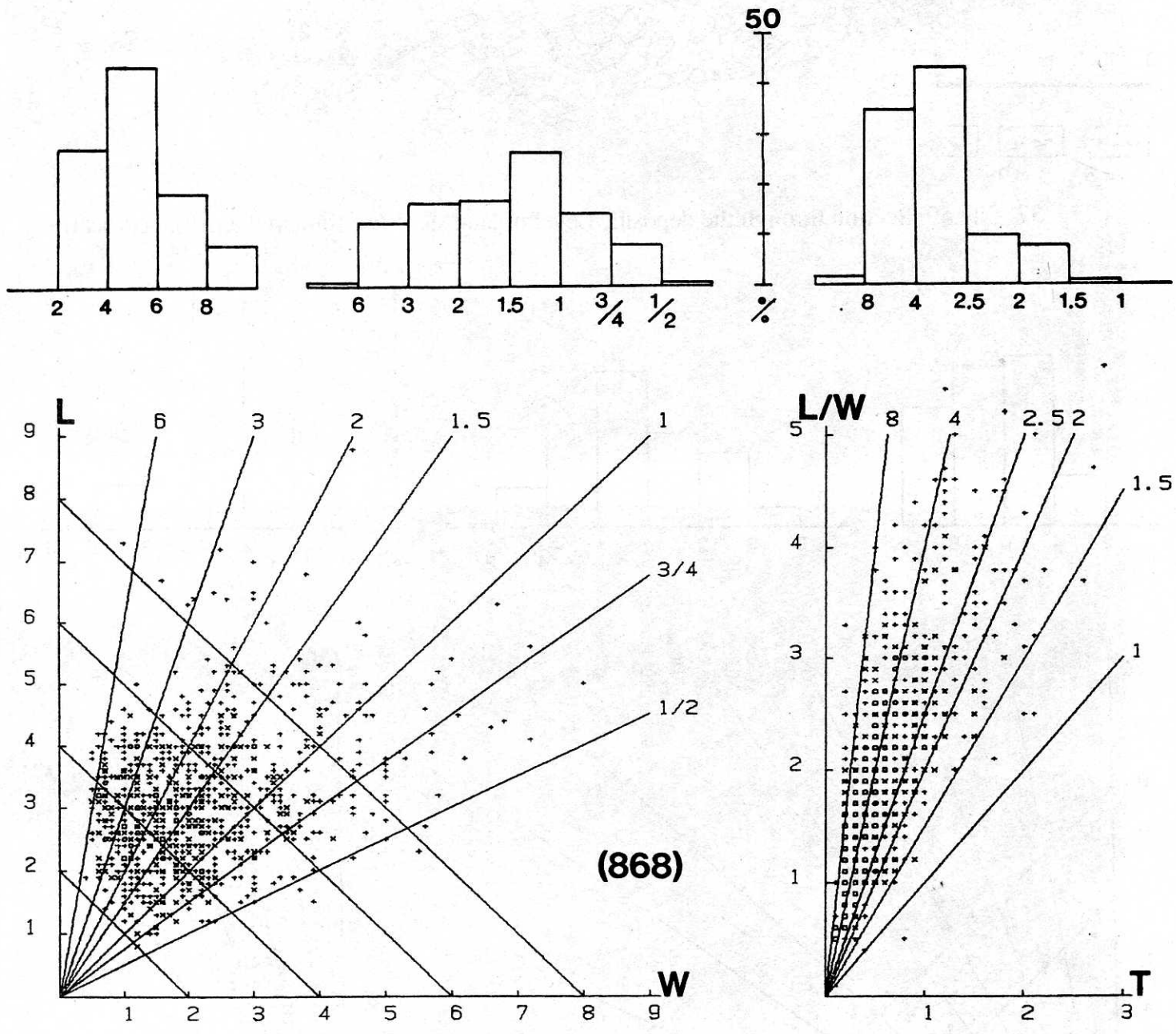


Fig. 39 - Site 59. Length /width and length-width/thickness diagram of the complete, unretouched artefacts from level 1.

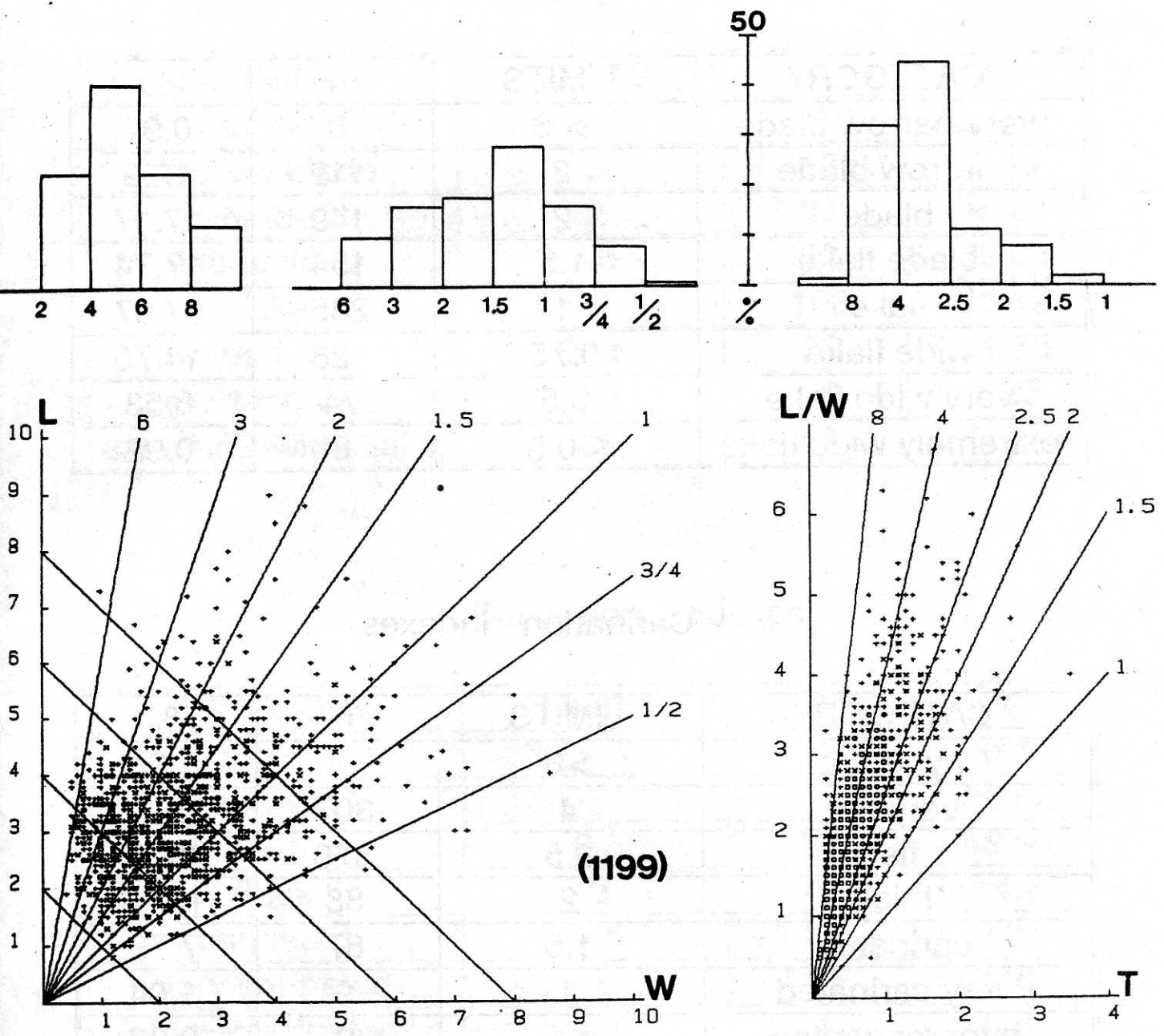


Fig. 40 - Site 59. Length /width and length-width/thickness diagram of the complete, unretouched from the whole site.

Site 59/1

Elongation Indexes

CATEGORY	LIMITS	n	%
very narrow blade	> 6	8	0.92
narrow blade	3	112	12.9
blade	2	149	17.17
blade flake	1.5	154	17.74
flake	1	235	27.07
wide flake	0.75	128	14.75
very wide flake	0.5	74	8.53
extremely wide flake	< 0.5	8	0.92

Carination Indexes

CATEGORY	LIMITS	n	%
hyperflat	>8	17	1.96
very flat	4	307	35.37
flat	2.5	378	43.55
thick	2	88	10.14
carinated	1.5	67	7.72
very carinated	1	9	1.04
hypercarinated	< 1	2	0.23

Fig. 41 - Site 59. Elongation and carination indexes of the complete, unretouched artefacts from the surface.

Site 59 Surface Elongation Indexes

CATEGORY	LIMITS	n	%
very narrow blade	> 6	0	0
narrow blade	3	13	3.93
blade	2	51	15.41
blade flake	1.5	63	19.03
flake	1	103	31.12
wide flake	0.75	72	21.75
very wide flake	0.5	26	7.85
extremely wide flake	< 0.5	3	0.91

Carination Indexes

CATEGORY	LIMITS	n	%
hyperflat	> 8	2	0.6
very flat	4	77	23.62
flat	2.5	160	48.34
thick	2	49	14.8
carinated	1.5	31	9.37
very carinated	1	11	3.32
hypercarinated	< 1	1	0.3

Fig. 42 - Site 59. Elongation and carination indexes of the complete, unretouched artefacts from level 1.

Site 59

Elongation Indexes

CATEGORY	LIMITS	n	%
very narrow blade	> 6	8	0.67
narrow blade	3	124	10.34
blade	2	200	16.68
blade flake	1.5	216	18.02
flake	1	341	28.44
wide flake	0.75	199	16.6
very wide flake	0.5	100	8.34
extremely wide flake	< 0.5	11	0.92

Carination Indexes

CATEGORY	LIMITS	n	%
hyperflat	> 8	19	1.58
very flat	4	385	32.11
flat	2.5	536	44.7
thick	2	136	11.34
carinated	1.5	99	8.26
very carinated	1	21	1.75
hypercarinated	< 1	3	0.25

Fig. 43 - Site 59. Elongation and carination indexes of the complete, unretouched artefacts from the whole site.

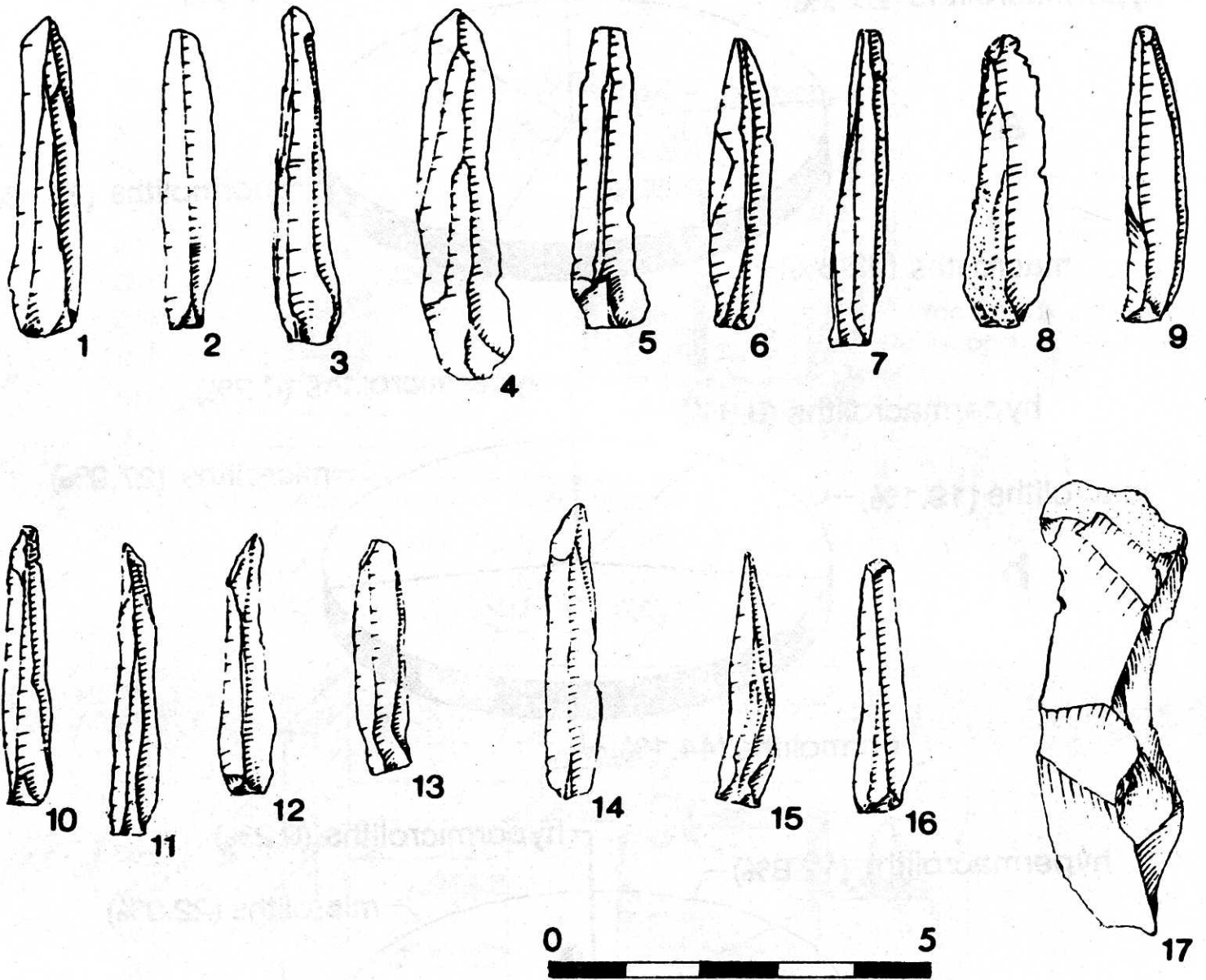


Fig. 44 - Site 59. Narrow bladelets from (1-16) and core trimming blade (17) from level 1 (drawn by G. Almerigogna).

SITE 59

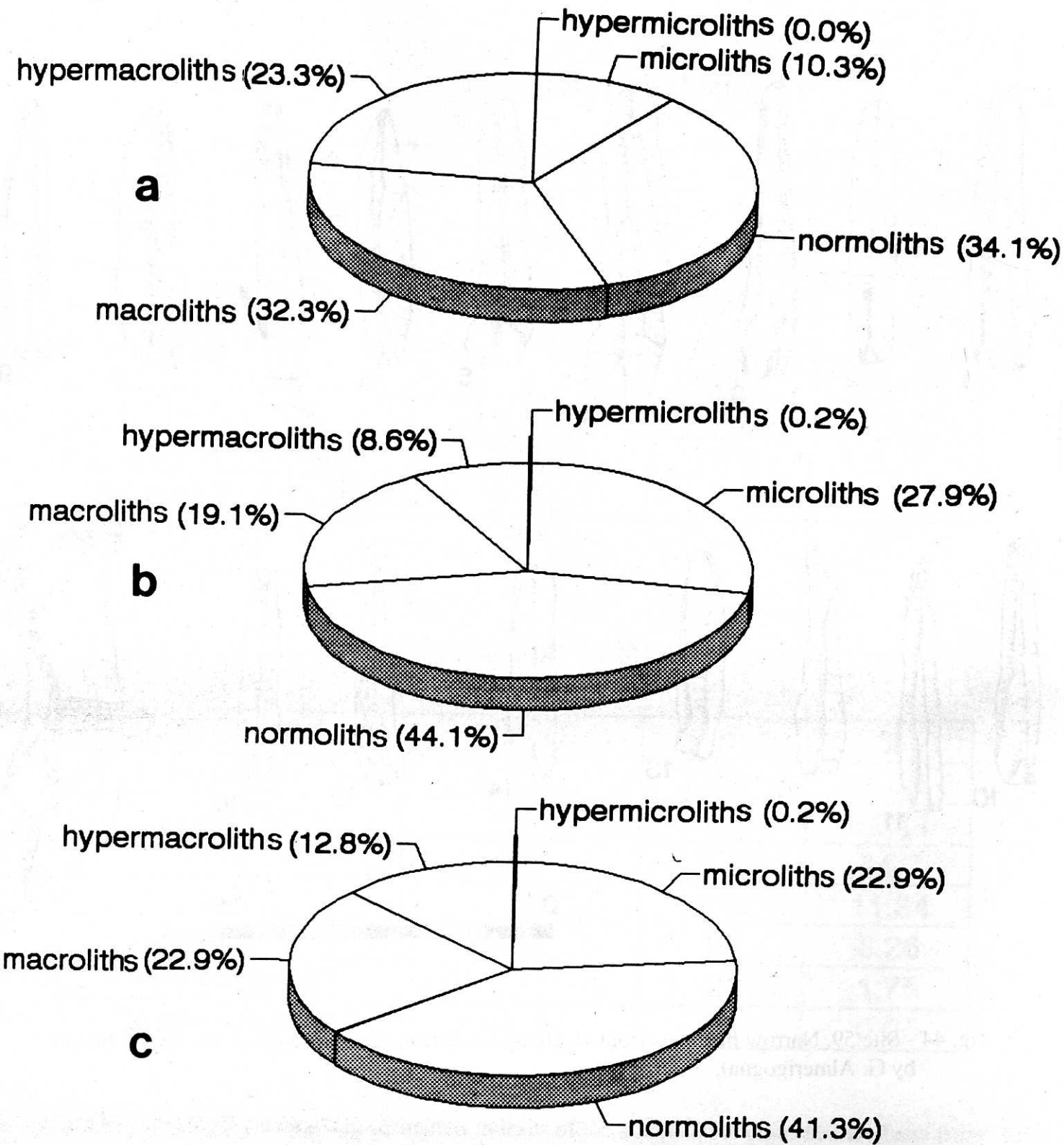
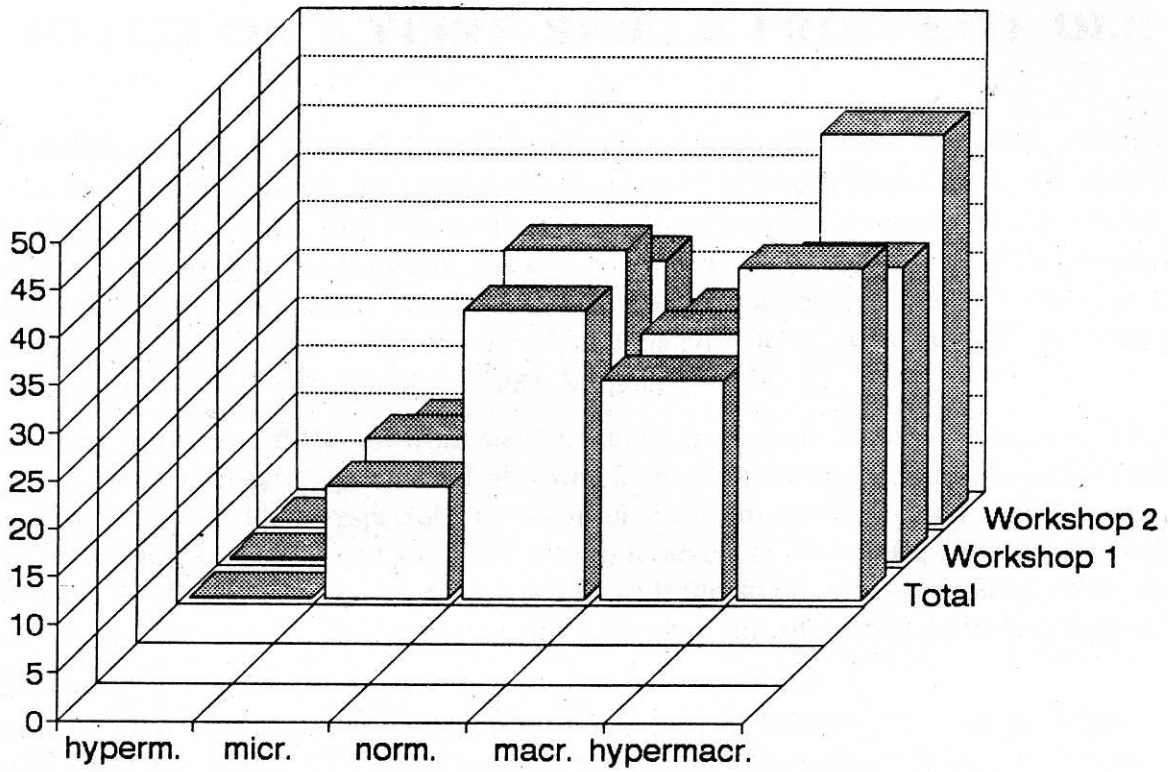


Fig. 45 - Site 59. Dimensional diagrams of the complete, unretouched artefacts from the surface (a). level 1 (b) and the whole site (c).

SITE 58



SITE 59

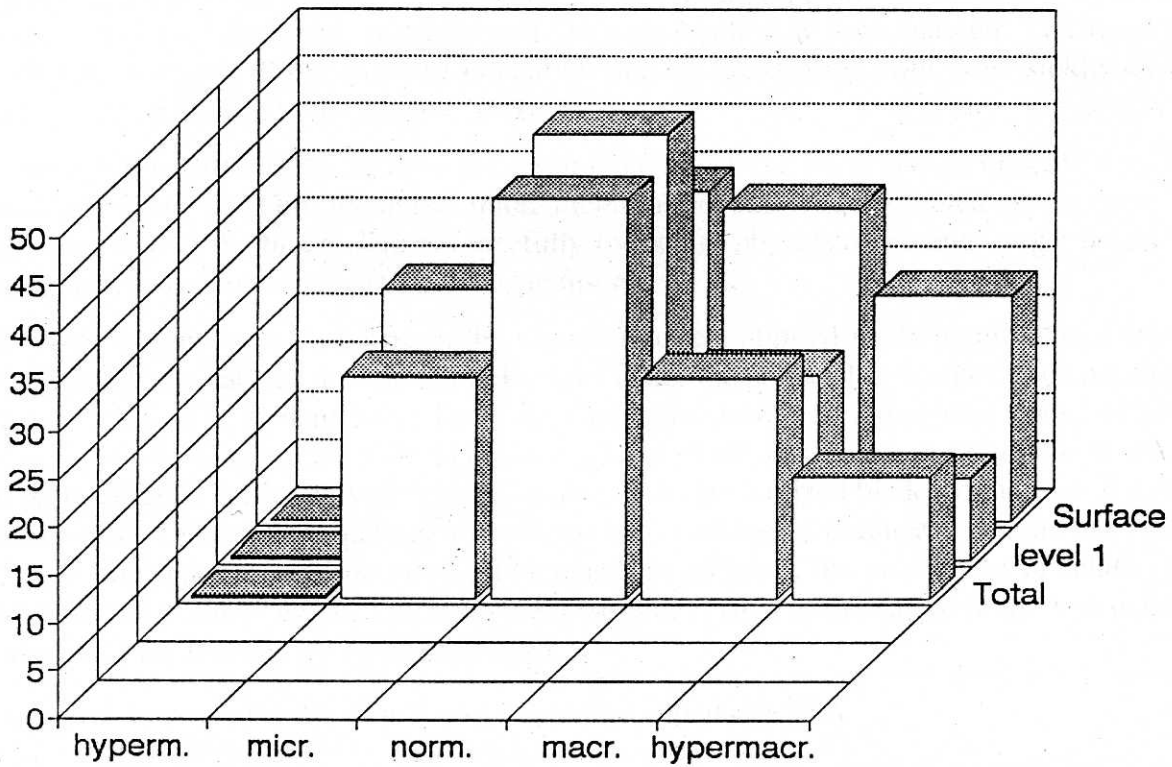


Fig. 46 - Site 59. Histograms of the percentages of the dimensional classes of complete, unretouched artefacts from site 58 (top) and site 59 (bottom).