

where, the non-correspondence between age and content of obtuse angles is clearly evident. The "Cromerian" industry was not included in my list, because recent work on the site by S. H. Warren throws grave doubts on its origin.

The Zambesi flakes are too rolled to allow of angle measurement. They are clearly of human origin, and the character of the flaking is normal.

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¹ Baden-Powell, D. F. W., *NATURE*, 152, 663 (1943).

² Bury, H., *NATURE*, 152, 664 (1943).

³ Barnes, A. S., *L'Anthropologie*, 48, 221 (1938).

⁴ Barnes, A. S., *Amer. Anthrop.*, 41, 110 (1939); *Bull. Soc. Prehist. Franc.*, No. 1, Fig. 6, 10 (1939).

My letter in *NATURE* of December 4 raised three main issues.

(1) If, as Mr. Barnes asserts, Kentish eoliths, etc., were formed by soil movement in Tertiary times, why, I asked, did the still more active movements of the Pleistocene produce no similar results? To tell us that natural forces left "abundant traces of crushing, abrasion and striation on the Tertiary flints" in no way answers my question.

(2) Seeing that the percentage of high-angle scars rises rapidly "as we pass from the later and more skilled to the older and rougher work", I suggested that a still further rise in Pliocene times was not impossible. Barnes replies that there is no correspondence "between age and content of obtuse angles"; but, on his own figures, there is. There may be recrudescence of rough work in late industries (Campignian, etc.), with local increase in the number of obtuse angles; but no early industry shows a low number.

(3) I thought that further information about the Zambezi implements might possibly affect Barnes's conclusions. I am interested to learn that he finds them "clearly of human origin", as my impression is that some of them (not figured) are very like Kentish eoliths. That remains to be seen.

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MR. A. S. BARNES says that Mr. J. Reid Moir's "criterion of human work fails when applied to similar series of Eocene date". This is not true, at least for the Bull-head Bed at the base of the Eocene in Suffolk, which was specially investigated by Moir¹ in order to settle this question. Moir came to the conclusion that there are essential differences between fractured flints of Eocene age and those of later date described as eoliths, although occasional Eocene flints can be found which show a superficial resemblance to flints flaked intentionally.

With regard to the use of steep flaking by Palaeolithic man, I agree with Barnes's criticism of a statement in my letter in *NATURE* of December 4 that Magdalenian flakes can be removed from the core "only" by steep flaking. Obviously some of the flakes in Upper Palaeolithic work were removed at lower angles than others; but the fact remains that Magdalenian man could, and often did, remove usable flakes at high angles. I am glad that Barnes admits that these flakes are due to human and not natural agency. Quite apart, therefore, from the steep flaking used for the butt ends of Acheulean

axes and for Aurignacian edge-work, it seems established that at least some high angles are also seen on various Upper Palaeolithic cores. This does not invalidate the interesting suggestion in Bury's letter in *NATURE* of December 4 that the rise of percentage of steep flaking with antiquity may be significant; it does, however, prove that steep flaking cannot be taken as a criterion of intentional work.

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¹ Moir, J. Reid, *Proc. Prehist. Soc. East Anglia*, 1, 4, 397 (1914).

Veterinary Education in Great Britain

THE leading article in *NATURE* of January 8 on veterinary education provides me with an excuse for mentioning some of the obstacles I see in our path. The present is a good time for discussion; for definite decisions, it is the worst time that has occurred during my rather long life. Never has the future of the nation, or the nature of the work lying ahead of the veterinary surgeon, been so unpredictable as it is to-day.

The Ministry of Agriculture looks forward to a need for a very much greater output of veterinary surgeons—I cannot see why. No doubt, it expects to increase the numbers and the work of whole-time inspectors, but this must be largely at the expense of the part-time and independent men; and it would appear to me that the general agricultural policy pursued pre-war—as much grass as possible and bring in concentrates from abroad—was designed to support a larger head of sheep and cattle than can be kept under any other system. Ploughing up grass means fewer, not more animals.

The Council of the Royal College of Veterinary Surgeons has a curriculum committee; I do not agree with many of its conclusions, but probably that is because I am old-fashioned. I do hope we are not likely to have a curriculum rammed down our throats by Government.

The present curriculum is well designed for the production of large-animal practitioners. Besides these, we have to provide small-animal practitioners; inspectors and research men for the Ministry of Agriculture; executive and research men for the Colonial Service; Royal Army Veterinary Corps men; and a diminishing number of municipal and county officials. The qualifications needed are very different, and it will always be impossible to train our students so as to be efficient for all these purposes, on graduation.

It will be the part of wisdom if we carry on with the *status quo ante* until after the War, taking no irrevocable steps, making no changes of constitution in the colleges.

When we see the number of each different kind of graduate that will be called for, we can try to arrange a suitable curriculum, reinforced by post-graduate classes; but we can never give experience. The most important part of veterinary education will always come after appointment.

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