

# Celts in Central Europe and beyond

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## INTRODUCTION: THE CELTIC PROBLEM

Comparative linguistic studies suggest that the Celtic group of Indo-European languages had an origin in a specific area from which they were dispersed over a wider area; this has long invited comparison with archaeological evidence of the spread of people or ideas with which this might be linked. The problem of the dispersal of the Celtic languages has been discussed many times in the past, and the topic has a vast literature; this paper attempts to review some of the evidence with reference to several Central European problems. Renfrew (1987:211–49) also considers this problem against the wider issues of Indo-European language origin (though mainly from a western European viewpoint), thus making the discussion of several more general points unnecessary here.

It is debatable how far the designation “Celt” can be taken as an ethnonym. Language is only one facet of ethnicity; geographical range, physical appearance, material culture, social organisation and belief systems may have interacted with language and a host of other factors to produce the perceived ethnicity of a group, and it is clear that few of these factors can be retrieved or even indirectly inferred archaeologically. The term “Celts” thus refers to a linguistic (and not a racial) group; in this article, the term “Celtic-speakers” is generally used for clarity (likewise, the terms “La Tène” and “Hallstatt” are used to define general styles, and not archaeological cultures nor ethnic groups).

The name *Keltoi* was first used by the Greeks to refer to a group of Celtic-speakers which they encountered in south Gaul in the middle of the first millennium BC (*Herodoti Historiae* 2, 33; 4, 49), and later, by extension, the whole group of barbarians in the surrounding area; the Roman sources refer to these groups as *Galli*, and reveal a host of tribal ethnonyms. The term “Celt” was applied as an ethnic label by 18th and 19th century scholars, though was probably never used as such in Antiquity by the Celtic-speakers themselves; indeed it is debatable whether there was ever in Antiquity a feeling of overall Celtic “ethnicity”, except perhaps in the broadest of terms.

The Celtic languages are today represented by the “Insular” languages spoken in parts of the British Isles as well as formerly in Brittany (whence it was probably introduced from Britain by the fifth century). There are several surviving British languages, but we have very little evidence to reconstruct the

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pre-Roman Celtic dialects spoken in much of Iron Age lowland Britain before they were displaced by others in later periods. Here in the immediate pre-Roman period there are however literate coin inscriptions (and mentions in Roman written sources) which demonstrate Celtic-type personal and place names. Surviving Celtic toponyms occur over a wide area in Britain, but there is often no means of dating their origin, Rivet and Smith (1979) consider some which predate the Roman period. We know of a few place names from fragments of Greek geographies preserved in later works, which seems to suggest for example that by the sixth century BC, Britain and Ireland already had Celtic-sounding names (*Albion* and *Ierne*).

The continental Celtic languages (apart from Breton) are now extinct, and can only be with difficulty partially reconstructed (*cf. eg.* Weisgerber 1931; Whatmough 1970). Place- and river-names with Celtic elements are known from Britain, France and other areas of western Europe (Rix 1954); they are somewhat scarcer in Central Europe (*eg.* Krahe 1962; Woźniak 1970:20). There is also a problem in the latter area that the division of “Celtic”, “Pannonian” and “Illyrian” hydro- or toponyms is somewhat subjective (Szabo 1971:31–2).

Place names of the *-Magus* or *-Dunum* type (Rix 1954) for example are not as common east of the Rhine as in the west, though it is not clear whether this is due to accidents of survival, or due to different toponymic formulae among the early Celtic-speakers in the area. Rix has however omitted some Central European names, such as *Noviodunum* in the Danube delta (known from the Peutinger Table and Jordanes). Other possible Celtic place names (*e.g.* *Brigetio*) also occur (Szabo 1971:31–2).

We know from several writers that some continental groups encountered by the Classical World seem to have been Celtic-speakers, for example most of the “*Galli*” mentioned in Roman sources, as well as several other central European tribes. We have a few personal and place names recorded in these sources, and occasionally information of other types; St Jerome (*Proem I, 2 in Galatus*) tells us that the fourth century Galatians in Asia Minor spoke a language like that spoken in rural areas near Trier, and hence Celtic (*pace* Green, quoted in Renfrew 1987:232–3). These written sources are almost always very curt, and sometimes very difficult to interpret, some impossibly so; this accounts for the different interpretations placed sometimes on the same text, of which the passage about the *Aestii* discussed below is a good example. In cases like this, no one interpretation can be the “right” one, simply the one which best fits the other known facts; in the case of the *Aestii*, changing the model of the nature of Celtic-speaker settlement in the area allows new possibilities of interpretation.

## BRIEF HISTORY OF STUDY

The attempted linking of archaeological data of various types with ethnic or linguistic groups has a long and unhappy history, and many of the general points about the difficulties encountered in hypotheses of this nature need not be re-

iterated here. The investigation of the archaeology of the Celtic-speakers has a similarly long tradition, but may be briefly summarised here (see also de Navarro 1936).

After a period of romantic antiquarian speculation in the 17th and 18th centuries, the Celtic problem was taken up by 19th century linguists and archaeologists; the written evidence from Greek and Latin authors had of course long been known and discussed. The "Celts" were, however, given a clear archaeological identity by the discovery and excavation of the Hallstatt cemetery (1846–52) and the La Tène lake deposits (1858). By the late 1860s it was common for the La Tène art styles to be directly linked with the Celtic-speakers by British and Continental scholars. Ideas began forming about the spread of "Celtic Culture" in Europe, and the question of the dispersal of the Celtic language group became as much field of archaeological as of linguistic enquiry. In Western Europe, study of the "Celts" developed somewhat nationalist overtones; the French have long regarded the Celtic-speakers as their spiritual forefathers. In late 19th century Britain, a "Celtic Revival" was strongly reflected in late Victorian culture, and more recently feelings of "Celtic ethnicity" have been used as a basis of political separatist movements in Wales and Scotland.

At the end of the last century, French and German scholars led in the typological division of the more distinctive metalwork types. These typological and chronological schemes, especially those of Reinecke (1902), Viollier (1911), and Hubert (1932a, 1932b), were so useful to the growing discipline of Iron Age archaeology that they were extended to areas well beyond the locality for which they were devised. This was possible due to the interregionality of some of the metalwork types and decorative motifs. It was soon appreciated that the earlier material of this type was concentrated in the area where the early Greek sources place the *Keltoi*, and that later examples of these types came from areas where later sources also note Celts. In a short time the typological affinities of a restricted range of archaeological material over wide areas became conflated in many scholar's minds with affinities between archaeological cultures, which in turn became associated with the spread of the "Celts" (treated as an ethnic or even racial group) as suggested by the linguistic and written sources. This basic idea has remained for a long time at the heart of many discussions of the Celtic-speakers.

It is a truism that each age and culture has the past it desires, thus in accordance with the spirit of the times, the study of the Celtic-speakers has had a romantic phase, a nationalistic phase and in the interwar and post-War years the "Celts" were seen as aggressive invaders (at least in Britain). In the German Third Reich, Celts were seen in some quarters as a noble and advanced people and the initiators of cultural change, but destined to be displaced by the "superior" Germans (Ströbel 1942: 21). Today, Iron Age Celtic-speakers are seen by some in Western Europe as the protohistoric forerunners of the European Economic Community (Megaw 1980), while some in Eastern Europe see them as western initiators of the means of economic and technological reform in Eastern Europe (Szabo 1971: 36–47; Hensel 1988: 426–64; Gąssowski 1985: 205), though this

idea owes much more to survival of pre-War ideas than post-Communist economic revival. It is notable however that most 20th century scholars right across northern Europe have tended to stress the positive effects of the “Celtic expansion” in one way or another.

From the beginning of the period of study, the movement of the Celtic languages has been seen as the result of the movement of populations, either as a whole or in part. Alternative models of language diffusion are available (Renfrew 1987), but in the case of the Celtic-speakers the population movement model seems best to suit the facts. The problem is determining when and how this took place.

## THE EVIDENCE FROM BRITAIN

A key part of the “Celtic Problem” is to identify the date and means of arrival of the Celtic languages in Britain, where their use in the past is not doubted. It is unlikely for several reasons that Britain was the “cradle” of the Celtic languages, and thus they seem likely to have arrived in the British Isles (presumably with an alien population) from the Continent at some time in the distant past. If we can identify by archaeological means the date of arrival of the Celtic languages in Britain, we have at least a *terminus post quem* for the differentiation of these languages in the rest of Europe.

For Crawford (1922) the arrival of the Celtic-speakers was linked with the arrival in Britain of Late Bronze Age bronze swords of types found on the continent and finger-tip decorated pottery, he claimed anthropological and settlement evidence support the thesis of the arrival of new people. Peake (1922) came to the same conclusion, though noted that race and language need not be the same thing (1922: 132–5). Childe (1940: 259–63) identified the Celts with the Bell-Beaker culture, for which there was at the time claimed anthropological evidence of an influx of a different population. In 1950 he modified this conclusion and saw the arrival of the Indo-European language in northern and central Europe as late as the Late Bronze Age. Other writers have suggested that the Urnfield Culture represents the spread of Celtic-speakers in Europe (Schmidt 1979: 190–1; Jażdżewski 1981: 371).

Hawkes’ (1931, 1959) influential cultural and chronological scheme for the British Iron Age was framed around the assumption of a series of “migrations” or “invasions” from the Continent. The first and second of these invasions were to have been of “Celts” (1959: 179). The appearance of “Celtic” (*i.e.* La Tène) metalwork and art styles in the British Iron Age (Fox 1958) initially supported the view, which was maintained for several decades by British archaeologists and linguists. Thus the Celtic migrations to Britain were dated to the Early Iron Age, corresponding to the Continental expansion of the La Tène phenomenon. Further detailed study began to show the differing chronology of the various individual features (eg. differences in pottery, metalwork and settlement type) taken as demonstrating these “invasions”, casting doubt on their value as indicators of

folk movement. In the 1960s the whole "Invasion Hypothesis" was discarded by a new generation of archaeologists (*e.g.* Hodson 1962; Clark 1966). In this period, different means were found to explain cultural change in prehistory other than by population movements.

With the loss of the "Invasion" model in the 1960s, British prehistorians seem also to have lost interest in ethnic problems. For example in an important and lengthy survey of the British Iron Age (Cunliffe 1974) there are no references to the question of the Celts, though it is conceded at the end of the book without further discussion that British Iron Age society was "Celtic" (1974:306–8). Hawkes revised his ideas on the Celts in Britain and proposed more subtle models (1972, 1973). He concedes that the "coming of the Celts" was in no way related to the distribution of the art styles generally ascribed to them (1976:2). Harding discusses (1978:123–5) the "Celtic migrations" on conventional lines using the distribution of art styles and the written sources. One can seek in vain for a recent definitive statement of opinion about the diffusion of the Celtic languages to Britain, excepting the recent book by Renfrew (1987), to which we will return below.

In only two cases can we detect evidence of folk movement into Iron Age eastern Britain; in both cases however the evidence refers only to (small?) elites. The first is the "Arras culture" of a restricted area in Eastern Yorkshire (Cunliffe 1974:40–1; Stead 1979), with chariot and barrow burials with close parallels in Burgundy and Champagne dating to the late 5th or 4th century BC. The second is the case of Caesar's (*de Bello Gallico* V, 12 1–2) first century BC invaders from Gallia Belgica, which have provided so much difficulty in their archaeological identification (Cunliffe 1974:59). In neither case does it seem probable that these groups were responsible for bringing the Celtic languages to the British Isles.

There is no evidence for the influx of large numbers of alien settlers to Britain in the Early Iron Age. The arrival of iron itself does not form a strongly-marked cultural break, the whole transitional period is characterised in Cunliffe's (1974:29) words by "massive continuity". Most instances of the appearance of British material with close parallels on the Continent (*e.g.* La Tène art styles, fibulae and warrior equipment, appearing from the middle of the millenium), are at present seen as due to exchange or other contacts. Generally speaking, this material is rare, and should be considered as luxury imports (Cunliffe 1974:144–8). In Britain, the arrival of the Celtic languages cannot be linked with the intrusion of new people in the Iron Age (or at least if there was a folk movement other than the two noted above, it has left absolutely no archaeological trace). Certainly there is no detectable connection between the arrival of the "La Tène" material and the movement of substantial numbers of settlers.

There is no evidence of any kind of alien population contemporary with the Continental Urnfields (Schmidt 1979:190–1). If we should seek a period when the Celtic languages arrived in Britain, we should look to a much earlier period. As yet however there is a similar lack of clear evidence for folk movement into the area in the Bronze Age or in most of the Neolithic. Both these periods are characterised by evidence of continuity and local development, punctuated by

external contact by means of exchange. Renfrew (1987) has argued that for much of prehistoric Western Europe, the most likely period when new people migrated in some numbers (and thus create the optimum conditions for language displacement) was at the beginning of the Neolithic. Renfrew's arguments, though not universally accepted (see Yoffee 1990 for recent criticism), seem to satisfactorily explain several features. It would at present seem from several viewpoints most likely that it was these Early Neolithic movements which brought the (proto-) Celtic dialects to Britain. We may now attempt to apply this model also to the Central European data.

### "CELTIC EXPANSION" IN CENTRAL EUROPE

In Central Europe, most scholars seem to have accepted the equation of the presence of La Tène style objects with the physical presence of Celtic-speakers (at least in the form of a dominating elite). Only in more recent years has this assumption been questioned. The most important general study is that by Filip (1956, 1976) and several regional studies (e.g. by Woźniak 1970, 1976; Hunyady 1942). Several recent general discussions (by Peschel 1970; Herrmann ed. 1985:97–108; Hensel 1988:426–64) are also noteworthy. Thus the "Celtic homeland" is usually seen as the area where these art styles developed, and the spread of the Celtic-speakers is represented by the subsequent enlargement of the La Tène style zone. The hypothetical ethnic "expansion" into Central Europe is thus placed firmly in the third and fourth centuries BC by the dating of the metalwork. This is despite the fact that for some time this has been manifestly not so in the case of the British Isles. Thus recent maps demonstrating Iron Age Celtic expansion (Szabo 1971:fig. 1; Herrmann ed. 1985:107–map.), sensibly avoid the issue by not putting a date on the arrow leading to Britain. Another feature especially notable in the synthetic literature is the great variety of shape, size and precise position of the supposed "Celtic homeland" (*i.e.* the core area where La Tène develops from Hallstatt traditions). Different authors also vary in the routes, destinations and dates of individual "Celtic migrations".

La Tène object types and art styles seem to have developed in the area around the upper Rhine and Danube; it may be presumed (after the Greek sources) that they developed among a Celtic-speaking population. Long term stability of dense settlement and a hierarchical society here, coupled with the concentration of long-distance exchange (especially with the Mediterranean), and the accumulation of wealth by certain individuals, led to the development of specific art and object styles. These were the prototypes of similar phenomena later found over a wider area of Europe. The contacts with the Classical world were not only a significant factor of the initial development of Hallstatt and La Tène art styles, but also brought the people using them to the notice of Greek writers.

We should carefully consider the evidence for the assumption that the finds of La Tène type material and cultural phenomena do in fact represent the influx of Celtic speaking settlers into Iron Age Central Europe. The nature and degree

of Celtic-speaker settlement in Central Europe is still unclear; although there is some literary and topographic evidence, this is scarce. The movement of new people at this time is difficult to demonstrate. It is possible that the spread of fibulae as opposed to pins represents a specific kind of dress, and thus a particular cultural code; there is no proof that these dress and ornament styles should be linked with an ethnic, still less a linguistic, group. The same comment applies to technological advances in the pottery, or metalworking. The change in burial rites leading to the appearance of flat cemeteries of furnished inhumations (Filip 1956) could be due to an ideological change, which could be independent of ethnicity or population movements.

It is methodologically incorrect simply to use the distribution of La Tène cultural phenomena alone to map the “expansion” of Celtic-speakers. We know that in certain areas of western Europe (Gaul and Britain), La Tène objects were used by people we presume were Celtic-speakers. This does not, however, imply that the analogy can uncritically be extended to Central Europe and that all who used “La Tène” material culture spoke Celtic languages or owed their allegiance to a Celtic overlord; still less that they felt themselves to be ethnically “Celtic” (as suggested by Champion and Champion 1986). Furthermore, neither in Britain (nor in the “La Tène core area”) is there evidence that the first appearance of La Tène (or Hallstatt) art styles represent the arrival or ethnogenesis of the Celtic-speakers. In Britain, La Tène objects were relatively rare and used mainly as elite status symbols, and their scarcity there does not necessarily reflect the scarcity of Celtic-speakers. The spread of La Tène material within the areas of “Celtic settlement” in central Europe was uneven; the *Aestii*, despite their apparent linguistic affinities testified by a Roman source, seem not to have absorbed La Tène material culture.

In most of Central Europe the furnished inhumation burial rite is the main feature taken as the indicator of Celtic-speakers. Inhumation graves are found in central European contexts in phases LT B and LT C<sub>1</sub>, but in the third century BC they disappear, probably representing the spread of a new ritual (Godłowski and Kozłowski 1985 : 106–7), rather than the disappearance of “Celtic-speakers”. Much of the British Iron Age however is characterised by an almost total lack of detectable burials, which contrasts with the so-called “Celtic” graves of the continent. Thus features which are taken as ethnic indicators for the presence of Celtic-speakers in one part of Europe cannot be so interpreted in others, which casts some doubt on the value of those indicators as such.

The La Tène phenomenon seem to have spread over a large area of Europe in a relatively short time. Demographic interpretation (Woźniak 1970 : 217; Hensel 1988 : 455–6) of the supposed Iron Age “Celtic expansion” thus produces difficulties if we see it as a straightforward mass folk–movement. The La Tène “core area” has an area of about 200 000 km<sup>2</sup>, the area over which later La Tène material occurs is about six times as big (of which Britain and Ireland have an area of 320 000 km<sup>2</sup> and the Celtiberian area another 100 000), and yet little evidence suggests depopulation of the core area in the period concerned. While supporters of the “expansion” theory seldom consider the mechanism of language

displacement and the relationship between new arrivals and the native population, it seems likely that new settlers should have arrived in some numbers to make their language dominant in a given area. Where did these “settlers” bearing the La Tène style suddenly appear from? How and why did these migrations take place? How did the migrating groups retain their cultural identity? How then do we imagine one or two generations rapidly moving to occupy vast tracts of land in some numbers maintaining the population density at home?

These difficulties have led some to see the “Celtic invasions” not as whole-scale folk movements, but as the movement of alien elites establishing their position over autochthonous populations, in order perhaps to control the exchange of certain vital commodities (e.g. Hensel 1988:44). Again however very seldom has the mechanism of the establishment of dominance by a small alien group of Celtic elites been explained. How were newcomers able to subjugate natives of different ethnicity in their own territory and transform any previous socio-political organisations (if any) to their own advantage? What size of supporting groups would they bring with them? Was the language of the elite passed down through all ranks of society? If so, why? Analogies with the conquest and colonisation of vast tracts with more primitive societies in America, Asia and Africa by relatively small numbers of Europeans in the nineteenth century are not directly applicable (but in the first half of this century were perhaps influential on archaeological thought-processes). There seems to be a prevailing notion that a culturally “superior” ethnic group will easily overcome and displace an “inferior” (less culturally-advanced) one, though the actual mechanisms of this are rarely considered, and often not quite so simple.

Apart from the La Tène style objects and burial rites, other evidence for Celtic-speaker presence is very scant for parts of this area. In Poland for example there are concentrations of La Tène finds in the south of the country, but there is little other evidence for a Celtic presence. It has been tentatively suggested that the name of the “Lugian tribal union” (mentioned by Tacitus and thought to refer to groups living north of the Carpathians in Poland) may be of Celtic derivation (Łowmiański 1963:191), and others have made the same claim for the name “*Calissia*” mentioned (*Geography* II, 11) by Ptolemy (often thought to refer to Kalisz in the Warta valley on the amber route though see Wielowiejski 1980:16–17). Apart from these and a few river names which might be Celtic (or might not – see Krahe 1962 and Łowmiański 1963:191), there is little place name evidence for a Celtic presence in Poland (Woźniak 1970:29). It seems that (with the possible exception of Cracow-Nowa Huta site 1, Woźniak and Hachulska-Ledwos 1976), there were never any *oppida* in Poland. The nature of Celtic-speaker settlement in the area is as yet unproven. A similar lack of linguistic evidence is apparent over other areas of Central Europe. This may be due to our lack of written evidence for the tribal and personal names, and the lack of Celtic toponyms may be due to later language displacement. While it cannot be denied that some Celtic-speaking groups were present in Central Europe, it may be questioned whether the extent of Celtic-speaker settlement in the area was ever very extensive (see Renfrew 1987:241 for a more extreme view).

## OTHER MODELS OF THE LA TÈNE PHENOMENON

The question of the validity of the direct identification of the occurrence of La Tène object types with the Celtic-speakers may be examined another way. Instead of subconsciously regarding La Tène as a phenomenon more or less identical to an archaeological culture, we might term the phenomenon the “La Tène Lifestyle”, and this may help us to realise that, like denim jeans and Coca Cola today, lifestyles (or their symbols) do not always respect ethnic, political or social barriers.

The La Tène style should be seen in its social setting. We should consider models of cultural interaction (Renfrew and Cherry eds 1986) as possible alternatives to straightforward culture transfer by population movement. Hawkes (1976) for example suggests that western La Tène art represents the accumulation and display of wealth by an elite to uphold their social position. The desire of the elite to control more means to accumulate wealth is seen as the driving force behind the “Celtic Expansion” (a view also taken by Hensel 1988 : 141, 453–5). On a lower social plane, imitation of elite fashions led to the development of the cultural assemblages identified in the archaeological record. In this model, “Celtic art” has no physical relation to Celtic-speakers as such.

Similar hypotheses have been advanced by T. and S. Champion (1986 : 63–4), though they assume that there is a connection between this material culture and the Celtic-speakers, and that the material culture is a coded affirmation of ethnicity.

“... it is a teasing question whether all the groups accepted the new symbols, rituals and art style because they felt part of a larger ethnic group, or whether in accepting these symbol... they recognised themselves as a people for the first time...”.

It is interesting to note however that these authors, despite their novel methodological approach, unquestioningly retain the notion that “La Tène = Celtic”.

It seems also that in any consideration of Celtic-speaker settlement and movement in Central Europe, we should differentiate at least five different types of manifestation of the “La Tène Lifestyle” phenomenon, which are only to a certain extent interrelated:

A) Compact settlement complexes of large numbers of Celtic-speakers forming a social organisation which may be termed “tribes”. In these areas the whole social system conforms to La Tène models, and there may be conformity in dress style, burial rite and perhaps belief systems with those current in other Celtic-speaking communities. In some areas the social organisation took on an Early State Module form, with the development of oppida, and the use of coinage. Perhaps this was the situation along the Danube valley (Woźniak 1970 : map 6). It should be noted that the development of social organisations giving rise to *oppida etc.* was not dependant simply on linguistic affinities, since these phenomena only develop in certain areas of Celtic Britain, and even then, much later than on the Continent.

- B) Dispersed Celtic-speaker settlement forming an elite among a larger population of a different ethnicity. Here La Tène style material and the burial rites probably represents both the intrusive population and the acculturation by autochthonous natives of (“superior”) foreign art styles and ideas. It is an expression of dominance and a status-symbol. In these areas some La Tène features may occur (such as fine wheel-made pottery, *fibulae*, art styles, sometimes an inhumation burial rite), but social and economic organisation seldom takes the same form as in the first type of Celtic-speaker settlement (e.g. lack of *oppida* or coinage). A possible example of this type of settlement pattern may be southwestern Poland (Woźniak 1970; Hensel 1988:426-64) strongly influenced by Celtic-speaking tribes south of the Carpathians. In certain circumstances elite dominance may lead to language displacement, as apparently in the case of the “colonisation” of western Scotland from Ireland and Brittany from Cornwall in the fifth century AD. In both these areas Celtic languages were in use until they were almost replaced by other language groups in the modern period (by English and French respectively).
- C) Dispersed Celtic-speaker settlement as part of a larger population of a different ethnicity. Here La Tène style material and the burial rites could be interpreted as representing attempts of the Celtic-speaking minority to retain cultural identity in a stress situation. If however we discard the notion of a “Celtic” ethnicity, we need not expect there to be any difference in the material culture of these populations from those surrounding them. The presence of Celtic-speakers would have minimal effect on social and economic organisation. Possibly Tacitus’ *Aestii* may fall into this category.
- D) Impermanent armed Celtic-speaker invasions of non-Celtic territory, such as Gallic invasions of Italy in the early fourth century BC (Livy *Histories* V. XXIII), and Greece and Macedonia in the early third century BC. These events appear in the written sources, especially when they directly impinged on the zone of interest of the Classical World. This type of “expansion” should not however be confused with the three types of settlement discussed above. They were often accompanied by attempts to settle parts of the invaded territory (by warriors, stragglers or hangers-on, perhaps to form supply-lines in protracted campaigns, or means to exploit loot seized); armed invasions were not always the beginning of colonisation. They may however have had some deeper consequences for the nation attacked (Stary 1987). In some cases however they did lead to the establishment of apparent colonies of Celtic-speakers in far distant territories (e.g. the Semnones in northeast Italy or the Galatians in Asia Minor).
- E) The acquisition of La Tène objects and fashions by people of a completely different ethnos, in the same way as western European Celtic-speakers acquired Greek imports and fashions (Piggott 1965:185-9). La Tène objects are thus known from the Russian forest-steppe (Kukharenko 1959).

It should be clear that the archaeological distinction between these five phenomena is difficult, and not always possible in the absence of other types of evidence. Nevertheless it is clear that these phenomena have not been rigorously

enough differentiated in some past work on the problem. The mere presence of “Celtic” objects is not enough to prove the presence of Celtic-speakers in any area, still less that they were dominant social or ethnic group responsible for the creation of a specific socio-political or economic situation in all areas where La Tène objects are found.

We have seen above that some workers have speculated that the Celtic-speakers were in some way the organising factor behind some economic systems and long-distance trade networks (perhaps on analogy with perceptions of pre-War Jews in Central Europe). This concept also perhaps requires closer examination. The fact that in Central Europe the areas producing evidence for Iron Age coinage, *oppida* and luxury exchange are those which generally are thought to be “Celtic-speaking” does not necessarily mean that it was the ability of part of the population of a given area to speak a Celtic dialect which led to economic development. Indeed the argument becomes a circular one, as it is often the presence of precisely these archaeologically-recognisable phenomena which led in the first place to the identification of the area as having a “Celtic” population. The paradox is heightened by one of the rare pieces of written information about one northern European group, the *Aestii*, which will now briefly be discussed.

## THE CENTRAL EUROPEAN CELTIC FRINGE

Here we will consider a few aspects of a written source not often noted in this context (because it has usually been linked by other writers with two different ethnic groups, Germans and Balts). If however as a working hypothesis an opposite view is taken, the acceptance of this information has important consequences for the questions under review here. Tacitus writing in Rome about 98 AD near the end of his “*De origine et situ Germanorum*” (section 45) has a passage on the groups which according to him lived at the edge of Suebian “Germania”. One of them is the *Aestii* (*Aestiorum gentes*) whose description is atypically long (Kolendo 1981: 58):

“...turning to the right shore of the Suebian Sea, we find it washing the territory of the *Aestii*... [who] have the religion and general customs of the *Suebii*, but a language approximating to the British. They worship the mother of the gods, they wear as an emblem of this cult the masks of boars... They seldom use iron weapons... They cultivate grain and other crops with a patience quite unusual among the lazy Germans. Nor do they omit to exploit the sea; they are the only people to collect the amber (*glaesum* is their own word for it) in the shallows or on the beach...”

Most scholars previously dealing with this passage have disregarded the Roman author’s specific statement about the language spoken by this people, as if it has little significance. These authors assume that (despite having quite a lot of information about this specific group), Tacitus has made a mistake here. Presumably this information seemed to them improbable, due to the lack of other material evidence (*i.e.* La Tène styles) for “Celtic” settlement in the area. Many

modern writers have also accepted literally and without question Tacitus' assertion that the *Aestii* were the only northern Barbarians responsible for amber collection, and therefore have seen them as Balts (if not from Sambia, as this is where the best sources of Baltic amber now are). This ignores the fact that amber was probably exploited on a small scale on the Frisian coast and the Danish peninsular at least until the late first century BC (Kolendo 1981: 48–50, 1990: 94). It should in addition be noted that the *Aestii* were not necessarily the actual collectors of the amber, but may have been the middlemen who were the immediate source of the amber reaching the Romans. Perhaps it was easier for the Romans to find a translator capable of dealing with the Celtic-speaking *Aestii* than with Balts, and perhaps prior to the Roman mission, Baltic trade with the Danubian region had been channelled through the Celtic-speaking *Aestii*. This means that we need not necessarily place the *Aestii* in the vicinity of the Sambian amber source as is often done (e.g. Łowmiański 1963: 161; Kolendo 1981: 59).

Tacitus was probably working from the account of a participant in a Roman trip made to the Baltic (Kolendo 1981: 58–9), most likely that mentioned by Pliny *Hist. Nat.* [XXXVII 3(11).45] of c. 60–68 AD (Kolendo 1976: 43 fn.21, 1981). In that case, we may perhaps give some of the information Tacitus cites some credence, after all a trader or official would have had to communicate with the people he contacted, so the linguistic comment may have some validity. Most of Britain was conquered by the Romans in 43–61 AD and Tacitus' own father-in-law, Agricola, had been governor in Britain. There is thus no intrinsic reason to doubt the comparison made by Tacitus' informant, who could have been to Britain itself, or at least come across British slaves elsewhere in the Empire. The "British tongue" with which the language spoken by the *Aestii* is compared is most likely to have been a Celtic dialect, but certainly *not* Germanic (Kolendo 1976: 43–4) nor "Old European" (Okulicz 1989: 69; see also Łowmiański 1963, I: 161). It is interesting that the language was referred to as similar to "British", and not "Gallic", the latter being of course better known to Tacitus and his contemporaries. It is unlikely, given the evidence for the rapid development of this province in the 80s and 90s of the first century AD, that (in using Britain as a comparison), Tacitus is drawing on an older literary motif and referring to the language of the *Aestii* as of the utmost barbarity. By Tacitus' time Britain was no longer the unknown island in Ocean beyond the edge of the known world.

Several writers (e.g. Okulicz 1973: 343; Kolendo 1976: 41) have used Hammer's Polish translation of Tacitus, who (1957: 288–9) translated the passage "...lingua Britannicae propior..." as "...though their language is more similar to that of the Bretons...", which is not only incorrect, but also anachronistic. It also includes the possibility of a severe distortion (especially as the most important Armorican tribe at Caesar's time was called the *Venedi*, which have been linked by some writers with the central European tribe of similar name, see Łowmiański 1963: 89–90; Hensel 1988: 226–9).

The etymology of the single known word in the language of the *Aestii* reported by Tacitus "*Glaesum*" [*Glesum*] is a particularly interesting problem. The modern Welsh word for amber is "*Gwefr*". Weigaber (1931) has a Celtic

word "*Glastum*" (a plant dye). "*Glaesum*" is considered by Toporov (1977, II:261–3) to be a word in a language related to proto-Germanic, perhaps a loan-word (related to the word "*Glas-Glass*" for shiny substances such as pitch/resin and glass). The word is mentioned as Germanic under the heading "*Glas*" by Kluge (1910:174). This does not mean however that the language spoken was itself "Germanic", simply that in two neighbouring Indoeuropean languages similar words had a common root. Maybe however the *Aestii* (or Tacitus himself) had borrowed the word for amber from a neighbouring group (or alternatively that the Germans derived it from the *Aestii*). Pliny tells us (*Hist. Nat.* XXXVII, 42) that traders of many nations met on the amber-rich island of "*Glaesaria*". Elsewhere (*Hist. Nat.* IV. 13 (27). 96) *Glaesaria* is met as the name given by Romans to an island known by the barbarians as "*Au(s)teravia*". The position of this island is not quite clear, but would seem from the position in the text not to be Sambia (Kolendo 1990:94) but one of the Frisian islands explored by Drusus in 12BC. It is worth considering therefore the nationality of the imperial soldiers/sailors using the term "*Glaesum*" for amber (which was "*sucinum*" in the Latin of Tacitus and Pliny), were they Gallic or German?

Though there is a certain amount of evidence that the *Aestii* described by Tacitus could indeed have been (as he reports) Celtic-speakers (put another way, there is no real evidence to the contrary), several problems remain. It is not possible to be sure that the *Aestii* were autochthonous to the area, where they might have arrived as early as the Neolithic, alternatively they might have been displaced from further south by Germanic invasions in the last centuries BC. If so, it is notable that they did not take with them any "Celtic" metalwork styles or other archaeologically recognisable characteristics. It is also not known how (in either of the above eventualities) the group retained its ethnic identity over a long period of time surrounded by other ethnicities; indeed, it seems that in terms of material culture these potential Celtic-speakers did not differ markedly from their neighbours.

The precise location of the *Aestii* is thus difficult to establish. We have seen that they need not to be placed in Sambia simply on the evidence that Tacitus says that they were the only group collecting amber from the sea. Nevertheless the most likely place for them would be somewhere on the "amber routes" deduced from the archaeological evidence (Wielowiejski 1980). The most likely place for such a group would be in the area to the east and northeast ("right") of the Vistula mouth. The presence of the *Aestii* in this area is not confirmed by Ptolemy, writing a little later. He mentions the "*Guthoni*" however, which he placed in *Sarmatia*" just east of the mouth of the Vistula. Tacitus also notes a group called the "*Gutones*" (or "*Gotones*") probably somewhere along the lower Vistula, e.g. in eastern Gdańsk Pomerania and Kujavia. Like Tacitus, Ptolemy probably learnt of these tribes and their relative position from trader's itineraries. If so, it is notable that he does not mention the *Aestii* who were, according to Tacitus, the "only" source of the amber. Ptolemy does however place a people called the "*Ostii*" (or "*Ossii*") further to the east, and this could be the *Aestii* misplaced.

Several Late Antique sources also mention the name *Hestii* or *Esti* (Cassiodorus, Jordanes, Einhard, king Alfred's translation of Orosius) applied to unspecified group(s) in the amber-producing general area of the southeast Baltic coast. This has usually been taken uncritically not only as proof that the tribal name was retained for nearly a millennium, but also that the *Aestii* were Balts. There is no reason to accept either of these claims, it is quite likely that these later authors were simply repeating older Classical geographers with no reference to the real name of the peoples concerned. There is severe doubt whether the letter by Cassiodorus for example (Kolendo 1990: 98–9) was actually addressed (in the form we have it) to a real recipient, to whom it would be incomprehensibly verbose. The *Aestii* should not be confused either with the Finnish Ests of modern Estonia (known to the Russian Medieval chroniclers as Čuds).

Archaeologically we should seek the first century *Aestii* living somewhere to the east of the Vistula mouth at the end of the "Amber Route". We do not know the limits nor the size of their territory, thus locating it precisely is difficult. Over most of the area east of the Vistula mouth in the period from the Early Iron Age to the end of the Roman period occurs the "West Balt Barrow Culture" (Okulicz 1973: 247ff.), which clearly should be linked with the Baltic-speaking tribes. In the light of Tacitus' clear reference to their language, we should discount the possibility that the (literary) *Aestii* were Balts. It would seem more likely that we should seek them among the sites of the Wielbark Culture of Pomerania, extending east of the Vistula up to the Pasłęka river from the first decades of the first century AD (Wielowiejski ed. 1981: fig. 31). The West Balts (Prussians) only moved into this area in the Migration Period (Okulicz 1973: 467ff.). The Wielbark Culture is probably of mixed ethnicity, and later gave rise to the "Gothic" Chernyakhov Culture on the steppes. It may be significant that Ptolemy places the "*Gotones*" where Tacitus notes a people called the *Aestii*. It seems that the *Aestii* may be a smaller group of Celtic-speakers of uncertain size and position inside the spread of Wielbark Culture sites (presumably using similar material culture). This raises a whole series of interesting questions which cannot be discussed here.

Earlier in the "*Germania*" (section 43), Tacitus also speaks of the *Cotini*, a tribe living "behind" (north/northeast) of the Marcomanni, but apparently south of the Carpathians and Sudety. The *Cotini* are noted specifically as a Gallic-speaking tribe. Their precise position is debatable, but their territory probably lay in the Carpathian foothills somewhere between the Morava and Cisa valleys.

When Tacitus links the *Aestii* and *Cotini* with the "*Suebians*" in "*Germania*" and Ptolemy placed the *Guthoni* in "*Sarmatia*", they were of course thinking more of their geographical location than their precise ethnic attribution. It seems, however, that Tacitus expected to find some kind of linguistic and cultural continuity across this area; thus apart from his comment on the Celtic language of the *Aestii* and *Cotini*, he tells us that the *Osi* spoke a Pannonian language, though he groups (*Germania* 43) them all as "*Suebians*". These groups therefore seem to form enclaves in an area where other languages (presumably principally eastern dialects of proto-German) were spoken. It is of course entirely possible that other similar groups escaped the notice of Roman geographers.

The main problem however is not how Tacitus perceived the ethnicity of these tribes of eastern Germania, but how we should approach this problem. In Britain, Tacitus' report on the language of the *Aestii* is regarded as a historical curiosity, Polish writers (e.g. Łowmiański 1963: 161; Hensel 1988: 469; Okulicz 1973: 343, 349–350) tend to disregard Tacitus' comment on language, thus the *Aestii* are considered (e.g. Wielowiejski ed. 1981: 460) as "undoubtedly" West Balts (see also Okulicz 1986: 14–18). Here the supposed position of the tribes in amber-producing Sambia and uncritical use of possibly anachronistic Medieval references to the (Baltic?) inhabitants of the area as "*Ests*" have tended to cloud the issue. Tacitus, the only source of detailed information about this population, tells us quite specifically that their language was Celtic, though grouping them as Suebian Germans, and reports a Germanic-sounding mineral name reputedly from their vocabulary. Many modern writers have ignored his statement about the affinities of their language, but we have seen that there is nothing inherently impossible in this model.

#### PRE-IRON AGE CELTS IN CENTRAL EUROPE

We have seen that there is no reason why we should link the demographic diffusion of Celtic-speakers in Europe to the expansion of the zone producing La Tène metalwork or related features, neither in Britain nor in several large areas of Central Europe. The archaeological evidence for this population diffusion should no longer be sought in the Iron Age, but perhaps much earlier, and the fourth century BC La Tène phenomenon in all probability represents the spread of material symbols among an existing population, and not the movement of the population itself.

Since to a great degree the distribution of La Tène cultural symbols matches that of the known extent of the Celtic languages, it is still possible that the majority of the phenomena and items regarded by archaeologists today as "Celtic" were also similarly interpreted by many of their Iron Age users, though perhaps not so precisely. The rapid spread of these items would thus be explained by the mechanisms of acculturation by population groups wishing by the use of certain material symbols to identify themselves with other groups or parts of groups (Champion and Champion 1986). Perhaps in this case there was in some of these groups a general awareness of pre-existing collective "Celticity" (encouraged and maintained by the functioning of long-distance exchange networks), a notion which the acquired symbols were supposed to support.

This model would explain several of the more puzzling features of the distribution of this material in Europe, especially why the new material culture represented in the archaeological record spread so rapidly over a vast area, while maintaining an interregional character. It would also explain regional differences, such as how some Celtic-speakers apparently present on the south shore of the Baltic were not using La Tène style objects. Britain has been discussed above, La Tène art styles are also rather uncommon in Spain where the evidence also suggests a Celtic-speaking population (Renfrew 1987: 231–2 and 237).

This idea is not new, Jażdżewski for example (1981:329 and 371-2) has suggested that proto-Celtic-speakers were already present in Central Europe by the later Bronze Age; he envisaged a basic stability of ethnic groups in Central Europe from the Early Bronze Age (1981:329). Godłowski and Kozłowski (1985:104-5) also note the possibility of a proto-Celtic population in Central Europe preceding the "expansion" in the 4th century BC; they also conclude that the Central European distribution of the art styles represents the "consolidation" and not the first phase of "Celtic expansion". A similar view was propounded by the Champions (1986). Renfrew has also suggested (1987:211-49) an earlier differentiation and diffusion of the Celtic languages in western Europe, and places their differentiation at a later (undefined) period after the original Early Neolithic spread of the Indo-European languages.

We have seen above that other workers have drawn attention to the inter-regional nature of several prehistoric cultures, and in them sought evidence for the movement of populations such as Celts. Prehistorians are presently more inclined to link the appearance and distribution patterns of many of these phenomena with local developments, and see them as resulting from the spread of ideas among populations in contact (*e.g.* the British Iron Age discussed above; the relationship between Central European "Corded Ware Culture" and the "Indo-Europeans"; Kossinna 1902; Gimbutas 1956; Häusler 1981). It is clear that lateral transfer of cultural patterns over such large areas would be much facilitated if there were certain links between the societies involved beforehand, one of these links might be the sharing of similar languages, which would form the optimum conditions for the relatively rapid transferrance of an idea (be it Early Bronze Age Beakers or La Tène lifestyles).

The extended timescale allowed by the theory of an Early Neolithic diffusion of the Indo-European language groups allows the population of large areas by groups with similar languages by natural demographic expansion, without the need to invoke mysterious population explosions or colonialist elites.

There are a number of archaeological cultures with pan-European aspect, which are (according to present classification) fundamentally the same (despite small regional differences) across enormously-wide areas of Europe; these areas of cultural similarity cover areas which are much larger than most modern states in the region. Perhaps some form of pre-existing linguistic or cultural unity (though not necessarily an ethnic one) may lie behind their formation. In this case, the distribution of certain groups of phenomena would not represent the movement of a population or related populations, but rather (part of) their extent. Differentiating archaeologically between these two phenomena might prove difficult. This is not the place however for a more general discussion of models of the processes of cultural accumulation and change (Renfrew and Cherry eds 1986).

It is notable for example that the distribution of Bell-Beakers in Western Europe as mapped by Harding (1985:75-map) is closely similar to that of the later distribution of Celtic-speakers and La Tène material. If these patterns are not pure coincidence or accidents of discovery, this phenomenon perhaps requires

attention. Either both represent similar social and economic structures exploiting the same natural resources, or perhaps they may be more closely linked. The Beaker burial assemblage phenomenon (Renfrew 1987:86–91) now seems most likely to be an elite “status symbol kit”, spread by culture contact by not dependant on movement of population (for which the evidence now seems to be lacking). Does the spread of the Bell-Beakers represent the distribution of an elite linked by similar languages? Perhaps the later spread of other pan-European cultures in the same general area represents periodic re-establishment in an archaeologically detectable form of linguistic and cultural (though not necessarily ethnic) links already in place before the end of the Neolithic? If so, there is no reason why that language cannot have been proto-Celtic, and no real reason why the “Beaker” elite should not be part of a larger population of proto-Celtic speakers present in Europe already for some time (*cf.* Childe 1940).

The longer timescale and the acceptance of the identification of the *Aestii* as a Celtic-speaking group, also allows us to see the limited linguistic evidence in new light. Since the “similar” British and Baltic coast languages need not now be seen as the result of a late dispersal from a “core area” (in which case it is difficult to explain their difference from the Continental languages between them), it is now possible that they are closer to an early more widespread variety of the language family, and that the Gallic and other group(s) between them are a later independant development of this. Here we may recall the wave model of language diffusion (Renfrew 1987:244–5). Unfortunately, since most of the dialects concerned are now extinct and known to us from very slight evidence, it is likely that the truth of such matters will never be known.

## CONCLUDING REMARKS

The models considered above allow us to consider it possible that large areas of Late Neolithic western Europe from the Rhine to the Pyrenees and much of Britain were occupied by (proto-) Celtic-speakers. It seems likely that already by the early prehistoric period, parts of Central Europe were also occupied by isolated settlement areas of similar populations. The later Germanic and Roman expansion began the cultural processes leading to the obliteration of Celtic ethnicity in western and central Europe. This concept seen from a Central European angle has several advantages over the “fourth century BC demographic explosion” hypothesis. Firstly there is no need to explain rapid population growth, since the demographic expansion need not have taken place in the short timescale of the chronology of La Tène metalwork. Secondly attempts to bypass the demographic problems by restricting Celtic diffusion to movement of an Iron Age elite fail to explain how such an elite rapidly imposed its will and language on a larger native population. A longer timescale allows more gradual processes of language displacement to operate. We have seen that there are serious grounds for doubting that the expansion of Celtic-speakers in Europe was as simple or as late a process as has been generally assumed.

In this paper we have explored only a few facets of the issues involved in the complex question of the data and mode of the distribution of the Celtic linguistic group. We are only too aware of the incompetence of archaeology to resolve this conundrum satisfactorily (Jazdzewski 1981: 329), the slenderness of the written accounts is equally tantalising. The amount of these latter sources is unlikely to increase with time, and the number of hypotheses that can be built on them is also limited. Archaeological material relating to the problems will continue to accumulate however, and will always be the subject of new questions and models. It is extremely probable that these problems will always remain the subject of debate and conflicting hypotheses, altering with the prevailing mood of the times in which they arise. Such continuing and periodic debate perhaps has at least the value that it prevents mental strait-jacketing. The Celtic Problem is one of these situations, where for far too long the ease of recognition of the material symbolism of the "La Tène Lifestyle" has led archaeologists (and students of the written record) astray when considering ethnic issues.

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## REFERENCES

- Champion, T.C. and S. Champion, 1986. Peer-polity interaction in the European Iron Age. In C. Renfrew and J.F. Cherry (eds), 59–68.
- Childe, G. 1950. *Prehistoric migrations in Europe*. London.
- 1940. *Prehistoric communities of Britain*. London.
- Clark, J.G.D. 1966. The invasion hypothesis in British prehistory. *Antiquity* 40: 172–89
- Crawford, O.G.S. 1922. A prehistoric invasion of England. *Antiquaries Journal* 2: 27–35.
- Cunliffe, B.W. 1974. *Iron Age communities in Britain*. London.
- Filip, J. 1956. *Keltové ve střední Evropě*. Praha.
- 1976. *Celtic civilisation and its heritage*. Praha.
- Fox, C. 1958. *Pattern and purpose: early celtic art in Britain*. Cardiff.
- Gąssowski, J. 1985. *Kultura pradziejowa na ziemiach Polski*. Warszawa.
- Gimbutas, M. 1956. *Prehistory of Eastern Europe*. Vol. 1. Cambridge, Mass.
- Godłowski, K. and J.K. Kozłowski 1985. *Historia starożytna ziem polskich*. Warszawa.
- Hachulska-Ledwos, R. and Z. Woźniak 1976. Formy do wytopu krążków mennicznych z I w. p.n.e. z Krakowa-Nowej Huty (Mogila stan. 1). *Materiały Archeologiczne Nowej Huty* 5: 200–1.

- Hammer, S. 1957. *Tacyt, Dzieła*. Vol. 2. Warszawa.
- Harding, D.W. 1985. *Prehistoric Europe*. Oxford.
- Häsler, A. 1981. Zu den Beziehungen zwischen dem nord-pontischen Gebiet, Südost- und Mitteleuropa im Neolithikum und der frühen Bronzezeit und ihr Bedeutung für das Indoeuropäische Problem. *Przegląd archeologiczny* 29: 101–49.
- Hawkes, C.F.C. 1931. Hill forts. *Antiquity* 5 (17): 60–111.
- 1959. The ABC of the British Iron Age. *Antiquity* 33 (131): 170–82.
- 1972. Europe and England: fact and fog. *Helinium* 12: 105–16.
- 1973. Cumulative celticity in Pre-Roman Britain, *Études Celtiques* 13.2: 590–611.
- 1976. Celts and cultures: wealth, power, art. In *Celtic art in ancient Europe, five protohistoric centuries*, Hawkes and Duval (eds), 1–25.
- Hawkes, C.F.C. and P.-M. Duval, (eds) 1976. *Celtic art in ancient Europe, five protohistoric centuries*. Oxford.
- Hensel, W. 1988. *Polska starożytna*. Wrocław.
- Herrmann, J. (ed.) 1985. *Deutsche Geschichte*. Vol. 1. Berlin.
- Hodson, F.R. 1962. Some pottery from Eastbourne, the Marnians and the Pre-Roman Iron Age in Southern England. *Proceedings of the Prehistoric Society* 26: 140–55.
- Hubert, H. 1932a. *Les Celtes et l'expansion celtique jusqu'à l'époque de La Tène*. Paris.
- 1932b. *Les Celtes depuis l'époque de La Tène*. Paris.
- Hunyady, I. 1942. *Die Kelten im Karpatenbecken* Vol. 1. Budapest.
- Jążdżewski, K. 1981. *Pradzieje Europy Środkowej*. Wrocław.
- Kluge, F. 1910. *Etymologisches Wörterbuch der Deutschen Sprache*. Strasburg.
- Kolendo, J. 1976. Zróżnicowanie ludów Germanii w świetle dzieła Tacyty. In *Kultury archeologiczne i strefy kulturowe w Europie Środkowej w okresie wpływów rzymskich*, K Godłowski (ed.), 39–50. Kraków.
- 1981. Wyprawa po bursztyń bałtycki za Nerona. *Pomerania Antiqua* 10: 25–63.
- 1990. Napływ bursztynu z północy na tereny imperium rzymskiego w I–VI w.n.e. *Prace Muzeum Ziemi* 41: 91–100.
- Kossinna, G. 1902. Die indogermanische Frage archäologisch beantwortet, *Zeitschrift für Ethnologie* 34: 161–222.
- Krahe, H. 1962. *Die Struktur der Alteuropäischen Hydronomie*. Wiesbaden.
- Kukhareno, J.V. 1959. Rasprostranenie Latenskich Veshchej na territorii Vostochnoj Evropy, *Sovetskaja Archaeologia* 1: 31–51.
- Łowmiański, H. 1963. *Początki Polski*. Vol. 1. Warszawa.
- Megaw, V. 1980. Kelti Kommt! *Antiquity* 55(214): 125–7.
- de Navarro, J.M. 1936. A survey of research on an early phase of Celtic culture. *Proceedings British Academy* 22: 3–47.
- Okulicz, J. 1973. *Pradzieje ziem Pruskich od późnego paleolitu do VII w.n.e.* Olsztyn.
- 1976. Einige Aspekte der Ethnogenese der Balten und Slawen im Lichte archäologischer und sprachwissenschaftlicher Forschungen, *Questiones Medii Aevi* 3: 7–34.
- 1989. Próba identyfikacji archeologicznej ludów bałtyjskich w połowie pierwszego tysiąclecia n.e. *Barbaricum*. University of Warsaw Occasional Publications, 64–100. Warszawa.
- Peake, H. 1922. *The Bronze Age and the Celtic world*. London.
- Peschel, K. 1970. Die Kelten als Nachbarn der Germanen, *Zeitschrift für Archäologie* 4: 1–36.
- Piggot, S. 1965. *Ancient Europe*. Edinburgh.
- Reinecke, P. 1902. Zur Kenntnis der La Tène Denkmäler der Zone nordwärts der Alpen. *Festschrift zur Feier des fünfzigjährigen Bestehens des Römisch-Germanischen Zentralmuseums in Mainz*, 53–109. Mainz.

- Renfrew, C. 1973. Problems in the general correlation of archaeological and linguistic strata. In *Bronze Age Migrations in the Aegean*, R.A. Crossland and A. Birchall (eds), 263–75. London.
- 1979. *The archaeology of language; the problem of Indoeuropean origins*. London.
- Renfrew, C. and J.F. Cherry (eds) 1986. *Peer-polity interaction and sociopolitical change*. Cambridge.
- Rivet, L.F. and C. Smith 1979. *The place-names of Roman Britain*. London.
- Rix, H. 1954. Zur Verbreitung und Chronologie eininger Keltischer Ortsnamentypen. In *Festschrift für Peter Goessler*, W. Kimmig (ed.), 99–107. Stuttgart.
- Schmidt, K.H. (ed.) 1979. *Indogermanische und Keltische*. Wiesbaden.
- Stary, P.F. 1986–7. Die militärische Rückwirkung der Keltischen Invasion auf die Apennin Halbinsel. *Hamburger Beiträge zur Archäologie* 13/14:65–117.
- Stead, I.M. 1979. *The Arras Culture*. London.
- Ströbel, R. 1942. *Unseres Volkes Ursprung. 5000 Jahre nordische–Germanische Kulturentwicklung*. Nationalpolitische Aufklärungsschriften 2. Berlin.
- Szabo, M. 1971. *Auf den Spuren der Kelten in Ungarn*. Budapest.
- Toporov, V.N. 1975–7. *Prusskij jazyk. Slovar*. Moskwa.
- Viollier, D. 1911. *Une nouvelle subdivision de l'époque de La Tène, Comptes-Rendus du congrès de l'Association française pour l'avancement des sciences*. Dijon.
- Weisgerber, L. 1931. Die Sprache der Festlandkelten. *Berichte der Römische-Germanische Kommission* 7: 147–226.
- Whatmough, J. 1970 *The dialects of ancient Gaul*. Harvard.
- Wielowiejski, J. 1980. *Główny szlak bursztynowy w czasach cesarstwa rzymskiego*. Warszawa.
- Wielowiejski, J. (ed.) 1981. *Prahistoria ziem polskich, Vol. 5: Późny okres lateński i okres rzymski*. Wrocław.
- Woźniak, Z. 1970. *Osadnictwo celtyckie w Polsce*. Wrocław.
- 1976. *Wschodnie pogranicze kultury lateńskiej*. Wrocław.
- Yoffee, N. 1990. Before Babel: A review article. *Proceedings of the Prehistoric Society*, 56: 299–313.