

# POLISHED-EDGE BONE IMPLEMENTS

by

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*With Two Plates.*

Goodwin <sup>1)</sup> does not consider the polishing of stone as a sufficient criterion for the definition of "Neolithic" but the assemblage must include certain other items to show the cultural advance. He further assumes that if this presence of "ground or polished implements" indicates the Neolithic then the Smithfield culture, which is "basically of Upper Palaeolithic or Mesolithic origin", must be included. These implements are very rare in South Africa and one tends to use the term mainly with regard to implements outside the Union; to Europe, North Africa, the Americas and even Australia, as such ground implements occur in the final phases of their stone ages.

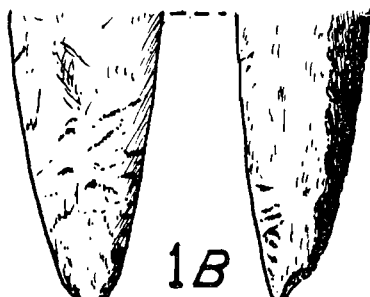
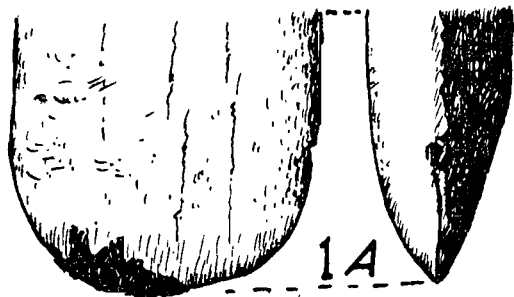
We cannot therefore, use the term Neolithic for South African ground or polished implements especially where they occur in older assemblages. The few which are listed below are of bone, of which one end has been ground to a fine edge. This edge has manifestly been obtained by grinding down both sides until a sharp edge has been formed and the whole tool indicates its use to have been as a hand-adze. This is especially so of the three long implements (Nos. 2, 3 and 4). Nos 6 and 8 are much smaller but have highly polished, nearly square edges, while the other end has been roughly trimmed down to a blunt end.

No. 1 represents a fine type of tool, which has been carefully made and shaped. The wider edge has been ground on both sides into the form of a wide arc and the narrow end tapers gracefully to a blunt point.

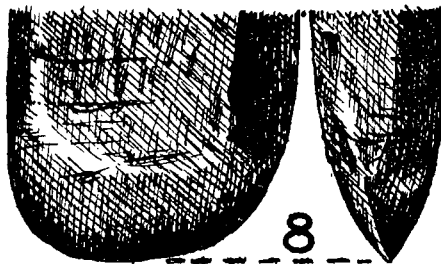
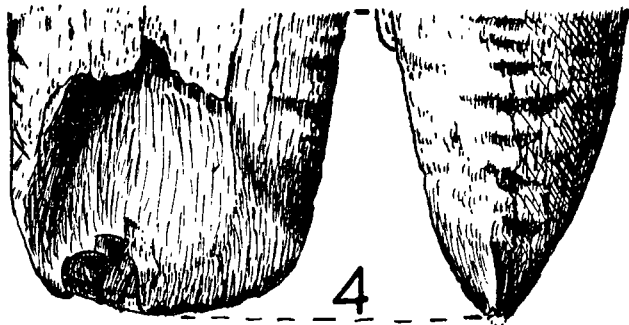
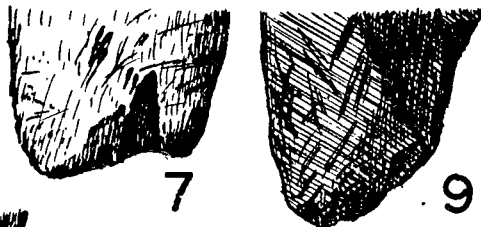
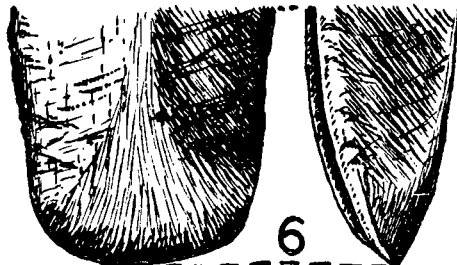
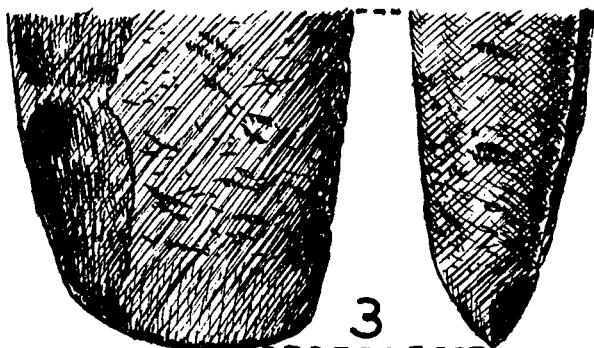
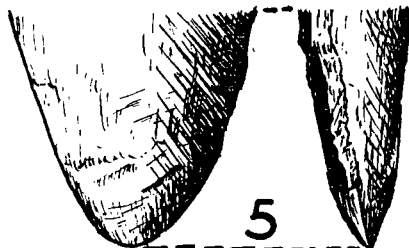
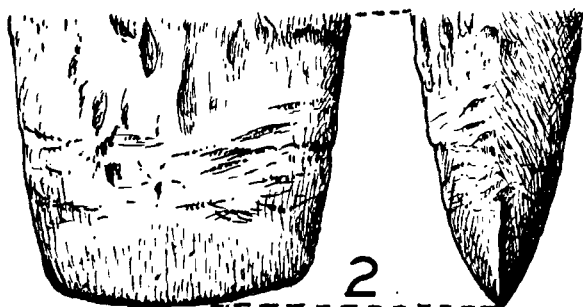
Nos. 5, 6 and 7 are more in the nature of spatulae, but too thick. The ground edge of No. 5 shows careful working but, perhaps due to the shape of the piece of bone used, the edge forms a sharp arc. No 7 is a cruder type of No. 6 and was most probably still in the process of manufacture with its wide end showing traces of grinding. Nos. 8 and 9 resemble the above group, with No. 8 a well-made tool and No. 9 still in the process of manufacture.

TABLE 1.  
(in millimetres)

	No. 2	No. 3	No. 4.
Length .....	409	370	327
Width at butt .....	54.5	55	65
Thickness at butt .....	31	51	51
Width at centre .....	47	47.5	55
Thickness at centre .....	32	34	30.5
Width 50 mm. from ground edge .....	43	46	48
Thickness 50 mm. from ground edge .....	28	25	37
Width of ground edge .....	34	32	34



*BLUNT END OF No.1*



9

*TWO VIEWS OF POLISHED EDGES OF TOOLS, Nos. 1 - 9.*

TABLE 2.  
(in millimetres)

	Length	Max. Width	Max. Thickness
No. 1	238	41	27
No. 5	72.5	37	18
No. 6	158	35.5	25
No. 7	109	28	12
No. 8	189	44	24
No. 9	146.5	35	18

These nine ground implements have all been recovered by Prof. T. F. Dreyer in the coastal strip extending from Great Brak River in the west to Matjes River in the east. At present they are housed in the National Museum, Bloemfontein, and it seems necessary to draw attention to these peculiar adzes, as only some mention of them has been made, but none pictured.

No. 1 (Cat. No. H. 3649) was found near a skeleton in an ash accumulation at the Lookout site, near Plettenberg Bay. The mound had an 18in. covering of black loam and the implement lay 4ft. 6in. deep near the skeleton of a man. The workmanship exhibited by this tool is of a very high standard and is the only one having both ends worked.

No. 2 (Cat. No. H. 3667) was recovered from a Kitchen midden in a sand dune at Groot Brak. It is slightly eroded on the one side but the edge was well covered and in perfect condition. It was lying next to fragments of the posterior skull region of a Bushman, at a depth of 4ft. 6in.

No. 3 (Cat. No. H. 3668) was buried in a black layer overlying red layers near the picnic spot at Keurbooms River. Although blackened to a certain extent, due to the black loam, this long bone adze is still in excellent condition.

No. 4 (Cat. No. H. 3673), another long adze, is one of the bone implements found in the Mytilus layer, M.R., B., at the Matjes River Shelter (vide Dreyer, <sup>2</sup>). It occurred near the top of this layer, i.e., about 4ft. below the surface, and judging by its cultural association, which Dreyer states is Smithfield C, belongs to the end of this period of the Later Stone Age.

The smaller implements (Nos. 5, 6 and 7, all with Cat. No. H. 3662) Dreyer (ibid, page 196) mentions as coming from the Wilton layer (M.R., C.). Under his heading "Bone Artifacts" they are resp.:—

"(2) A fragment of polished bone with a sharp polished edge may very well be part of an 'apron' similar to the wooden one, except that the edge is not scalloped." (Our No. 5.)

"(3) One thick bone with a polished chisel-like edge, and apparently used for preparing skin, was found." (Our No. 6.)

No. 7 was not mentioned due to the unfinished nature of the edge.

The associated material with these smaller implements has been described as a Wilton industry which in its constant features agrees very well with that given for S.A. Wilton by Goodwin, with the exception of horseshoe scrapers and ostrich egg-shell manufacturing. In the less constant elements there are additional items, which seem strongly to indicate that the manufacturers of this Wilton do not belong

to the San Stock, who are usually claimed to have made and used the Wilton implements. This is borne out by the nature of the associated skeletal material (vide Meiring<sup>3</sup>).

Nos. 8 and 9 (Cat. No. H. 3664), Dreyer (ibid, page 203) recovered from the "burnt" layer (M.R., D.) of the Matjes River Shelter, i.e., "from above the sterile layer between M.R., D. and M.R., E." and are therefore to be referred to what he has called the "less typical Mossel Bay" culture. Dreyer described them as being of a group of "five splints of very large bones, each with one end scraped and polished to a fine chisel edge . . . somewhat the shape of a duckbill. . . ." He further takes their function to have been for "preparing skin." Unfortunately only three of these are at present in the collection. No. 8 agrees with his description, but No. 9 is a much cruder instrument showing, however, a certain amount of trimming at one edge in the form of small grooves or cuts. A third tool of this group has the polished edge so badly damaged that it has only been pictured here but not described. It is of interest because it is the only polished implement of ivory. (See Plate 1, tool No. 10.)

The peculiar "rasplike" marks must be the results of the method of manufacture for the initial trimming of the edges in nearly all the implements. This was followed by a final polishing which left the edge comparatively even and sharp. It is quite possible that the function of the smaller implements was for scraping and preparing skins, but the three larger ones seem to have been used for digging or for gathering molluscs off rocks. This is especially so of No. 4, the edge of which is not only blunted but also chipped.

In this corner of the South African coast the use of these bone adzes stretches over a considerable time in space, from the pre-Wilton-folk of the Matjes River Shelter to the time of the Strandlopers or Beachcombers, eaters of the Blue Mussels (*Mytilus*). The three larger ones are so similar in size (see Table I), technique and association that one is tempted to regard them as having been made and used by one wandering group of people or perhaps even by a single family, the distance between their sites not being a difficult barrier to beachcombing wanderers.

No. 1 may be a development of the smaller type, judging by the size, shape and its occurrence below the *Mytilus* layer, and rather deep down (6ft.). Much more trouble has been taken about its manufacture as not only has the edge been carefully ground and polished, but the whole implement has been methodically shaped, gradually tapering to the narrow end. On the other hand it may simply mean that a more skilled (and artistic?) individual was responsible for its manufacture.

It is strange that No. 8 shows so much resemblance to No. 6 when we consider the differences in their makers and in their respective cultures (vide Dreyer,<sup>2</sup>), where these bone implements, together with bone awls, are the only elements common to both layers. It seems that, in this area at least, bone was more easily procurable for certain types of tools than was suitable stone, and the similarity of function caused a similarity in the finished tool.

#### REFERENCES

- 1) Goodwin, A. J. H.: "South African Neolithic Elements". *Ann. S. Afr. Mus.* Vol. XXVII. 1929.
- 2) Dreyer, T. F.: "The Archaeology of the Matjes River Shelter". *Trans. of Roy. Soc. of S.A.* Vol. XXI, Pt. II. 1933.
- 3) Meiring, A. J. D.: "The Wilton Skulls of the Matjes River Shelter". *Soöl. Nav. v. d. Nas. Mus., Bloemfontein.* Dl. 1, St. 6, 1947.