

THE DATE OF THE DARTMOOR ANTIQUITIES.

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FROM conclusions derived from the study of the pottery, tools and weapons found in the prehistoric settlements and graves of Dartmoor, it has been customary to speak vaguely of the antiquities as belonging to the Bronze Age; but, as far as I know, no attempt has been made to fix with anything like definiteness either the length of time during which the moor was occupied by the people who erected the hut circles and set up the megaliths, or the date when the occupation began. Absolute precision, of course, is not to be expected. Yet there is, I feel, sufficient evidence to be obtained from other sources to warrant the suggestion of limits of time which will give us a close approximation to the truth. This evidence may be summarized thus :

1. *The Anterior Limit.*

The character of the occupation, the number and distribution of the hut dwellings, and the type and distribution of the megaliths.

2. *The Posterior Limit.*

The negative evidence of the lack of Iron Age remains on the moor combined with the positive evidence afforded by the ring of prehistoric camps encircling the moor.

I. THE ANTERIOR LIMIT.

(a). *The character of the occupation and the number and distribution of the hut circles.*

The conventional view has been that the hut circle folk were a pastoral people who occupied the moor with flocks and herds during the Bronze Age and then departed. On the face of it, this seems absurd. The pastures were there before; they remained there afterwards. Yet we have neither distinctively Neolithic remains on the one hand, nor any Iron Age, Roman, or Saxon on the other. Nor is Dartmoor mentioned in the Domesday Book. Thus we are asked to believe that there was a sudden incursion of a pastoral people

upon the moor, and that their departure was followed by a neglect of it through many centuries until the time of the medieval tinners. If pasture were the attraction, this is unthinkable.

Further, from calculations based on the size and number of the hut circles it has been usual to imagine a relatively teeming population inhabiting all parts of the moor at one and the same time. To take three examples only—the settlements at Postbridge would, if simultaneously occupied, account for 2,000 inhabitants, those round White Tor 2,500, and those which lie along the banks of the Erme 21,000. Now take into consideration all the other river valleys and the host of circles with which they are congested, in order to gain some dim impression of the enormous total population which this idea involves. Think, too, of the magnitude of the associated flocks and herds, the food requirements of those hordes of people, the skins needed for clothing, the hopeless overcrowding, and other practical problems ; and it is clear that the proposition reduces to an absurdity.

To obtain an insight into what was probably the actual state of affairs, consider first of all the *distribution* of the hut settlements. They are all found in the neighbourhood of streams, which also afford evidence of the activities of the medieval tin-workers. It may be objected that this statement has no special significance, since we should naturally expect to find the huts near running water. But if a domestic water supply were all, this expectation would apply to any and every main stream, not merely to those which were later worked by the medieval tinners. Yet in the north-west of Dartmoor, where large streams such as the West Okement and the Redaven are to be found, together with magnificent pasturage, there is an entire absence of hut circles. And this region is also devoid of the later streamworks. Such a coincidence suggests a common interest and a common purpose ; and it further suggests that whatever pastoral use was made of the moor by prehistoric man was purely incidental to the occupation and not its object.

The implication therefore is that the early occupation of Dartmoor was for the sole purpose of obtaining tin required in the production of bronze. Such a conclusion rationalizes the matter and brings it into accord with what is known of the moorland activities in historical times. It explains why we have no evidence of a pre-Bronze Age occupation. It also explains why the moor was deserted for many centuries after the Bronze Age ; for when the supplies of tin were exhausted, so far as the primitive methods available to early man allowed, it was left to its desolation until medieval man, with improved methods of extraction, found it worth while to exploit it once again.

A further point in favour of this view is that while it accounts for the *distribution* of the hut circles, it accounts also for their *number*. In this connexion I suggest that the huts, and hence the associated monuments, are not contemporaneous, although all belonging to the same cultural age. If early man went to Dartmoor in response to the industrial need of providing the tin required in the production of bronze, he would naturally build huts of the solid and permanent type which are found there, for even a small section of any valley would occupy him a long time before he had extracted all the tin which the means at his disposal rendered available. When any such section was worked out, he would move higher up the valley and another settlement would spring up. Thus, for example, instead of a vast population of 21,000 in the Erme valley, where hut circles are distributed for miles along the banks of the river, the truth probably is that we have a small, gradually shifting group of settlers making their way further and further into the moor with the passage of time, and being able readily to support themselves and supply all their needs of food and clothing by very reason of the smallness of their numbers.

Geographical considerations further suggest that the search for tin on Dartmoor would almost certainly be a somewhat late development as compared with, say, the Cornish industry, on account both of the remoteness of the moor and the difficulties of communication and transport. Thus it is highly probable that the Bronze Age in Britain had been long established before the occupation of Dartmoor began. Incidentally, it may be remarked that the hut circles are of a relatively late architectural type, with the floor at ground level and with door jambs from three to three and a half feet in height supporting a stone lintel. Professor Gordon Childe, in *The Bronze Age*, refers to these huts as belonging to the late Bronze Age, and he further suggests 1,000 B.C. as the date of the first invasions which ushered in that age.

(b). *The type and distribution of the megaliths.*

If we are correct in suggesting that early man slowly worked his way up the river valleys towards the heart of the moor, with the result that the groups of hut circles found in any given region are not contemporaneous, it would not be unreasonable to expect a similar lack of contemporaneity as between one quarter of the moor and another; and the view that we have taken would be automatically strengthened by the discovery of evidence which justifies this expectation. The hut circles themselves, being all of similar type, do not furnish the necessary data. But if we consider the associated megaliths and other monumental remains an interesting fact appears. Both dolmens and kistvaens are to be found on

Dartmoor, and since dolmens are in general characteristic of an earlier and kistvaens of a later people, it has been suggested that the remains may be explained on the hypothesis of two racial waves, one early and one late. Now, in the first place, every known burial on Dartmoor affords evidence of cremation, no instances of inhumation having been discovered; and, in the second, it is a commonplace that there is always an infiltration of the religious or sepulchral or social customs of one age or people into those of its successor. If there were a widespread and numerically large distribution of dolmens together with a similar distribution of kistvaens, the assumption of a double wave of occupation would be reasonable. On the other hand, the presence of an *occasional* dolmen in the kistvaen period could readily be accounted for by the survival of an earlier custom, so that the occurrence of a very small number of dolmens might be consonant with a single wave of occupation. Thus the question of the number and distribution of the dolmens is of crucial importance, and it seems to me that this question is susceptible of a reasonably definite settlement.

Admittedly the hand of the despoiler has been very heavy on Dartmoor, but one would expect to find still *in situ* the vast majority of such relatively massive remains as dolmens, since their constituent stones are so inconvenient for handling in any way on account of their size and weight. This is illustrated by the fact that Spinster's Rock, near Drewsteignton, although set in the midst of a wide area of farmland, is in perfect condition, while the adjacent remains, of which a considerable number existed a century ago, have all long since disappeared. Thus, if dolmens had ever been at all numerous on the moor we should expect to come across frequent evidence of the fact. Yet only four are to be found—Spinster's Rock, a portion of one called The Three Boys on Shovel Down, one incorporated into the wall of Dunnabridge Pound, and one near Coryndon Ball. Kistvaens, on the other hand, are distributed in abundance all over the moor. This scarcity of dolmens therefore definitely suggests that the occupation of Dartmoor was carried out by a single wave of a kistvaen people rather than by a dolmen people followed by a kistvaen people.

If this conclusion be accepted, another deduction follows. The positions of these four dolmens are indicated on the accompanying sketch map, and it will be noticed that they all lie on the eastern side of the moor. This would seem to point to the fact that the earliest intrusions were made along the valleys of the eastern rivers—the Teign, the Dart, the Avon—by a people whom we find still erecting an occasional dolmen, but that by the time the search for tin reached the

other quarters of the moor, this practice had completely died out.

This argument therefore not only rules out of consideration a very early date for the occupation, but also lends support to the theory already advanced as to the lack of contemporaneity among the settlements and the monuments.

The suggestion of a double wave of occupation has likewise been urged by those who point to the menhirs as indicative of an early cultural age. Now menhirs are much more widely distributed over Dartmoor than are dolmens, and if they regularly occurred in isolation this point might be difficult to meet. But what has to be kept in mind is that "in its typical and complete form" the normal Dartmoor grouping is "menhir plus stone row plus circle enclosing a kistvaen". The whole group must clearly be taken as a single entity. It would be almost an insult to the intelligence to suggest, for example, that an early race erected the three menhirs at Drizzlecombe, and that a later race came along and erected three circles with kistvaens and solemnly joined them to the menhirs by stone rows. Of course, it is not impossible, but the balance of reason demands that the group be treated as a whole. Thus its date must be that of *the latest people whose presence is indicated by the scheme*; so that the menhirs do not disturb the conclusion deduced from the scarcity of dolmens.

Taking now into account all the factors which we have proposed, it would seem not unreasonable to suggest that the date at which the occupation began was probably between 1,200 and 1,000 B.C.

II. THE POSTERIOR LIMIT.

At first sight it might seem as though the evidence in this case is of a purely negative character, consisting of the total absence of Iron Age remains upon the moor. And negative evidence, never very satisfactory and convincing, is particularly lacking in force in dealing with considerations based on the existence and duration of a cultural age. For it may readily happen that whereas, through the accidents of trade and communication one region may be in contact with, say, an Iron Age culture and be markedly influenced by it, a more remote area may remain unaffected until a far later period. Thus the absence of Iron Age remains in any given district does not in itself necessarily mean that the people concerned ceased to exist before the time at which iron became generally known. In such a case further evidence has to be sought, and it must be sought in the case of Dartmoor if we are to make any proposal worthy of serious consideration as to the date which marks the end of its occupation. And it is sufficient if that evidence possesses a high degree of probability, for very

often from the nature of the case it is impossible to satisfy a demand for the rigid, formal demonstration of its certainty. For example, if it is clear that continual communication between one community and another must have been inevitable, provided that they flourished at the same time ; and if we then find in the one a well-marked Iron Age culture and in the other a total absence of such remains, we may safely suggest, with a conviction amounting almost to certainty, that the latter had ceased to exist either before the former came into being or at any rate before it felt the influence of the Iron Age.

In regard to the occupation of Dartmoor, such presumptive evidence for the posterior date limit is furnished by the ring of ancient camps encircling the moor, if the thesis that the occupation was for industrial purposes be accepted. These camps, which dominate the main river valleys, are Prestonbury, Cranbrook and Wooston, overlooking the Teign ; Hunter's Tor, Hound Tor Wood, and possibly Manaton, overlooking the Bovey ; Holne Chase, Borough Wood, Place and Hembury, overlooking the Dart ; one near South Brent, overlooking the Avon ; Boringdon and Dewerstone, overlooking the Plym ; Tavistock and Brentor, overlooking the Tavy ; Burley Wood, overlooking the Lew ; and Okehampton, overlooking the Okement. The positions of these camps are shown on the sketch map.

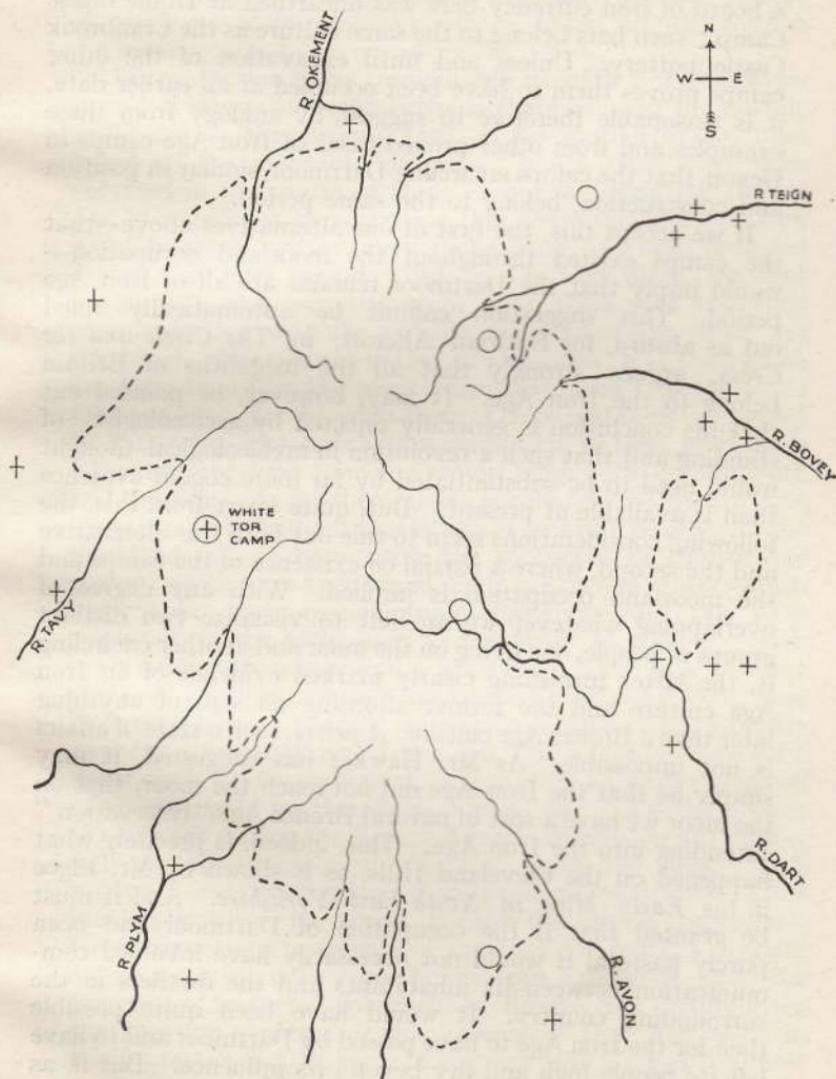
To avoid any possibility of ambiguity here, it is as well to point out that when we speak of a ring of encircling camps we do not mean to imply that the encirclement was deliberate. It is merely a statement of the simple fact that of the large number of prehistoric camps to be found in Devon some happen to be so placed that they form a complete ring round Dartmoor. The point is that with such a distribution all the main routes of communication must have passed by one or more such settlements, so that if the moor folk and the camp folk were contemporaneous contact between them could not have been avoided.

Taking now these camps in conjunction with the monuments and hut circles we may propose three possibilities :

- (a) The camps are contemporary with the whole period of the moorland remains.
- (b) The camps were built during the closing years of the occupation and continued in use after it ceased.
- (c) The camps were built at a time subsequent to the occupation.

Now the hill-forts and camps of Britain are, as Mr. Christopher Hawkes has recently pointed out (*Antiquity*, March 1931, p. 60), "the peculiar product of the latest of the prehistoric periods, the Early Iron Age". There are a few of

the Neolithic Age in Sussex, Dorset, Wiltshire, etc., but these are of a distinctive type, with ditches intersected at intervals by causeways. Many post-Neolithic camps have been investigated, and almost all give evidence of a purely Iron Age occupation. Those in Devon belong to this epoch. Cranbrook Castle was explored in 1900, and fragments of Early Iron



DOTTED LINE : APPROX. LIMIT OF OPEN MOOR.
 CROSS : CAMP.
 CIRCLE : DOLMEN.

SCALE : MILES
 0 1 2 3 6

Age pottery, with incised decoration similar to that typical of the finds at Glastonbury Lake Village, were discovered. Nothing of earlier date was found, and this fact, together with the elaborate system of fortification on the southern side and the discovery of a granite quern, makes it practically certain that the camp is an Early Iron Age erection. In 1870, too, a hoard of iron currency bars was unearthed at Holne Chase Camp ; such bars belong to the same culture as the Cranbrook Castle pottery. Unless and until excavation of the other camps proves them to have been occupied at an earlier date, it is reasonable therefore to suggest, by analogy from these examples and from other proved cases of Iron Age camps in Devon, that the camps encircling Dartmoor, similar in position and construction, belong to the same period.

If we accept this, the first of our alternatives above—that the camps existed throughout the moorland occupation—would imply that the Dartmoor remains are all of Iron Age period. This suggestion cannot be automatically ruled out as absurd, for Hadrian Allcroft, in *The Circle and the Cross*, argues strongly that all the megaliths of Britain belong to the Iron Age. It may, however, be pointed out that his conclusion is generally rejected by archaeologists of standing and that such a revolution in archaeological thought would need to be substantiated by far more cogent evidence than is available at present. But, quite apart from this, the following considerations seem to rule out both this alternative and the second, where a partial co-existence of the camps and the moorland occupation is implied. With any degree of overlapping whatever we are left to visualize two distinct groups of people, one living on the moor and another encircling it, the latter furnishing clearly marked evidence of an Iron Age culture and the former affording no sign of anything later than a Bronze Age culture. *A priori*, such a state of affairs is not impossible. As Mr. Hawkes has suggested, it may simply be that the Iron Age did not reach the moor, that on the moor we have a sort of natural Bronze Age "reservation" extending into the Iron Age. This, indeed, is precisely what happened on the Cleveland Hills, as is shown by Mr. Elgee in his *Early Man in North-East Yorkshire*. And it must be granted that if the occupation of Dartmoor had been purely pastoral it would not necessarily have involved communication between its inhabitants and the dwellers in the surrounding country. It would have been quite possible then for the Iron Age to have passed by Dartmoor and to have left its people high and dry beyond its influence. But if, as seems to be clear, the occupation was for the sole, or even the main, purpose of extracting tin, there must necessarily have been continual traffic up and down the main channels of

communication with the outside world, namely, the river valleys. And it is perfectly evident from the distribution of the camps that, if they had been to any extent contemporaneous with the moorland occupation, continual contact between the two groups of inhabitants must have been unavoidable ; and it is unthinkable that in such a case there should be in the encircling region a strongly marked culture of which no trace whatever can be found anywhere upon the moor.

This contention gains considerable strength from the widespread evidence of traffic between the moor and the outside world during the Bronze Age. If no specimens had been found on the moor of "imports" which must have been obtained in the course of trade exchange during the Bronze Age, it would not be surprising that there should be no Iron Age "imports" either, even if the moor had been occupied during this later period. But, in the first place, the flint implements and weapons show that there was continual communication with the outside world while the moor was inhabited. Flint is not native to Dartmoor, and that which has been found on the moor must have been imported. To take one example, the great store of chips and tools discovered at Batworthy was shown on investigation to have been made from flint obtained from the region lying between Sidmouth and the Exe. As for the remains peculiar to the Bronze Age, while it may be granted that it was at any rate possible for the moorland folk to have made the specimens of Bronze Age pottery which have been found, there are certain objects which must have been manufactured elsewhere and can have appeared on the moor only as the result of trading. Such are a copper spearhead and a glass bead found in a kistvaen north of Lustleigh, bronze spearheads at Bloody Pool, near Dockwell, a bronze dagger near Shavercombe Head, a bronze sword at Greenaball near Great Mis Tor, a bronze ferule for a spear shaft at Postbridge, a dagger with an amber pommel inlaid with gold on Hameldon, and so on. Thus the process of exchange during the Bronze Age has resulted in our finding well-marked evidence of the fact upon the moor. This confirms our contention that intercommunication must inevitably leave its traces among the people concerned. Hence the complete absence of any Iron Age remains suggests a departure from the moor before Iron Age times, while the presence of imported specimens of Bronze Age culture gives the negative evidence of this absence of Iron Age relics, in itself a factor of little force, a cogency which raises it almost to the level of positive confirmatory evidence.

It therefore seems impossible to avoid the conclusion that the camps represent an Early Iron Age pastoral occupation

of the lower levels off the moor subsequent to the industrial occupation of the moor itself, and that the latter thus came to an end before the appearance of the Iron Age in South-West England.

As a matter of fact, even if the camps were of Bronze Age origin, our conclusion would not be disturbed. The crucial point would still remain that discoveries show them to have been in occupation during the Early Iron Age, so that the argument as to the absence of Iron Age culture on the moor would still retain its force.

Although precision of statement and certainty of deduction are admittedly impossible, this conclusion as to the close of the occupation does seem to be in accordance with the balance of probabilities. And there is one final point which may possess some significance and so help to justify it. We have mentioned that hill-fort construction, apart from the well-known examples of Neolithic date, was a late development in the life of early man, being in general a mark of the Early Iron Age. It would therefore scarcely be a matter for surprise, if the moor had been occupied to any marked degree during that age, for us to find the remains of hill-forts in various parts of the moor. Yet there is one, and only one, and this is at White Tor above Petertavy, on the western side of Dartmoor (see sketch map). Now we have shown from a consideration of the dolmens that it is reasonable to infer that the west was the last quarter to be explored for tin, so that the region in which that particular argument led us to expect to find the latest evidence of the prehistoric people is just the region in which such evidence is found. Thus this isolated example of an early camp actually upon the moor adds force to that argument. But it does more. In character and situation it differs fundamentally from the outer ring of Early Iron Age camps ; nor are any Iron Age remains found in it. Now Mr. Hawkes (*Antiquity*, March 1931, p. 87) comes to the conclusion, based on the exploration by Mr. Elgee of the promontory fort of Eston Nab in Yorkshire, that "it seems as if the Late Bronze Age people had already begun fort-building on the Cleveland moors", and it may well be that the same stage of development is to be noted at White Tor on Dartmoor. Thus, again on the balance of probabilities, White Tor Camp seems to afford confirmation, not only of the suggestion that here were carried out the last operations of early man on Dartmoor, but of the further suggestion that the occupation of the moor extended towards, but did not intrude upon, the Early Iron Age.

Thus on all grounds we shall probably not be far astray if we propose 500 B.C. as marking the end of the occupation, and so allow 500 to 700 years for the period during which the surface supplies of tin were being worked out by early man.