The Wessex Early Bronze Age was studied and defined by Professor Piggott in 1938, and subsequently divided into two phases by Arthur Apsimon in 1954. These two papers have come to represent the orthodox view of the Wessex Culture. Professor Piggott’s study, apart from defining the culture, also proposed that the Wessex Culture maintained trading links which reached to Mycenaean Greece and beyond. This Wessex-Mycenae equation has a dual importance, for it not only fundamentally affects our ideas of how, and under what impetus, the Wessex culture developed, but it also looms large in any discussion of the chronology of the British Early Bronze Age. Wessex-Mycenae is an equation on which much of the chronology of British and west European prehistory has been built; carbon 14 dating has partially eased the disproportionate burden which the equation has had to carry, but the equation still exerts a strong influence not only on our ideas of E.B.A. chronology but also on the way in which we approach the whole question of the development of the West European Bronze Age. What part did Aegean and Near Eastern civilisation play in that development; can we still follow Gordon Childe and think in terms of “the irradition of European barbarism by Oriental civilisation?” These are the fundamental questions which lie behind the Wessex-Mycenae equation.

Since Piggott first proposed the equation, it has gathered many distinguished adherents, among them Gordon Childe and Christopher Hawkes.

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Only in 1968 was it seriously challenged, when Dr. Renfrew published his article in the Annual of the British School at Athens. His title proclaimed his message clearly—WESSEX WITHOUT MYCENAE—and as a result of his discussion, he concluded that “the link between Wessex and Mycenae is thoroughly severed”. Dr. Renfrew has done a signal service in provoking us to re-examine and re-think the Wessex-Mycenae equation; but is he right?

The basis of Dr Renfrew’s case is the carbon 14 chronology for the European Early Bronze Age. We do not of course have any C.14 dates for the Wessex EBA itself, but have a good many British dates which clearly give some indication of the chronology of the Wessex Culture, and others from western Europe which confirm the general picture which these provide. Some of the most relevant dates may be mentioned here. The City Farm hengi-form monument (Oxon) produced sherds of a pygmy cup in a level C.14 dated 1575-1445 BC, whilst a circular enclosure at Whitestanes Moor produced cremations and a pygmy cup with a C.14 date of 1450-1270 BC. In Wessex itself we have the sequence of dates for Stonehenge, of which the most relevant are those for the beginning of IIIA, 1870-1570 BC, and the beginning of IIIC, 1345-1135 BC. It is perhaps some indication as to whether we should incline to the higher or lower end of the scale for the all important IIIA date, that an incomplete R hole of Stonehenge II produced a C.14 date of 1730-1510 BC. These dates, imprecise as they may be, certainly do not conflict with the “archeological” dates for the Wessex Culture, based on the Wessex-Mycenae equation, of c. 1600-1400 BC. Neither does a relevant date for the Helmsdorf burial of Reinecke’s A2 phase, generally agreed to overlap with the Wessex EBA; this burial is C.14 dated 1823-1503 BC. The carbon dates as such, therefore, do not bring the Wessex-Mycenae equation into question; it is the tree-ring calibration of them which does this.

Tree-ring correction of C.14 dates is potentially the most important breakthrough in absolute dating since C.14 itself was discovered. If the method is successful, it means of course that we need no longer worry about changing concentrations of C.14 in the upper atmosphere, or the correct half-life value. Sufficient work has now been done to produce a calibration chart which allows us to “correct” the dates I have just given and other relevant ones as well. The chart which Dr Renfrew drew up on the basis of tree-ring calibration introduces a good many major changes in the chronology of prehistoric Europe which, if accepted, will obviously revolutionise our ideas not only on European

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4 C. Renfrew BSA 63 (1968) 277-85.
6 III (I-2384), IIIA (BM-46), IIIB/C (I-2445).
7 Bln-248.
contacts with the Mediterranean and the Near East, but will also completely change our ideas of the tempo of development in prehistoric Europe. The introduction of farming, wheeled transport, metallurgy and so on, will all have to be recognised as much longer, more drawn-out processes than we have previously been prepared to recognise. But of immediate relevance is that we find the Wessex EBA pushed back into the late third and very early second millennium BC. In fact, pushed well back beyond the rise of Mycenaean Greece, which can hardly be placed before c. 1650 BC. On this sort of dating, Colin Renfrew is obviously right into calling into question the Wessex-Mycenaean equation, and in re-examining the evidence on which the equation has been built.

The strength of this evidence is such that Renfrew was able to dismiss it within four short paragraphs. Analysis suggests that segmented faience beads were made in Britain rather than Egypt. The wealth of gold from Wessex burials has no relationship to the similar wealth from the Mycenae shaftgraves other than that both represent a particular cultural and social phenomenon. Particular parallels in the assemblage of goldwork are more apparent than real—the Rillaton gold cup for example is far closer to British Beakers than to anything from Mycenaean Greece. As to the Pelynt sword, the Fal ingot, the Egton Moor dagger and the four British doubles-axes, not one of these seven items has any recognisable, let alone dateable, associations. Finally, we come to the Stonehenge dagger; is it Mycenaean in form, and if so what conceivable evidence is there to suggest that it was carved in the Wessex Early Bronze Age rather than at any other time since Stonehenge was erected?

With much of what Dr Renfrew says I am in agreement. The Rillaton gold cup is not Aegean in origin or inspiration, but much closer to the shale cups of the Wessex Culture. The Fal ingot is probably of much later date than the Bronze Age and certainly has no associations, the Stonehenge dagger is a very dubious representation of a Mycenaean example, and the other Aegean items from Britain are indeed singularly lacking any recognisable archaeological associations. Nevertheless, I do no think that Renfrew’s conclusions are correct.

The key to the whole problem must obviously lie with C.14 dating and the tree-ring calibration of C.14 dates. If the present calibrations are correct then Wessex-Mycenae is a non-starter; if they are wrong, and the present C.14 dates are approximately right, then Wessex-Mycenae is at least a feasible possibility.

9 Renfrew op. cit. n. 4, 283-4.
10 Note particularly the treatment of the handle, identical to that on the Amesbury and Faraway Down shale cups, and the Hove amber cup.
In an article in *Nature* \(^{11}\), Walton and Baxter expressed some concern about the immediate adoption of tree-ring calibrated dates. More specifically they compared the results of such calibrations made by two laboratories and clearly demonstrated that prior to c. 1000 BC, the two calibrations were notably at variance with each other. In other words, the results themselves suggest that the method is not yet perfected. I suggest that we may go further than this and prove that the calibration chart as it stands at present is incorrect and misleading. What we need are examples of historically dated artifacts (i.e. artifacts of Aegean or East Mediterranean origin) which have been found in distinctive and recognisable associations in western or central Europe. There are two examples of this sort which are particularly relevant since they overlap with the Wessex EBA in southern Britain.

Firstly we have the Beitzsch helmet. There is no reasonable doubt whatever that the helmet was found with two ingot torcs and a grooved bronze dagger \(^{12}\). The helmet with its conical shape, holes to take cheek-pieces, and pierced top-knob to take a plume undoubtedly forms a close parallel to the well known helmet from an LM.II tomb at Knossos \(^{13}\). If one accepts the similarity as indicative of Aegean inspiration for the Beitzsch helmet, then one can say that the helmet should be a contemporary of LM.I-II, c. 1600-1400 BC. The important point is that the same date must then be applied to the associated dagger, which has many good parallels from Northern Germany which fall within Reinecke's A2 phase. Now this date range would fit with the C.14 dates for Reinecke's A2, which fall in the period c. 1800-1500 BC, as indeed it would fit the dates for the contemporary Wessex EBA. But it would not fit with calibrated dates for Reinecke's A2, which would be in the order of c. 2300-2000 BC. This would be far too early for the Aegean helmets.

If the Beitzsch helmet seems a not entirely satisfactory basis on which to reject the tree-ring calibrations, then I suggest we move northwards, past Oranienberg where a similar helmet was found (regrettably without associations), along the Baltic Amber route to Jutland. Here, in a grave of the Northern Bronze I period, was found the Orskovhede sword \(^{14}\). Here again, there is no reasonable doubt of the associations in which the item was found. The sword is a good example of a Mycenaean/Minoan short-sword dating to LM.II-IIIA, c. 1450-1300 BC, and it is perhaps of interest to mention that an example was found alongside the Knossos helmet we have just matched at Beitzsch. There is little doubt that the sword is an actual import from the Aegean, but even if we are perverse and insist it is no more than a copy, we

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\(^{12}\) H. Hencken *Proc Prehist Soc* XVIII (1952) 36-46.
\(^{13}\) M.S.F. Hood *BSA* 47 (1952).
cannot escape the fundamental conclusion; Northern Bronze I (which is contem­
orary with Reinecke’s A2) cannot end before c. 1450-1300 BC. Certainly
it cannot be placed within the third millennium!

There is further evidence which could be brought to bear here, but I do
not think we need to labour the point, and we may touch on some of the ad­
ditional evidence as we progress. The point of immediate importance is that
there is clearly good reason for doubting the validity of the tree-ring calibration
chart as it exists at present. Once this is established then the way is open for
a re-examination of the Wessex-Mycenae equation. As I indicated earlier, some
of the evidence which has been brought forward to support the equation is
rejected not only by Renfrew but by myself as well. Two groups of material
however I feel to be worthy of closer study and examination.

The first of these are the double-axes 15. Four of them have been found
in Britain (Topsham, Whitby, Ireland 2 examples). None have any know asso­
ciations; but I think we can put them into some sort of context. All the axes
have convex cutting edges, concave sides, and an oval shaft-hole, and belong to
a single, distinctive type of which only some 33 or 34 are know from the Aegean
itself. The remainder of the Aegean double-axes have round shaft-holes and/or
straight edges and sides, and these are much in the majority. It may be coincid­
ence that the British examples are all of the minority group, but it seems un­
likely. This all the more so when one notes the occurrence of similar axes from
the continent, as well as several stray finds and two hoards of them in the
Ukraine 16. The four British axes, I suggest, can be seen to be part of a general
picture in which axes of this type were traded into eastern and south-eastern
Europe in quantity and reached western Europe in small numbers. In other
words the axes can be seen in a context—a commercial context—which makes
sense. The closest Aegean parallels for the four British axes date between
1450-1220 BC 17.

The second group of material is not as uniform as the first; it consists
of three weapons of Aegean or Cypriote origin found in Britain. We may per­
haps begin with the best known piece, the Pelynt sword fragment 18. There is
more than an even chance that this weapon was found in a Bronze Age barrow
at Pelynt; from what little we know of the discoveries in the group of barrows
involved—a Wessex ogival dagger and funerary pyres—it seems at least a
reasonable possibility that the sword belonged to a burial either contemporary
with Wessex II or not much later. The sword has been the subject of much

16 see S. Piggott Ancient Europe (1965) fig. 76, C.F.C. Hawkes BSA XXXVII
(1937), 141-59.
18 V.G. Childe, op. cit. n. 3.
debate, but most authorities have dated it c. 12th century BC 19. I have discussed the problem in detail elsewhere, and argued for a date in the first half of the thirteenth century BC 20. This does of course seem rather late to be a contemporary of Wessex II, but this is not of immediate importance; for the moment we must see if the sword too can be seen in some sort of context, other than the one in which it was perhaps found.

In fact, an almost identical fragment of a sword of this type has just been published in PPS 21. It comes from Surbo, in Apulia, and was seemingly part of a hoard which contained two Aegean hammers as well. Apart from this find, short swords of this particular type, which we label Fii, are not found in western Europe. But other Mycenaean short-sword types are; we have already seen one from Orskvheede, and to this we may add another found at Lyons in 1854 22. Nearer to their point of origin, and to some extent reflecting the distribution of double-axes mentioned earlier, the short-swords are found in greater quantity in Yugoslavia, Roumania and Bulgaria 23.

The second weapon we may treat briefly, since it cannot be matched by other examples from western Europe, although as we shall see in a moment it has a very clear context indeed. This is a short dagger found at Winterbourne Bassett Down, apparently without associations 24. This is a good example of a Late Cypriote I or II short dagger, many examples of which have been found with plentiful associations which date the type between 1600-1350 BC 25. This is the first Cypriote item we have come across so far, but it is not the isolated find it might seem.

The third weapon, found on Egton Moor, Yorkshire, is also of Cypriote origin 26. It was first described as a dagger, and the description has stuck although the weapon is in fact a sword 27. This is an important distinction, since the dagger type in question must be dated to c. 2000-1700 BC, whilst the sword is a LC.I weapon, dating c. 1600-1400 BC. That is, it is a contemporary of the Winterbourne dagger.

This sword can certainly be seen in a context once we turn our attention to the continent. At least twelve find-spots for such swords are recorded, a good many of them in France, Switzerland and Austria 28. Furthermore, al-

19 Notably S. Benton Proc Prehist Soc XVIII (1952) 237-8; Catling and Sandars have dated this general type (Fii) similarly to Benton.
22 Randsborg op. cit. n. 14, fig. 7a.
23 N.K. Sandars AJA LXVII (1963) 121, 143-4, 146.
26 F. Elgee Whitby Gazette 27th November 1936.
27 Catling op. cit. n. 25, 110, fig. 12, 1-5.
28 see distribution map, Branigan op. cit. n. 17, fig. 4, and Briard. J. Les depots
though none have been found in closely dateable associations, at least three do have some sort of archaeological context. At Csorvas in Hungary for example two of these weapons were found together with an ingot torc like the two found with the Beitzsch helmet; although we cannot date them with precision it does therefore seem probable that the Csorvas swords were hidden during the Bronze Age. Of much greater interest however are a group of finds from Brittany. First is a broken Cypriote sword found in a megalithic tomb at Plevenon; second, and far more impressive, is the Plouguerneau hoard, also reputedly found in a megalithic tomb. Here we have no fewer than seven Cypriote swords, together with flesh-hooks of characteristic Cypriote type and two flat axes which may be either west European or Mediterranean in origin. The possibility that the hoard, and the Plevenon weapon, were placed in the tombs in antiquity is much strengthened by the discovery in at least two Breton passage graves of carvings of Cypriote daggers. We cannot convincingly dismiss all four finds as the work of modern tourists; it is altogether more probable that they represent Breton contact with the Aegean during the mid-second millennium BC.

Now this is obviously an important point to establish since we know full well that the Wessex and Breton Early Bronze Ages are culturally very closely linked indeed. If some sort of commercial relationship existed between Brittany and the Aegean, then the case for a similar relationship between Wessex and the Aegean is immeasurably strengthened. The same may be said of Aegean contacts with the EBA of Germany, as exemplified by the Beitzsch (and probably Oranienberg) helmet, and by the Orskovhede sword. These finds from graves contemporary with Reinecke's A2 phase, clearly point to contacts with the Aegean at this time; but we also know that the Wessex culture maintained contact with the EBA Unetice culture of Germany. Examples of crutch-headed pins from Wessex graves, and the distinctive bulbous-headed pin from the Camerton burial are but the more obvious manifestations of this contact. Thus, we can demonstrate that in two vital regions in western Europe, contacts with both the Aegean and Wessex were maintained, and we can begin to recognise the mechanisms by which Aegean metalwork might have been reaching Britain. On the one hand we have the Danube and the northern part of the Baltic amber route, and on the other the west Mediterranean, the Rhône

29 Childe op. cit. n. 28, 219, fig. 128.
30 Briard op. cit. n. 28, 62, 60.
31 Briard op. cit. n. 28, fig. 15c, P.R. Giot Brittany (1960) 107.
and the Loire. In Greece itself, these two trade routes are represented by the amber spacer plates, and by a handful of Italian MBA metalwork. There is also of course, the amber disc from Knossos 34.

While the quantity of Aegean metalwork found in central and western Europe is, I think, sufficiently large to carry conviction, the quantity of European material found in the Aegean is remarkably small. But we must bear in mind the cultural context of European trade with the Aegean. The civilisation of LBA Greece was technologically in advance of that of contemporary Europe; if the people of the Aegean imported materials from western Europe they would almost certainly have been either raw materials or animal and vegetable products not available in the Aegean. Of the second group, if it existed, no trace survives; nor might we expect it to. Of the raw materials, only amber survives in recognisable form, but copper and tin are other obvious candidates, and the latter at least would suggest why the trade network carried to the British Isles. The occasional finds of Italian daggers, brooches and pottery in the Aegean must be seen as by-products of a more substantial and uniform trade in these other commodities.

The Aegean artifacts found in Europe on the other hand are not only more numerous, but they are also more uniform and present a coherent and comprehensible picture. Three particular items account for more than 80% of the "exports". Of these the most prolific are the Cypriote swords, followed by the Aegean short-swords and double-axes. I think there can be little doubt that we are dealing here with the primary objects of trade. Furthermore, seen in the context of the contemporary European armoury, these three types of weapon make sense. The Cypriote swords and Aegean short-swords were being traded into cultures which at this time had no longer offensive weapon than the short rapier. Similarly the double-axes were being traded into Europe at the time when the stone battle-axes of the early second millennium were rapidly disappearing from the scene. Aegean trade into Europe may therefore be seen to be directed at filling two important gaps in the European armoury.

These three groups of material however do raise one further question. The Cypriote swords date to the period c. 1600-1400 BC. Other Aegean metalwork of this period found in Europe includes the Beitzsch and possibly the Oranienberg helmets, the Lyons and Orskovhede swords, the Cypriote dagger from Winterbourne Bassett Down, and five gold crescentic earrings, three of which came from England (1 from a Wessex II burial) and two from Tufa, in Roumania 35. These various items may have been exported into western Europe over the whole of this period; there is no way in which we can narrow

35 Discussed in Branigan op. cit. n. 17.
the brackets. But on any conventional archaeological dating for the Wessex Culture, these brackets cover the period occupied by Wessex I and II.

The remaining two groups of material, the square-shouldered swords and the double-axes, cannot be placed so early. None of these seems likely to have been manufactured before 1400 BC, and the two swords were almost certainly manufactured just before or just after c. 1300 BC. This later phase of trade is also represented by Mycenaean pottery in Italy, the Monte San Vincenzo bowls, and the ox-hide ingots 36. The brackets for trade in these items must be placed between c. 1400-1150 BC, much of the material probably being attributable to the period between c.1350-1250. This is too late of course, on conventional dates, for the Wessex Culture. We must therefore recognise the probability that trade between the Aegean and western Europe continued after c. 1400 BC, and that in Britain this would mean that trade with the Aegean was not exclusive to the Wessex Culture but also extended into the later Middle Bronze Age communities. Far from being surprising, this is surely what we should expect. It is clear from the situation in Italy, Sicily and Sardinia that Mycenaean contacts with western Europe were if anything stepped up after 1400 BC. It is equally clear that the Middle Bronze Age communities of Britain maintained their links with both Germany and Brittany; the ornament horizon in the south-west and the occasional finds of British palstaves, spearheads and daggers on the continent demonstrate the continuance of the German links 37, whilst the imported Breton palstaves from several sites in southern England do the same for contacts with Brittany 38. In other words, Wessex and Mycenae is perhaps only half of the story.

But it is the vital half of course, because it is the first half. Despite the activities of the Beaker and Food Vessel people, and those of the builders of the Passage Graves, it is the Wessex Culture that can first lay claim to carrying Britain into what I suppose we might describe as the first European common market—an established trading network which reached from Ireland in the West to Cyprus in the East. Britain's participation in the common market of the twentieth century may be a matter of speculation and controversy; its participation in that of the Bronze Age is not!

36 W. Taylour Mycenaean Pottery in Italy and Adjacent Areas (1958), F. Biancofiore La civiltà micenea nell'Italia meridionale. I. (1963); L. Bernabò-Brea Sicily Before the Greeks (1957) fig. 26, bottom left and right; Catling op. cit. n. 25, 266 ff.