The Atlantic Celts: Cumulative Evidence of Continuity from Palaeolithic

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Models of Celtic ethnogenesis

1. The traditional paradigm: Celts from Central Europe in Late Bronze Age

2. Renfrew's paradigm: a 'cumulative celticity' in 4.000 B.C.

3. Cunliffe's and Koch's paradigm: Celts from the Atlantic Zone during the Bronze Age

4. The Palaeolithic Continuity Paradigm (PCP): Celts from the Atlantic Coasts at least since Mesolithic
1. Exclusively Celtic Innovations
(Upper Palaeolithic and Mesolithic)

Nature

1.1 The name for 'island'
OI inis, l innis, W ynys, B enez < celt *inissi (<*eni-sti- 'which stays in [the water]')

1.2. The name for 'sea coast/beach/tide'
OI tracht, trág 'coast', OI trāigim, l traigh 'ebb, beach', W. trai, treio 'high tide', W traeth 'beach, coast', B. traez, treaz 'sand', B tre 'low tide'.

1.3. The name for 'valley'
OI glend, glenn, I gleann (> Engl. glen), W glyn 'valley', W glan 'brink, coast', B glann 'river coast'

1.4. The name for 'tree'
OI crann 'tree', W. pren 'tree, tree stump', B. prenn 'wood'

1.5. The name for 'skull'
a compound of 'head' (OI cen, W pen) and 'stone' (OI cloch, W glog): OI clocenn, I cloigeann, W penglog, B kloppenn / kokenn ar penn
Technology, fishing, hunting

1.6. The name for 'boat'

I currach, W corwg / cwrgw (boat made of skin covered with canvas, already used in Upper Palaeolithic)

< PIE *(s)ker- 'to cut' (see Ssk. carman- 'skin', Greek kórykos 'sack made of skin', Lat. corium, caro carnis, curtus 'lather, meat, short')

The innovation 'cut skin for building a boat' as evidence that Celtic was already separated in this period
1.7. The name for 'awl'

typical instrument used in
Upper Palaeolithic and Mesolithic

OI *menad, I *meanadh meanaithe,
W *mynawyd, B *menaoued

< PIE *men- 'power, craft, ability, skill'

1.8. The Brythonic name for 'knot'

W *clwm, cwlwm, C *colmen, B *koulm, skoulm ‘knot’

cfr. OI *colum ‘skin, nerve’

< PIE *kel- 'to hide, to cover'

Evidence of the use of tendons for binding: it allows to date the differentiation between
Brythonic and Goidelic to Mesolithic, before the separation of the islands from the
continent
1.9. The name for 'arrow'

OI saiget, I saighead, W saeth, C seth, B saez / seaz

Arrow’s barbs made of stone precede the use of arrows connected with bow, and are one of the most important indicators of Upper Palaeolithic, Mesolithic and Neolithic

< PIE *sāg- 'to chase (to scent)’: the Celtic name for arrow can be connected with OI saigim 'I look for', W. cy-r-haedd 'to reach' (see Engl. to seek)

Arrow thrown with the propulsor instrument as a sort of 'intelligent projectile', able to chase its movable target
2. Celtic-Italic concordances (Upper Palaeolithic)

Grammar

2.1. Exclusively Celtic and Italic Prepositions
I and Brythonic *di*, L *de*
I and Brythonic *com / co-*-, B *ken-*-, L *cum*

2.2. Two distinct themes for 'other', common to both groups
OI *aile*, W *eil*, C *yll*, eill, B *eil*, L *alis alid / alius aliud*

Semantic relationships

2.3. 'life' and 'nourishment'
OI *bethu*, I *beatha*, W *bywed*, B *buhez* 'life', L *vita*
OI *biad*, I *biadh*, W *bwyd*, B *boed* 'food' (cf. B *bewan* 'to live' and 'to nourish, to raise'), L *victus* 'nourishment' (*vivere*)

2.4. 'land'
I *talam* and *tir* 'land' / L *tellus* and *terra* 'land'

It would be absurd to interpret these grammatical and semantic aspects in the recent prehistory, for example in the Iron Age, as the traditional theory postulates
2.4. 'to fly, to fall'

One of the oldest examples of Celtic-Italic correlation is the one that connects these two groups in the frame of the PIE family *pet- 'to fly, to fall', with the *pet-n- formation

2.5. The PIE name for 'bird' used for 'duck' and 'goose'

Celtic and Italic use the PIE root for 'bird' to indicate 'duck' and 'goose'

L auca 'goose' < *avica < avis
W hwyad, C hoet, B houad 'duck' < *avietos

Duck is one of animals hunted in Ireland during the 9th millennium
3. Celtic-Italic-Germanic concordances (Upper Palaeolithic)

**Fishing and hunting**

### 3.1. The name for 'fish'

I. *iasc*, L *piscis*, Got. *fisk*.

Only in Celtic the name seems to be motivated:

- cf. MI *esc* 'water' (>
  *esca* 'marsh') and MI *escung* 'eel'
- < 'water snake' < Celt. *pid-ska* < PIE *pei-tu-, *pi-tu* 'food, drink'

This can be interpreted as a Celtic innovation (with the motivation of 'water' – the fish as aquatic animal – and 'food'), extended to the other two areas

### 3.2. The name for 'salmon' (fished since Final Palaeolithic)

Lat *salmo -onis*, OHG *salmo*, western German *salm*;

from Celtic (cfr. Gaulish *Salmona*)

< *sali-mo* 'salted water' (appropriately attributed to a sea fish sailing up a river)

From the Atlantic area the name reached the inland, including the Germanic area (OHG *salmo*, Ned *zalm*) (consistent with the salmon's vertebrae found in Liguria, but coming from river faced on the Atlantic)

The Celtic name for ‘salmon’ (OI *eo*, W *eog*, B *eok* [preserved in Lat. *esox*, *esocis*]) can be connected – as new Atlantic food resource, based on migratory fish, in the late Upper Palaeolithic, at the acme of the Glacial period [20,000 years ago], when the Atlantic coast became a refuge area – with PIE *ed* 'to eat' (cfr. Lat. *esca* ‘food, bait’ [< *eds-ka*] and German *Aas* ‘bait’, *aasen* ‘to eat’ [< *edso*])
3.3. Fishing with net

Ol naidm, nascim 'tie', B naska naskan 'to tie (cow's legs)', L nōdus, L nassa 'net used for fishing', Got. nati, German Netz, Ned. and E net, Olcel. nōt 'big net'

The original motivation is documented only in Celtic: 'to tie'.

An extended diffusion of this name is documented by It. nassa, Fr. nasse, Occ. naso, Cat. nansa, Sp. nasa, Port. nassa

3.4. The name for 'herd, flock'

Only Celtic and Italic show the same semantic development of PIE root *ger- gere- 'to put together':

L grex 'flock', Ol graig, W, C, B gre 'horses herd', MC gre-lin ('horses lake')

Celtic specialization of an equine herd seems to correspond to the specialized hunt to herds of horses and reindeers, which is typical of the second half of Upper Palaeolithic, and is related to the introduction of propulsor instrument
4. Megalithism as a Celtic innovation

4.1. The 'maritime' character of the megalithic area

The distribution area of megalithic monuments is basically maritime. These monuments are concentrated especially along the Atlantic coasts.

Even if we take into consideration later and clearly derivative areas of megalithism, their relationship with the sea is striking: in European Turkey and Bulgaria, in the Crimea and in the Caucasian Colchis, for example, megalithic monuments appear on the Black Sea coast.

Moreover, in all areas the earliest monuments appear on the coast, while those inland are more recent: for example in Brittany the earliest monuments are those on the coast of Morbihan, on the northern coast of Finistère and Côtes-du-Nord, on the islands of Jersey and Guernsey.
4.2. Renfrew’s polygenetic origin vs. the PCP monogenetic and Celtic origin of megalithism

Colin Renfrew denies the fundamental unity of megalithism and thus the existence of a 'megalithic province'. He also criticizes what he calls the «diffusionist trap».

Quite on the contrary, megalithism appears to be a cultural phenomenon the distributional area of which is too much compact, and which shows too evident unitary characters, to be explained as a polygenetic phenomenon. It is much simpler, more economic and sensible to assume an original focus area, with one or more areas of relatively independent development.

To attribute a polygenetic origin to cultural phenomena dispersed all over the world is legitimate; it is even indispensable whenever we are dealing with phenomena that reflect universal needs and are realized in clearly differentiated ways (for example, burial of the dead). It makes much less sense when the distributional area of the phenomenon is limited and quite compact, and the phenomenon itself shows clear characteristics of a specific 'typology' and 'style'.

European Neolithic megalithism is too specific a phenomenon, both considering its geographic boundaries and its typological uniformity, to be seen in a polygenic key.

The social context of these exchanges and this cooperation would be that of the great, collective celebrations documented by ethnography, within which exchange of gifts between groups, families and individuals takes place.
Some basic facts:

1) The chronological table of megaliths proves, by the simple parallelism between the chronology of megalithic diffusion and the direction of its spread, that the latter took place gradually, from the Atlantic coast inland, towards the rest of western Europe and beyond: the earliest megaliths are the Breton ones, while northern, central and southern European ones, farther away from the Atlantic coast, are more recent.

2) The earliest form of megalithism, that of Brittany, appears with characteristics that distinguish it from that of other areas:

(A) Only in Brittany megalithism finds its roots in the Mesolithic, as it represents the transformation of non-monumental Mesolithic ritual areas. The classic sites for this observation are Téviec and Hoëdic, two Breton islets (fishermen's settlements!), which have revealed collective burials in stone cists, covered by stones, already at the Mesolithic level, and dated between 5500 and 5000 BC, thus showing a relationship of continuity between Mesolithic and Neolithic rituals.

(B) Only in Brittany, the great concentration of Mesolithic and Early Neolithic sites, that of megaliths, both on the coast and on the islands, and the coexistence of Mesolithic elements (as, for example, deposits of shells in megalithic tombs), demonstrate the direct continuity of the Mesolithic fishing economy, and bring archaeologists to the conclusion that Mesolithic traditions and people were continued and integrated, and not replaced, by Neolithic and megalithic traditions and people.

(C) The antiquity of Breton megaliths, their construction level and the complexity of the rituals that can be imagined behind them, indicate that their beginning must go back to an earlier period.

(D) As Renfrew himself recognizes: «The range of grave forms in Brittany is striking». This is often the case with focal areas, elaboration of single types characterizing later areas.
Thirdly, in small islands such as that of Arran in Scotland (Firth of Clyde), until recently Gaelic speaking, or of Rousay in the Orkneys, today English speaking, but originally Celtic, it is even possible to observe the continuity of the present farms from Neolithic ones, and at the same time the strict connection between megalithic monuments and arable land, both in modern times and in the Neolithic. Actually, what we observe in Arran and Rousay is the uninterrupted continuity of material culture from the Neolithic to this date.

In short, if one accepts, on the basis of the identity or similarity of function, forms, materials, and locations, as well as of the sequence of available datings, the existence of a 'megalithic province', its area can be quite immediately identified with that of the Celts: Ireland, entirely Celtic, is entirely megalithic. In Great Britain, the areas with maximal megalithic density are the three Celtic areas: Wales, Cornwall and Scotland (in its western part, the most exposed to Irish influence). Celtic Brittany is the megalithic area par excellence, besides its very focus. In the Iberian Peninsula, the area with maximal megalithic density is that of Galicia, an area where the presence of Celtic peoples has left strong traces on language, toponymy, and folklore.

Consequently, the most logical, simplest and most economical hypothesis is that the Mesolithic fishermen of the central Atlantic who were the first to build megaliths were already Celts, and that it was also the Celts who, with the beginning of farming, undertook the spread of megalithic monuments, first along the 'Atlantic façade' and in the whole of the Celtic area, then, later, in the other, non-Celtic areas (central Europe; the western Mediterranean and the Tyrrenian gulf; Holland, northern Germany and Scandinavia), with Celtic contributions varying in dates and importance.
All the megalithic areas mentioned above share, on the linguistic level, typical Celtic borrowings and 'consonantal lenition'. The correspondence between the area of European consonant lenition and the one of European megalithism is remarkable.
5. Bell Beaker culture (3rd Millennium) as a Celtic innovation

Main elements

1) Atlantic distribution of BB as the oldest evidence of BB: its expansion from Portugal and Brittany towards East and South coincides with the PCP interpretation of an expansion of Celtic groups from the Atlantic coasts towards the other parts of Europe

2) Many cultural characters of BB (metal weaponry, commercial trade, individualism, warfare, patriarchy) preannounce the definitely Celtic cultures of Hallstatt and La Tène (not only did the 'BB Folk' practiced metallurgy, but in certain European areas it was they who introduced metallurgy)

3) The variety of relationships between BB groups and autochthonous can be read in terms of an ethnic affinity or diversity:

A. In Ireland and Brittany BB groups are not found (as in BB examples of the Germanic area and central Europe) in individual burials: they are part of collective burials (as wedge tombs megaliths)

B. In northern Ireland BB people are not associated – as they are in the Germanic area and in central Europe – to copper daggers, perforated V buttons, and archer wrist-guards and arrows: this can be interpreted as a consequence that in Ireland BB peoples had no need of a distinguishing 'uniform' and had no need of burials more consistent with their individualist ideology

A possible linguistic reflection:

I coire, W pair, OC per ‘kettle, pot’ is a Celtic borrowing both in Latin (cfr. Occitan par, Lyonnais per, Ferrarese per ‘bowl, cauldron’, fr. pareau, perreau, it. paiolo etc.) and in Germanic (cfr. O Icelandic hverr, Icelandic hver, O English OHG hwer ‘pot’).

The Celtic presence in Western Europe, in the form of the BB culture, and thus already in the 3rd millennium, is the only satisfactory explanation of the formation and the growth of a Celtic primacy in Iron-Age cartwright and spoked-wheel technology.
5.1. Lat. rota and its cognates as a Celtic loanword for 'spoked wheel'

Following Pokorny's materials, the original motivation 'run' behind the IE words for 'wheel' actually appears only in Celtic: OI rethim 'I run', I rithim 'idem', W redheg, B redek 'to run' etc.

The principle of 'morphosemantic density' applied to the rota word family, leads one to conclude that the rota family must be the result of the spread of a Celtic loanword.

As to the rota family, not only is Celtic the only language group which shows a morpho-semantic regular relationship between the original verbal motivation 'run' and the noun 'wheel (of a fast vehicle)', but Celtic is also the only group in which the basic verb 'run' shows a very high degree of morpho-semantic density, including developments of suffixes and abstract notions, which point to a greater chronological depth. Here is the basic evidence:

(1) The exceptional variety of compounds based on the Celtic verb for 'run', as shown by OI reth- 'run': with ad-, air-, to-air-, com-, di-, for-di-, to-imb-di-, fo-to-imb-di-, to-eter, com-to-eter, fo-, iarm-fo-, to-iarm-fo-, imb-, ind-, air-ind-, to-air-ind-, to-ind-, di-od-, for-di-od-.

(2) The development, from the same verb, of collective and abstract suffixes, as in MW rhawd 'lauf', gaeaf-rawd 'winter', MI gem-rad 'idem', MW bed-rawd, W bedd-rod, MB bez-ret 'cemetery', B bered 'idem' (W bedd 'grave'); W brith-red 'tangle, confusion', MI brecht-rad 'variety', MI aig-red 'ice', etc.

The Celtic word for 'wheel' (I roth, W rhod, B rod) seems thus to be one of the many developments shown by the highly productive Celtic verb for 'running', while in the other IE languages the rota cognate words show no formal and semantic background whatsoever.

The morphosemantic developments shown by some other IE languages clearly indicate that they took place only after the development of the meaning 'wheel': as in Latin, where rotundus 'round' is an evident development from the roundness of the fast rota 'wheel', and in Germanic, where there appear for example Germ rasch, gerade, from OHG rado, rato 'schnell', from the speed of the new kind of wheel and vehicles, and ON roðull 'Strahlenkranz, Sonne', from the association of the sun with the spoked wheel.

The solid-wheel technology was already widely diffused in Europe in the 3rd millennium (the earliest European solid wheel, recently discovered near Ljubljana, Slovenia, has been dated to the end of the 4th millennium) and if the much faster spoked-wheel vehicles, suitable to warfare, did appear first in Near East at the beginning of the 2nd millennium the new, powerful Celtic elites emerging in Europe certainly would not have wasted time in adopting them for their own war plans and prestige, at the same time giving them a new name.
Philological and archaeological evidence for a Celtic primacy in wheel and vehicle technology

(1) In Latin, the whole cart terminology is Celtic: benna, cant(h)us, carpentum, carrus, carrago, carracutium, carruca, cisium, colisatum, covinnus, essedum, petorritum, piletum, ploxenum, raeda. Rota could be easily be added. The Latin record shows thus a general lead of the Celts in cartwright technology.

(2) For Latin writers, the most famous spoke-wheel makers were the Celts, and their fame was especially due to their ability in creating spoked wheels with felloes of one single piece of heat-bent wood. As is known, the felloe is the curved piece of wood on which the spokes are fitted, and is thus one of the three main components of the spoked wheel, the other two being the nave and the spoke.

(3) The archaeological record confirms that single-piece felloes, made of heat-bent wood, were characteristic of the Celtic Iron Age (La Tène), and that prior to that period the standard form was a felloe in which the segments were dowelled one to another, each carrying two spokes. Now, the earliest example of this kind comes from a second-millennium German find from Barnstorf (Oldenburg). Even in that period, then, we find ourselves in a putatively Celtic area.

(4) Also Latin cant(h)us 'felloe, rim of the wheel', is considered to be a Celtic loanword, to be compared to W cant 'rim of the wheel, tyre', and B kant 'rim of the sieve'. The Latin form is continued by French jante and Gallo-Romance and Occitan dial. variants (contaminated with jambe; Sp. (Sanabria) cantrelas, Port. dial. cantella, canteras, cantelas. These latter forms can be compared to W cantel and cantell 'a rim', Italian canto 'rim of the wheel', Northern-Italian kant 'idem', Southeastern-Italian ianta 'idem' (< Gallo-Rom.).

(5) One of the most notable features in heroes of the Táin Bó Cuailnge, is the war-chariot called carpat, from Celtic carpanto- carbanto-, the word which also lies behind Latin carpentum.

In the traditional IE Copper Age invasion theory and in Renfrew's theory of the IE Neolithic dispersal the 'arrival' of the Celts in the Bronze Age cannot be detected in any way in the archaeological record: within these two frameworks, the sudden appearance of the Celtic power in Europe remains thus inexplicable.

Only by assuming that it was the Atlantic Celts of prehistoric times who introduced important technological innovations such as metallurgy, horse domestication and horse-riding, a new type of wheel and of vehicle, as well as trade and exploitation of natural sources into Western and Central Europe, it becomes possible to understand why the Celts of Hallstatt and La Tène appear as the first 'colonial power' of Europe.
6. Iconomastic developments (lexical self-datation)

6.1. The name for 'shell' as connected to the one for 'pile, hillock' (and 'boundary')

B *krogen*, C. *crogen* 'shell'
B *krugel*, C *crüg*, W *crug*, MI *crúach*, I *cruach* 'pile, hillock'
OI *crích*, I *crióch* 'circle, boundary, territory'
B *kregiñ* 'to catch, to capture'

< PIE *kreuk- / *krok* 'shell', 'pebble' (cf. Gk *krókos*, *krókē* 'pebble')

This connection can be interpreted as a linguistic reflection of the use of “shell middens”, documented since Mesolithic in the Atlantic area: “shell middens” were associated to the first villages both as dump sites and as first examples of boundaries. Loïc Langouët e Marie-Yvane Daire have also interpreted them as the result of fishing systems with traps and markers of boundaries (often associated to megalithic Structures)
6.2. Two 'Atlantic' names for 'megalithic stone'

Port. ventrecurgo < ventre 'belly, stomach' + curgo, related to the Celtic words for 'boat' (I currach, W corwg / cwrgw: 'boat's belly').

B bronbag (near Kercado, Morbihan) < bron 'breast' + bag 'boat': 'boat's breast'

Cfr. the technique used to carry these big stones (or at least a few of them) from one place to another, according to the hypothesis formulated by Frank Mitchell, Phillips and Mighan in order to explain the way of transporting the big stones at the entrance of the passage tomb at Newgrange (identified with rocks belonging to the site of Clogher Head, a place in the eastern coast of Ireland, 20 miles far from Newgrange). The same explanation has been given by Le Roux for the way of carrying stones to the megalithic site of Gavrinis, not far from the place where the word bronbag has been collected, which have been identified with rocks coming from Er Vinglé, a few miles in the western part of Morbihan.

According to these scholars, a great skin-covered boat may have had the buoyancy to take a stone quarried beside the sea, to have it lashed to the bottom of the boat, and both boat and stone then lifted with the tide (the This hypothesis has been advanced comparing a similar technique used in recent times by quarrymen of Herrylock, South-West of Ireland)
6.3. Celtic names for 'whale' as totemic prehistoric names

('parental' names related to the figure of the 'Old Woman')

I (co. Kerry) foraismoir, = forais '(huge) old woman' + moir 'of the sea'

G. cailleach mhara 'old woman of the sea'

I (co. Galway) seanmáthair 'whale', but – firstly – 'grandmother'

Cfr. the following other Atlantic lexical forms:

Galician (Ourense) vella 'whale', but – firstly – 'old woman'

(and, in the frame of already known totemic names of atmospheric phenomena, cfr. also Galician arco da vella 'rainbow' [but literally 'old woman's bow', or 'whale's bow'], similar to Italian arcobaleno 'rainbow' [but literally 'whale's bow']).

Portug. (São Pedro da Torre) grasseia 'whale' < gran(de) 'big' + Celt. *sēnā 'old woman'?

The motivational (iconimic) process which brought to perceive and name a whale as an old woman and/or a grandmother clearly indicates a totemic system of beliefs, which anthropologists date to the prehistoric ideology of Palaeolithic. The 'Old Woman' (L vetula, Germ. Alte, Slav. baba) is present in myths, fairy tales, Carnival and many other folk festivities and oral traditions the world over, so that some scholars (e.g. Vladimir Propp) consider her as the main totemic matrilinear ancestress.

These Celtic names for 'whale' indicate, again, a presence of the Celts in the Atlantic area since Palaeolithic

Two more data:

1. presence of noa names for 'whale' in Celtic:

I mial-moir, OB morvil < Celt. *mori-mīlo 'sea beast'; G muc mhara 'sea pig'
(cfr. 'dolphin': Celt. *mori mukko, *mori-sukkā 'sea pig')

2. Basque word for 'whale': the fact that the Basque word for 'whale' is balea, a borrowing from Latin ballaenam, confirms that the old people of Atlantic were not the Basques, but the Celts.
6.4. Celtic names for 'whale' as connected to megalithism

One of the local names for 'megalithic stone' in Irish (co. Clare) is *docoisle*, which means 'whale'. The same in the Orkney islands, where a ‘megalitic stone’ can be named *blaoclach* < *blaoc* ‘whale’ + *clach* ‘stone’ = ‘stone-whale’

(and cfr. also, consistent with our proposal, B *gwrac’h* ‘megalithic stone’, but – firstly – ‘old woman’)

One can connect this ethnolinguistic find to recent studies by Serge Cassen and Alasdair Whittle, where the two archaeologists argued that some megalithic monuments can be interpreted, in their structure and in their motifs, as (stone) representations of whales.

Concerning the Orkney islands, one has also to remember the use of whale bone in megaliths, tombs and houses

These names confirm the maritime character of megalithic monuments and the continuity of a Celtic kinship of whales from Palaeolithic (totemism) to Neolithic
Main references


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