THE BACKGROUND OF THE CELTIC LANGUAGES: THEORIES FROM ARCHAEOLOGY AND LINGUISTICS

by

CATRIONA GIBSON & DAGMAR S. WODTKO

Aberystwyth
Canolfan Uwchefrydiau Cymreig a Cheltaidd Prifysgol Cymru
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Crynodeb

Mae'r papur hwn yn cyflwyno damcaniaethau sy'n ceisio esbonio ymdarddiad yr ieithoedd Celtaidd o'u cefndir Indo-Ewropeaidd ehangach. Mae amser a lleoliad y datblygiad ieithyddol hwn yn anhysbys. O ran y modd y datblygodd Celteg, tynnir sylw at fodelau sy'n cwmpasu newid ieithyddol a achosir gan brosesau 'rhyngwladol', heb fod yn annhebyg i effeithiau globaleiddio heddiw. Mae cymhlyg y Biceri Cloch yn esiampl o ymwneud rhwng rhanbarthau sy'n weladwy mewn cofnodion archaeolegol. Gallai trosglwyddiad gwybodaeth dechnolegol ac ideolegol ar draws grwpiau Biceri Cloch gwasgaredig fod wedi cael effaith sosio-ieithyddol yng nghyswllt symudedd unigolion ac amlieithrwydd uchel ei fri. Dichon fod hyn yn un man cychwyn ar gyfer y newid graddol yn nhirwedd ieithyddol gorllewin Ewrop.

Resumen

El artículo presenta teorías que intentan explicar la aparición de las lenguas celtas a partir de sus más amplios antecedentes indoeuropeos. La época y el lugar de este desarrollo lingüístico son desconocidos. En lo que se refiere a la manera de la aparición del celta, se fija la atención en modelos que incluyen el cambio lingüístico producido por procesos "internacionales", no muy distintos de los efectos de la globalización de hoy en día. Un ejemplo de interacciones suprarregionales visibles en el registro arqueológico lo constituye el complejo campaniforme. La transmisión de información tecnológica e ideológica a lo largo de los ampliamente dispersos grupos campaniformes puede haber tenido un impacto sociolingüístico ligado a la movilidad individual y a un plurilingüismo socialmente apreciado. Este puede haber sido uno de los factores presentes en el inicio de un cambio gradual en el paisaje lingüístico del oeste europeo.

Abstract

This paper presents theories attempting to explain the emergence of the Celtic languages from their wider Indo-European background. Time and place of this linguistic development are unknown. With regard to the manner of the emergence of Celtic, attention is drawn to models encompassing linguistic change brought about by 'international' processes, not dissimilar to globalization effects today. An example of supra-regional interactions visible in the archaeological record is constituted by the Bell Beaker complex. Transmission of technological and ideological information across the widely dispersed Bell Beaker groups may have had a sociolinguistic impact linked to individual mobility and socially respected plurilingualism. This may have provided one starting point to a gradual change of the western European linguistic landscape.

Figure 1: maximum geographical extent of Celtic linguistic evidence (Koch et al. 2007, 2–3)

The background of the Celtic languages: theories from archaeology and linguistics

Models attempting to describe the development of Celtic, its separation from the other Indo-European (IE) languages, and its spread into its historically attested speech areas face the problem of establishing this process in time and space, as it occurred at an unknown period and location(s) in prehistory. Moreover, there is as yet no established framework for the exact manner and nature of this development. Celtic is the geographically most widespread IE language in Western Europe at the beginning of historical times (Figure 1). By its expansion it doubtless replaced an unknown number of other languages, Indo-European or otherwise. Some non-IE languages, such as Iberian, are well represented as neighbours of Celtic at the beginning of the historical period, and give way to an IE form of speech only in Roman times; but in many regions there is no trace of non-IE languages and no manifestly pre-IE onomastic substratum. This suggests a fairly early and / or thorough installation of IE, which may well go back to the 2nd or 3rd millennium BC. It is against this background that the emergence of Celtic may be seen.

Linguistic theories aiming at an explanation for the wide distribution of IE speech rightly take their starting point from known mechanisms of language death and replacement. They usually involve language contact situations in which one language becomes privileged over another, with a consequent shift of speakers to the new language resulting ultimately in the death of their previous form of speech. This process is firmly connected to the social setting of the respective languages and their speakers. An adequate theory for the spread of Celtic and its IE forebearers, therefore, must take prehistoric social conditions into account, as far as they can be deducted from the archaeological evidence. Historical models that have been projected back into prehistory include mass migrations and military conquests, which, in later times, formed the background for the spread of e.g. Germanic and Romance. But these models should be supplemented by additional factors related to broader aspects of 'globalization', if only globalization on a European scale.

A *terminus ante quem* for the emergence of Celtic is provided by the earliest attestations of its daughter-languages. The oldest Celtic texts are

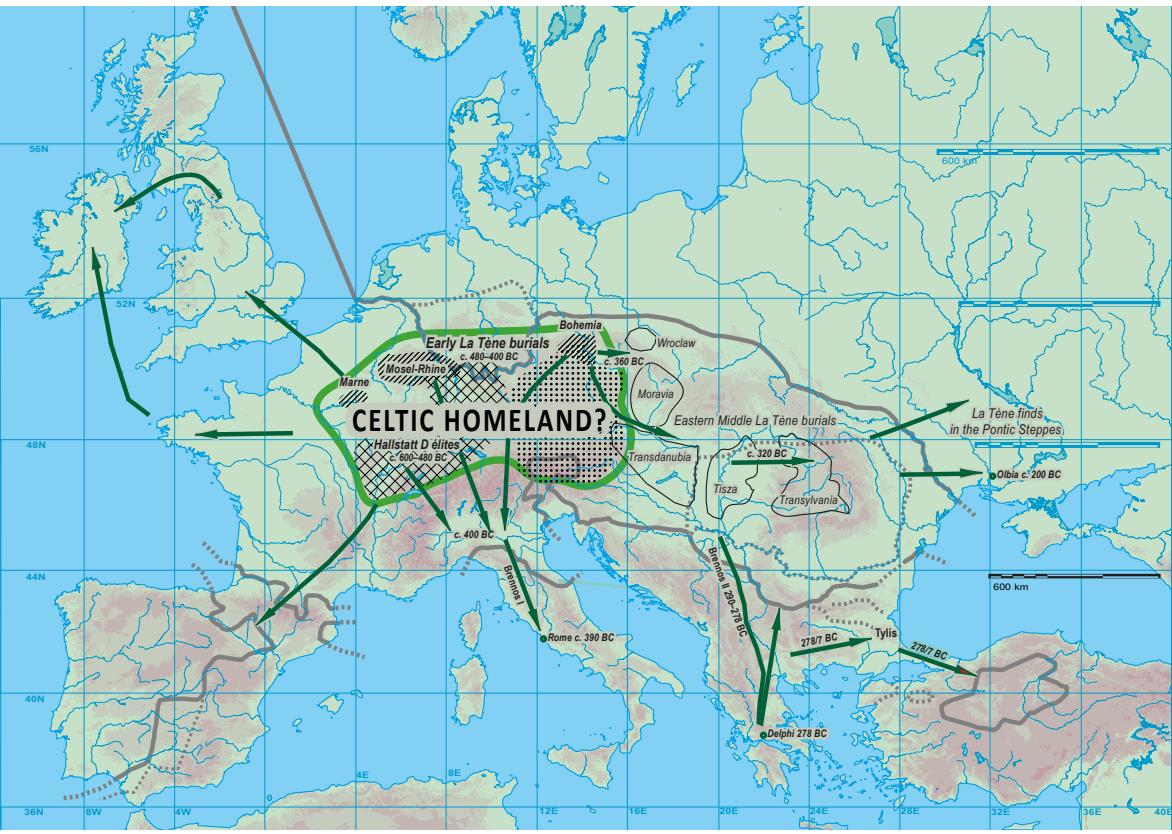

Figure 2: suggested “Celtic homeland”

currently believed to be extant in some Lepontic inscriptions from northern Italy, some of which have been dated to the 6th century BC.[1] Celtic texts from the 1st millennium BC are found, moreover, in Gaul and Celtiberia, while the attestation in the British Isles – the only area providing fully literary transmitted and contemporarily spoken Celtic languages – begins only in the 1st millennium AD.[2] From the start, Gaulish and Celtiberian, Goidelic and

1 Lepontic is not distinguished from Gaulish by all specialists. For its linguistic status and for texts predating the Gaulish invasion of the 4th c. BC see Uhlich 1999 and 2007. On the texts and their dates cf. also Morandi 2004 (where the dates of some texts differ from those given by Uhlich). For a discussion of the possibly Celtic character of Tartessian and its dating see Koch 2010.

2 A few Old British coin legends can be dated to the 1st c. BC, cf. Van Arsdell 1989, e.g. no.s 350, 362, 1035, 1605.

Brythonnic appear as distinct Celtic languages, with clear common traits, but probably only limited mutual intellegibility. They are all found in their specific cultural settings without any immediately visible non-linguistic shared cultural features, such as distinctive and exclusive material or social characteristics. The timeframe and speech area of Proto-Celtic cannot be straightforwardly deducted from the wide areal distribution of the earliest attestations.

A unified material culture, ideology or social organization are not prerequisites for a common language, particularly when this language extends over a vast geographical area. Nevertheless, linguists have in the past taken their clues from historical and archaeological theories in an attempt to reconcile the distribution of the Celtic languages with the distribution of material archaeological remains in search for such a 'Celtic culture'.

Traditionally the Celtic homeland has been located in central Europe, specifically the North Alpine area where the Celts have been equated directly with Urnfield, Hallstatt and La Tène cultures (cf. e.g. Schmidt 1986, 15). From there Celtic speech was assumed to have advanced towards the south, north, and west (Fig. 2). However, the archaeological evidence does not support the hypothesis of a 'Celtization' of Atlantic regions during the Iron Age and there is a dearth of material evidence for such a migratory movement from the North Alpine zone to places like the Iberian Peninsula and the British Isles. More recently, Brun (2006) argued that Celtic first developed as a supra-regional language of Bell Beaker groups (Fig. 3). This identification of the 'Beaker folk' with Celtic speakers is not new; although rejected by Pokorny (1936, 336), it was endorsed e.g. by Dillon & Chadwick (1967, 214). Vander Linden (2003) suggests a connection between the spread of Bell Beakers and early IE languages, de Hoz (2009, 22) associates them with the so-called Old European hydronymy. More will be said below about possible linguistic implications of the widespread, but unevenly distributed Bell Beaker phenomenon. It is clear, however, that the archaeological identification of the Proto-Celtic speech area has varied for different generations and also in different countries (Kalb 1993), with changing evidence and interpretations in archaeology; thus, only the linguistic unity of Celtic and its classification as an IE language remains as a fact.

Like other IE languages, Proto-Celtic is described by a bundle of isoglosses, which constitute innovations in relation to Proto-Indo-European and which, together, differentiate it from all other IE sub-branches. There is no complete unanimity among scholars as to which isoglosses are to be regarded as obligatory for the definition of Celtic and which are dispensable, e.g. as Common Celtic rather than Proto-Celtic developments. Among the features usually adduced are the following, all describing phonological rather than morphological innovations:

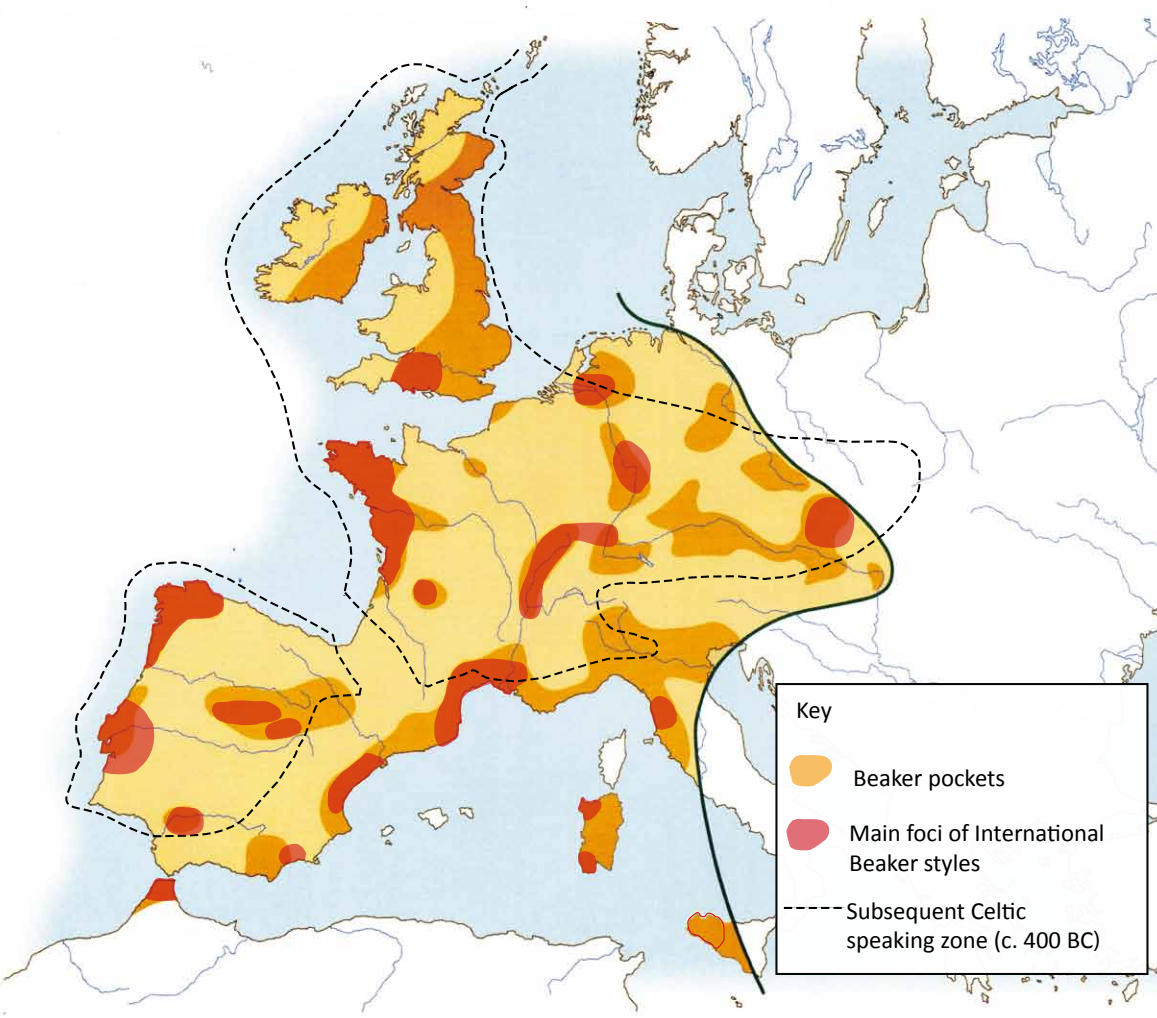

Figure 3: main extent of the Beaker complex c. 2800–2200 BC (Source: adapted from Brun 2006, fig. 3, and combined with Cunliffe 2010, fig. 1.9)

- *$\underset{\circ}{R}$ > *Ri* (before stops)
- *g^w > *b*
- coalescence of voiced and voiced aspirate stops into voiced stops (except for *g^w, g^{wh})
- *p ... k^w > *k^w ... k^w
- *p > Ø (word-initially and between vowels)
- *$\bar{o}$ > $\bar{u}$ in final syllables (dispensable according to de Bernardo Stempel 2003, 40)
- *$\bar{o}$ > $\bar{a}$ in other positions (dispensable according to Villar 2001, 114)
- *$\bar{e}$ > $\bar{\imath}$ (dispensable according to Prósper 2005, 245)
- *-*Vns* # > -$\bar{V}$*s* # (dispensable according to Griffith 2005)
- **ey* > $\bar{e}$ (dispensable, as **ey* is often preserved in Lepontic and Celtiberian)

Loss of PIE **p* word-initially and between vowels is traditionally adduced as one defining characteristic of Celtic. When, at the margins of the Celtic-speaking area, examples are found, which show **p* preserved, most scholars postulate the presence of another IE language in the neighbourhood of Celtic, even if this other language cannot always be clearly identified.[3] When examples of preserved **p* are found with some frequency within Celtic-speaking territory, they are accordingly referred to IE but pre-Celtic substrata, which have been labelled e.g. Ligurian, Illyrian or Old European [4] (Fig. 4). Consequently Celtic, e.g. in the Iberian Peninsula, is placed into a linguistic environment of neighbours or substrata seen as already IE speaking; Celtic, thus, is not the first IE language entering an area of non-IE speech.[5]

The postulated IE substratum languages in Western Europe tend to remain

3 Exceptions are e.g. Untermann 1985-86, Ballester 2004, who accept preserved **p* as an archaism in Celtic.

4 On postulated substrata and the dangers of their fallacies see Mees 2003.

5 In historical times Celtic languages are spoken in the neighbourhood of non-IE Iberian and Basque in Spain, Aquitanian in Gaul, Raetic and Etruscan in northern Italy. For the British Isles, especially for Ireland, it is more often assumed that Celtic was preceded only by non-IE but not by other IE languages, cf. e.g. Mac Eoin 2007, 123.

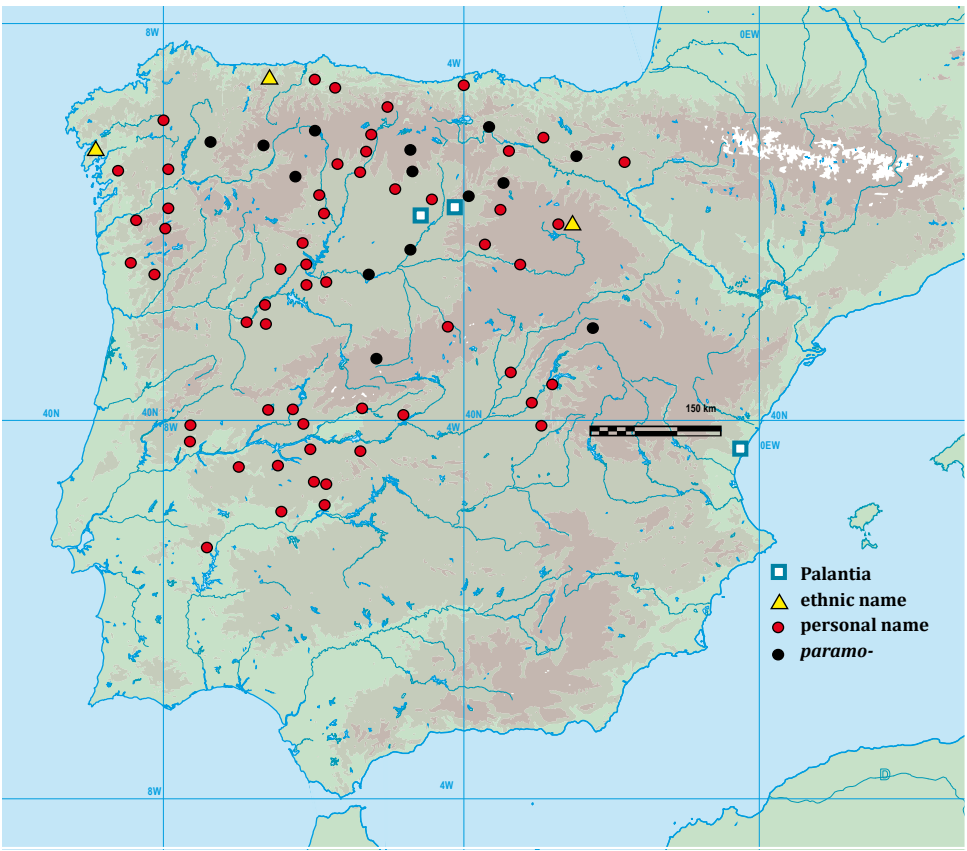

Figure 4: pre-Roman *p-* in the Iberian Peninsula (based on Untermann 1985-86, 72f., and Almagro-Gorbea 2001, 96)

shadowy, exactly because the recognizable linguistic stratum is Celtic. For each individual instance it is then mostly assumed that a Celtic language – as such – at some stage entered the relevant area. On the model of the Gaulish south-eastern expansion in the second half of the 1st millennium BC, speakers of an already developed Celtic language are envisaged as moving into a new territory in sufficient numbers to change the previous linguistic landscape.

A more careful approach has been suggested by Hawkes 1973 in a model called 'cumulative Celticity'. This model, a version of the élite dominance explanation for language shift, implicitly argues for the gradual introduction of a new language by rather few, but influential individuals. Another alternative to the introduction of Celtic by a comparatively large-

scale population movement has been advanced by Prosdocimi (e.g. 1987), who emphasises the possibility of observing a Celtic language '*in fieri*'. In this model, linguistic material is classified not so much as clearly Celtic vs. non-Celtic, but rather as possibly pre-Celtic vs. anti-Celtic. A possible pre-Celtic feature would be an archaism, such as the overall preservation of $*g^w$, which may then later become *b* as known from Celtic languages. An anti-Celtic feature, by contrast, would be the overall development of $*g^w > g$, a change which Celtic does not share, and from which there is no way back to the general Celtic development. While this model seems to allow for a possibly quite late emergence of Celtic at the beginning of the 1st millennium BC, it also stresses that this emergence of a distinct IE sub-branch may be seen as the implementation of a number of isoglosses spreading through an IE but as yet pre-Celtic dialect continuum. Although some dialects in the continuum may retain more archaic features than others, a clear split is only acknowledged when a part of the speech area adopts innovations alien to the known Celtic developments. The sociolinguistic reality of spreading isoglosses must involve contact among speakers, but it does not require movements of population groups rather than individuals.

The description of Celtic emerging as an IE sub-branch by means of the wave model, instead of the family tree model, may help to understand the apparent lack of archaeological evidence for large-scale population movements in western Europe in the late 3rd and 2nd millennia BC, the period in which the westward spread of IE speech may be expected.[6] While the family tree model tends to evoke the idea of spatial and communicational separation between IE speaking groups, the wave model underlines their connectivity.

Archaeologists interpret connectivity in later prehistory in terms of exchange networks sharing material and ideological values. Contact and coherence is implied here in a manner quite different from ethnic boundaries or migrating tribes. A closer look at the Bell Beakers, already referred to above for suggested linguistic correlations, may serve to illustrate prehistoric connections and raise questions of their possible sociolinguistic implications.

There are certain periods in prehistory when uniformity in the archaeological record across extensive parts of Europe indicates long-distance interaction. The Copper Age Bell Beaker phenomenon provides the earliest example of a widespread adoption of a fairly standardised material culture set across Europe. Bell Beakers appear from the first half of the 3rd millennium BC onwards, extending over a vast area from Poland to Portugal

6 All models must obviously assume that Celtic developed in an area, where an IE language was already spoken, at least the IE language which was its direct ancestor. Whether a specific intermediate sub-branch, such as Italo-Celtic, can be reconstructed, is debated, cf. de Vaan 2008, 5, Isaac 2007, 94.

and from Scotland to Morocco. This phenomenon was first interpreted as representing invasions or migrations of a specific group of people – the 'Beaker folk' (e.g. Childe 1950), perhaps sharing one language, as Dillon & Chadwick (1967) assumed. Later hypotheses argued that the Beakers represent a status package, revolving around male élites and associated drinking, feasting, warrior and hunting cults (e.g. Burgess and Shennan 1976; Sherratt 1987).

In recent decades, archaeologists have shifted away from these pan-European interpretations, through removing the superficial uniformity to reveal the underlying diversity in different Bell Beaker using areas. Highlighting heterogeneity rather than homogeneity has been effective in deconstructing the notion of a single Bell Beaker 'culture' (e.g. see Besse & Desideri (eds.) 2004; Czebreszuk (ed.) 2004; Vander Linden 2007; Fokkens and Nicolis (eds.) 2012). While this has encouraged the main focus of Bell Beaker studies to revolve around individual regional developments, it has also unwittingly resulted in wider connections between different Bell Beaker using areas being played-down, ignored or broken completely. The important point that Beaker funerary traditions in particular appear to have been structured by specific rules throughout many parts of Europe should not be neglected. There is an emphasis upon individual, rather than group or communal burial. Gender distinctions are also stressed through body orientation and grave goods, and burials are accompanied by a quite restricted set of objects (e.g. Beaker pots, flint arrowheads, stone wrist-guards or bracers, copper and bronze knives, awls and ornaments). Although funerary rituals vary from place to place, indicating regional practices or 'dialects', in many areas the Beaker funerary sphere seems to have been governed by a supra-regional symbolic structure.

The spread of the Beaker 'package' across Europe emphasises fluvial and maritime routes of interaction and exchange, and its distribution shows pockets of adoption along coastal zones and main river arteries (Fig. 3). As Brodie (2001, 488) has stated "If the Beaker culture marks anything it is the diffusion through space and time of the same styles and technologies". The oft glossed-over crux of the Beaker phenomenon is that new and complex technologies and ideologies cannot be spread, understood or integrated into distant, different and fragmented social groups simply from the finished artefact or product – the elaborate Beaker pot, the bronze dagger, or the Beaker burial. Successful and effective transmission must have been underpinned by elements of common or mutual understanding and active participation between different communities.

In situations of close contacts and big exchange networks, styles will show much greater homogeneity (e.g. Hodder 1982). Marked similarities in Beaker pottery styles may therefore imply that inter-regional communication

networks were both extensive and intensive. Until recently it was assumed that the 'International' (All-Over-Ornamented, All-Over-Corded and Maritime) Beaker styles were earliest and became later modified into regional styles. However, as more and more Beaker pottery assemblages have been dated by absolute radiocarbon methods, it has become clear that both International and regional styles overlap quite considerably in chronological terms, with the former persisting for up to 600 years or more (Salanova 2002, 153). The makers of the International pots were thus deliberately creating vessels that resembled each other in terms of colour, decoration, style and shape (Boast 1995; Prieto Martínez 2004). It is generally the International Bell Beaker that is chosen to accompany the dead as grave goods (Salanova 2002, 2003) and these emblematic Beakers form part of a symbolic system uniformly adopted throughout much of Europe.

Other motivations underlying the widespread adoption of the Beakers likely included the desire for bronze. Raw metal ores are not widely distributed throughout Western Europe, but Brittany and Cornwall have tin veins, and the Iberian Peninsula is richly endowed with both copper and tin minerals. The Beaker package comprises a paraphernalia of technologically more advanced, desirable, unusual, exotic, and even 'magical' substances – bronze, amber, gold, schist, jet, and richly-decorated Beaker ceramics (e.g. Harrison 1980; Strahm 2004). The pots themselves are sometimes considered to have functioned as containers for alcoholic beverages, including mead and beer, perhaps employed during communal drinking ceremonies (e.g. Sherratt 1987; Guerra Doce 2006).

At present, most of the earliest radiocarbon dates for Bell Beakers come from Portugal, in particular the Tagus estuary, and it is also here that the densest concentration of International (notably Maritime) style Bell Beakers are known (Cardoso and Soares 1990–1992; Castro Martínez *et al.* 1996, 105–110; Müller and van Willigen 2001). Furthermore, some of the earliest dates for copper mining and smelting in Western Europe have come from Iberia. In the early 3rd millennium BC, copper was extracted from the mines of El Aramo and El Milagro, both in northern Spain (Blas 1998). Evidence for on-site metallurgy has also been recovered from many of the Chalcolithic hillforts along the Atlantic coast of Portugal, almost always in contexts associated with Beakers and dating from *c.* 2600 BC onwards (Cardoso 2001; Müller and Cardoso 2008; Soares and Araújo 1994). Recent excavations at the fortified settlement of Cabezo Juré, in the mining district of Huelva, south-west Spain, have revealed evidence of potentially one of the earliest and most complex copper metallurgical sites in western Europe, dating from *c.* 2900 BC (Nocete 2006). Since it is unlikely that metallurgy was invented independently in the British Isles (e.g. see Ottaway and Roberts

2008; Roberts 2008), it is feasible that the dissemination of copper and bronze technology came from western Iberia, either directly or indirectly via France (Alday Ruíz 1999). The earliest attested copper mining from the British Isles comes from Ross Island in south-west Ireland, dating from *c.* 2400 BC (O'Brien 1995; 2001). The inspiration and know-how of complex metalworking technologies therefore may have been spread across some parts of Atlantic Europe through Beaker networks.

Recent developments in archaeology have presented a timely opportunity to tackle questions relating to the movement of people and the exchange of ideas and things in later prehistory, and the underlying implications of long-distance interaction. Advances in scientific techniques have provided new ways of tracing the geographical origins of objects and people in the past. Although it is early days, results of stable isotope analysis have demonstrated that small groups of people were travelling considerable distances in prehistory, particularly during the Beaker period. Large numbers of migrants buried with Beaker grave goods have been identified in cemeteries from Bavaria, Austria, the Czech Republic, and Hungary (Grupe *et al*. 1997; Price *et al.* 1998; 2004; Heyd *et al.* 2005). In Britain, the 'Beaker People Project' is also producing interesting results (Parker Pearson and Larsson 2007), and analysis of the Amesbury Archer and Boscombe Bowmen burials may suggest that Stonehenge acted as a magnet to people travelling from central Europe and Brittany (Fitzpatrick 2009, 2011).

While movement of people and migration have been unpopular models in archaeology,[7] it is clear that they now need to be placed firmly back on the agenda. The mounting scientific evidence is beginning to suggest that Chalcolithic societies may have been more permeable and mobile than we have hitherto thought, yet other factors and mechanisms that are implicitly bound up with this realisation remain inadequately theorized. Future discourse should help explain the logistics of how efficient exchange networks were created and maintained, in conjunction with shared knowledge, technologies and ideologies, such as we see during the Beaker period. Increased and more intensive long-distance exchange inevitably results in more contact across linguistic frontiers.

Perhaps the creation of extensive yet fragile exchange networks was facilitated by common Beaker ideologies. Once opened, trade networks would

7 Early archaeological interpretations of culture change generally followed invasionist and migrationalist theories. These became progressively unpopular in the 1950s and 1960s, and were replaced by models of independent invention and autochthonous development. By the early 1990s, some archaeologists (e.g. see Anthony 1990) began to challenge whether the pendulum had not swung too far, with limited consideration of technological diffusion or movement of people.

have to be maintained, as societies became increasingly dependent upon non-local sources of material. There is a significant increase in metallurgy during the Beaker period, implying more integrated social and exchange networks. Far-flung interaction at this time was likely only sporadic, so a widely shared and understood 'Beaker identity' would help maintain intermittent long-distance exchange and make the transfer of ideas, knowledge and technology more accessible and mutually intelligible. Thus, the widespread adoption of elements of the archetypal Beaker set, comprising symbols of an international character, might have formed the glue that linked scattered communities and ensured that long-distance networks remained resilient.

It is unlikely that we will ever know which language the people using Bell Beaker paraphernalia spoke. There is, of course, nothing to guarantee that all or most individuals involved in Beaker practices spoke one and the same language; the simplistic equation of 'one culture' with 'one language' has long been abandoned. Yet cultural developments in the past as in the present have sociolinguistic implications, and there are indications of a large-scale, supra-regional understanding within the Bell Beaker network, which are difficult to explain without linguistic transmission of information. If, therefore, the network was linguistically diverse, an important degree of bilingualism / multilingualism or the use of some *lingua*(*e*) *franca*(*e*) may be assumed. Individuals like the Amesbury Archer, with high-status grave goods and a proven record of long-distance mobility, may well have belonged to the bilingual part of their society.

Eloquent evidence for mass migrations, invasions and widespread conflict is lacking in the archaeological record for the periods and places relevant for the westward spread of IE languages. Indications of long distance material and ideological connections, on the other hand, are undoubtedly found, for example, in the patchy distribution of Bell Beaker finds along nodal points linked to major communication routes. Wherever the origin of this cultural complex, there is nothing unlikely in IE speakers sharing in its diffusion. This would have provided them with widespread connections and the possibility to establish themselves and their IE language(s) in many different localities. It may well have implied a new identity and self-conception of IE speakers in new territories, but if they preserved their language, IE forms of speech could have become established at new starting points from which they might spread at various later times all over western Europe.

The westward expansion of IE in the 3rd and 2nd millennia BC should thus perhaps be seen against a background of globalization, individual mobility and socially respected bilingualism, rather than in terms of mass migrations or the introduction of a specifically 'Indo-European' cultural inventory. Important communal resources, such as copper mines, potentially furthered bilingualism (with possible subsequent language shift) among

people depending on efficient collaboration. The death of pre-IE languages in Europe may thus have begun by the repeated installation of comparatively small groups of IE speakers in several areas, from which they could eventually expand by recruiting increasing numbers of non-IE speakers as the Beaker period evolved into the Western European Bronze Ages. Powerful existing networks, like the Bell Beaker complex, may have provided one opportunity for IE speakers to establish themselves in Western Europe as part of a mobile, self-conscious, supra-regional community.

One of the IE languages that reached Western Europe may have been the ancestor of Celtic. The exact location in which isoglosses characteristic of Celtic languages first developed and from which they spread, is unknown. If it was embedded in an already IE speaking, well-connected and prestigious environment, its development into the most widespread western Indo-European branch before the Roman conquest is easier to understand.

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Catriona Gibson & D. S. Wodtko
University of Wales
Centre for Advanced Welsh and Celtic Studies
National Library of Wales
Aberystwyth, SY23 3HH
c.gibson@wales.ac.uk
dagmar.s.wodtko@mail.uni-freiburg.de

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