SIMILARITIES BETWEEN CELTIC AND SLAVIC

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Abstract

At past Celto-Slavica conferences, cultural and linguistic parallels between Celtic and Slavic were identified, discussed and questioned critically. It is time now to ask how these parallels arose. This paper will attempt an evaluation and a historical explanation of a number of linguistic parallels.

Out of this complex picture, the present paper addresses the typological properties of Celtic which are relatively rare within Indo-European and traditionally assumed to originate from an Afro-Asiatic or Atlantic substrate, in spite of the fact that archaeological evidence is too problematic to support this hypothesis. Instead of relying on the contact hypothesis, I shall examine the structural properties of these phenomena in a synchronic and diachronic Indo-European perspective, pointing especially to Slavic parallels to the Celtic phenomena discussed. The general conclusion is that the origin of these properties is firmly rooted within Indo-European and, moreover, connected with aspect phenomena.

1. The Insular Celtic verb complex and conjectures about substrate influences

Insular Celtic (or 'North Celtic', following Schrijver (2007)), consisting of Goidelic, i.e. Irish, Scottish Gaelic, and Manx, and Brythonic, i.e. Welsh, Cornish and Breton, is usually considered more innovative than Continental Celtic (or 'South Celtic', consisting of Gaulish, Alpine and Cisalpine Celtic, Lepontic and Celtiberian). Typologically, however, Celtiberian is in some respects further apart from the other Celtic languages. The split between Celtiberian and the rest of Celtic (called 'Gallo-Insular'), as evidenced by differences of relative marking, is assumed by McCone (2006: 277-282) to have occurred earlier than the division between Gaulish and Lepontic on the one hand (and Alpine and Cisalpine Celtic, we should add) and Insular Celtic on the other (based on compelling phonological and morphological properties shared by Goidelic and Brythonic).

The innovative phenomena of Insular Celtic cluster around the verb complex, including verb-initial word order, and more generally around pronominal affixation possibilities, which go back to rules for pronominal clitic placement. These properties stand out within Indo-European, giving rise to conjectures about possible substratum influences on the British Isles. The subject of Insular Celtic morphosyntactic peculiarities has been on the agenda

since Davies mentioned some similarities between Welsh and Hebrew as early as 1621 in *Antiquae Linguae Britanicae* (cf. also Hewitt 2007: 230). In the 20th century, Morris Jones (1900), Pokorny (1927-30) and Wagner (1959) set the stage for discussing the distinctive properties of Insular Celtic as possibly related to partly comparable structural properties of Afro-Asiatic, including Classical Hebrew and Arabic, and in Wagner's analysis also to properties of Basque and Berber. Later authors, primarily Gensler (2007 [1993]) and Jongeling (2000), added more constructions and features to the complex of explananda, but without discerning their internal relations and typological value, and advanced more general (and more vague) ideas about a common substrate. Following Gensler (2007), Vennemann (2012) specified that it was probably a substrate of the Mediterranean type, including Libyco-Berber, Ancient Egyptian and Semitic, which provided the impetus for changes in early Indo-European in western and central Europe. According to Vennemann (2012: 264), the Insular Celtic syntax resembles Old Testament Hebrew and Classical Arabic more than "any other Indo-European language including Continental Celtic", and this is "a fact which can be explained as the effect of Atlantic substrata in the British Isles at the time of their Celticisation, an explanation which is far superior to the assumption of typological convergence or of chance".

Unfortunately, evidence for a possible substrate on the British Isles remains too slim to enable identification or to justify such a hypothesis. The main evidence derives from island names, especially in the West, including Arran, Mull etc., which are not evidently Indo-European (although the name of Arran, for example, may be related to Celtic **are* 'near, by'), though they do not give sufficient evidence for a non-Indo-European identification either. What is relevant, however, is that place-names which are not obviously Indo-European occur in marginal areas, which gives the impression that speakers of the language to which these names pertained were pushed in the westward direction by the main stream of the Celtic migrations. This situation does not suggest a dominance of a pre-Celtic population on the British Isles sufficient to produce a structural change in the language of the culturally dominant Celtic newcomers.

In the north of Scotland lived Picts, whom Jackson (1955) and other investigators assumed not to have been Celtic on the basis of very limited evidence. More recent evidence does not exclude essential similarity with Celtic any more (cf. Forsyth 1997/2008). Given the fact that evidence of a pre-Indo-European substrate and mixing with Celtic on the British Isles is such that we cannot base any analysis on it, I shall now proceed to investigate the striking phenomena of Insular Celtic in their own right. The question of origin will then follow the full analysis.

The argument of the authors who adhere to the Afro-Asiatic hypothesis rests heavily on two assumptions: a) the identity of certain phenomena in Insular Celtic and the Afro-Asiatic languages,[1] and b) non-identity in comparison with the other Indo-European languages. Both assumptions require careful examination. The first assumption was examined by Hewitt (2007 etc.) and Isaac (2007), the second assumption by Eska (2010) and McCone (2006) with regard to Celtic developments, and further Indo-European parallels will be examined in the present paper.

Hewitt (2007) noticed a relatively low percentage of agreement (not exceeding 10%) among the previous authors about the basic data motivating a comparison with Afro-Asiatic (in his formulation, Hamito-Semitic).[2] The properties agreed upon are, according to Hewitt's survey, conjugated prepositions, VSO word order, and relative clause copying (*the bed that I slept in it*). The remaining properties (up to 39 in total) were viewed as relevant by some, but not all, the authors. Irish is the language with the most alleged Afro-Asiatic properties, but, as shown by Hewitt (2007), potential sources of these properties seem to originate from different Afro-Asiatic languages. This of course lowers the likelihood of substrate influence. Moreover, apparent Afro-Asiatic parallels to Celtic in many cases turn out to rest on different structural and distributional properties, which calls into question the likelihood that they served as models or sources for borrowing.

The verb-initial word order of Celtic is considered exceptional in Europe; Siewierska (1998: 489) mentions Celtic as the only instance of VSO order in Euroasia. Hewitt (2007) argues that VSO is not an appropriate word-order formula and it should in fact be (X, any constituent) T (tensed constituent) P (predicate <lexical kernel>) S (subject) O (object). For Arabic, however, Hewitt proposes to reanalyze the frequent but not exclusive VSO word order as VGN, i.e. Verb Given New, in view of significant variation possibilities. This brings up the problem of word order patterns, to which I shall return in the next section.[3]

Infixed and suffixed pronominal elements are another major property of Insular Celtic. Hewitt (2007) points to the fact that in Arabic the same set of endings is attached to prepositions, possessives and verbs to mark objects, in which respect Arabic differs from Celtic, exemplified by Breton (cf. Breton *gan-in* 'with me', Aramic *ma'-ī* 'with me', but Breton *ma levr* 'my book' vs. Arabic *kitāb-ī* 'book-me, i.e. my book'). I would like to mention that Old Irish

[1] The Afro-Asiatic languages are e.g. by Hewitt (2007) referred to as Hamito-Semitic.

[2] Hewitt's (2007) survey included (in addition to his own earlier work) Morris Jones (1900), Pokorny (1927-30), Wagner (1959), Gensler (2007) and Jongeling (2000).

[3] The distinction between virtual complement clause (VSO word order) and factual complement clause (SVO word order), found in Breton and Arabic, is probably a typological rather than a substratal effect (Hewitt 2007: 251).

had infixed pronominal clitics after verbal particles (*do, ro, no, dí, fo, ar, ní* etc.), after prepositions (*for, etar, fri, con, ad, aith, ess, in, oss*), preposition + relative particle, conjunctions (*dia, ara, con)*, and the interrogative (*in*), and suffixed pronominal clitics after absolute verbal forms and after prepositions requiring accusative or dative (Thurneysen 1946: 271).[4] This distribution was clearly different from Arabic or the other mentioned languages. At the same time, affixation of pronominal elements is a widespread phenomenon and in itself no evidence for language contact.[5]

The remaining alleged similarities also exhibit distributional differences, making a common development or influence unlikely. Thus the invariable relative clause linker in Celtic (Breton and Welsh particle *a* following the subject or object, Breton *e*/Welsh *y* in other instances) does not have parallels in Afro-Asiatic because Hebrew *ăšɛr*, for example, is a relativiser and a relative pronoun, and Arabic has relative pronouns (Hewitt 2007: 241). Concerning relative clause copying, Hewitt also points to differences of word order between Berber and Old Irish, which make a direct borrowing relatively unlikely. Definite possessives (Breton *ti ar roue* 'house the king', i.e. 'the king's house', Arabic *bait al-malik* 'house the-king', i.e. 'the king's house') exhibit structural differences, which surface with an attribute. The attribute directly follows its head in Breton, but it occurs at the end of the entire possessive construction in Semitic (e.g. Breton *ti bihan ar roué bras* 'house little the king big', i.e. 'the big king's little house', but Arabic *bait al-malik al-kabīr* 'house the-king the-big', i.e. 'the king's big house/ the big king's house').

There are many instances of only partial presence of similar features in these language groups, a fact which poses a methodological problem because these similar features apparently are not very old, though the alleged contacts between the languages in question must have occurred before the earliest attestations of Celtic. To the partial correspondences belongs the special relative tensed form of Irish (*-as* vs. *-aidh, -ann* etc.; cf. Hewitt 2007: 242), which corresponds with similar forms in Egyptian and Berber (where it is called a 'participle'), but lacks parallels in Semitic.[6]

[4] Hewitt (2007: 242) states that object marking in verb is proclitic in Celtic (i.e. preverb-infix-verb) but postclitic in Semitic. This was, however, more complicated in Old Irish, as stated above.

[5] Concerning infixed pronouns, Hewitt (2007: 242) mentions that there are parallels in Romance and Serbo-Croat clitic rules.

[6] The so-called predicative-particle construction known from Celtic, which is at best marginal in Hamito-Semitic, definitely belongs to newer phenomena. Possibly related to it are copular locative phrases for expressing the progressive in Celtic, but this is a widespread phenomenon. Periphrastic DO (as an activity predicate, DO with NP, or an auxiliary) is not typical of Semitic, but it is of many other languages.

Many other phenomena are more widely spread. Non-agreement of verb with plural subject is a widespread phenomenon in languages of VSO type, found not only in Celtic and Afro-Asiatic.[7] Coordinated circumstantial clauses (e.g. Breton *gweled neus ahanon ha me o tond er-maes* 'seen he.has me.OBJ and I PROG come.INF out', i.e. 'he saw me as I was coming out') also occur in Arabic and various other languages (e.g. Arabic *raquad ra'-ā-nī wa-'anā ṭāli* 'PFV he.saw-me and I coming out', i.e. 'he saw me as I was coming out'). I should mention the medieval Russian active participle used as main predicate in a circumstantial clause followed by a coordinating clause (with *i* 'and', *a* 'and/but', *da* 'and', *no* 'but' and a finite verb) described by Potebnja (1874). It has been attested, for example, in the Novgorod birchbark letters, since the 11th century (see *a nyne vodę novuju ženu a mŭně ne dastĭ ničĭto že* 'and now leading new wife and me gives nothing EMPH', i.e. 'and now he has a new wife and gives me nothing (at all)', Borkovskij & Kuznecov 1963: 351). Main verb in non-finite form occurs in Welsh and Hebrew, marginally in Irish and Breton, and not at all in Arabic (Hewitt 2007: 247).

To phenomena not restricted to Celtic and Afro-Asiatic we can also count initial-focus cleft clauses, preference for parataxis, subjectless sentences, and amplification of the negative by a noun after a verb as an instance of function-word amplification. Locative possession (i.e. 'at/with/after' + possessor) is also more widely spread, including in Slavic (particularly East Slavic, where it is archaic, not innovating). Celtic distinguishes internal possession and so-called external possession, used when the object possessor does not equal subject, in the dative case (e.g. Breton *Yann neus torred e vrec'h da Ber* 'Yann has broken his arm to Per', i.e. 'Yann broke Per's arm'), but this also has a parallel in the Slavic possessive dative used for inalienable possession.[8]

At the same time, a whole set of relevant phenomena differs between Insular Celtic and Afro-Asiatic. These include the distinction between essential and contingent 'to be', attested in Celtic historically (cf. Old Irish substantive vs. copula, Thurneysen 1946: 475 etc.) and continued into modern Celtic (Irish *is/tá*, Breton *eo/emañ*), which has no parallel in Semitic (Hewitt 2007: 249). States/relations expressed by N (PREP O) PREP S (e.g. Irish *tá scilling agam ort* 'is shilling with.me on.you', i.e. 'you owe me a shilling') are

[7] Concerning the use of the verbal noun instead of the infinitive, Hewitt (2007: 244) points out that the distinction between the verbal noun (preserved particularly with a genitive or prepositional object, e.g. Breton *gweled ahanon* 'see.VN/INF of.me', i.e. 'to see me') and the infinitive (which is a matter of later development) is more of a cline.

[8] Related 'double subject' sentences, found for example in Breton (*per eo klañv e vab* 'Per is ill his son', i.e. 'Per's son is ill') and Arabic (*Zaid marīd ibn-uh* 'Zaid ill son-his', i.e. 'Zaid's son is ill'; Hewitt 2007: 252) are not exclusive to Celtic and Hamito-Semitic.

typical of Insular Celtic, but not of Semitic.[9] The prepositional relative (i.e. fronting of the bare preposition) is found in Irish and Berber, but not in the other related languages. The derived singulative (e.g. Breton *blew/blewenn* 'hair/strand of hair') is found in Arabic and other languages, but is not a shared Celtic feature.

Upon closer inspection, other alleged parallels also turn out not to be true parallels.[10] The absence of a present-tense copula in Semitic is not paralleled by Celtic, where we only find such ellipsis in gnomic expressions. The lack of a present/active participle also distinguishes Celtic from Afro-Asiatic. Hewitt mentions adjective-noun compounds (such as English *pure-hearted*), formed with a possessive in Celtic but not so in Semitic. The sentential question pronoun (Breton *hag-eñv* 'whether') is invariable in Breton, but it agrees in number with the subject in Arabic. Finally, initial mutations of Celtic have no parallel in Afro-Asiatic, but there are many parallels elsewhere.

Hewitt (2007) points out that Insular Celtic has more alleged Afro-Asiatic features than the Afro-Asiatic languages themselves. In the light of this evidence, even Jongeling's hypothesis (2000) about a common substrate to these language groups appears too weak. Hewitt therefore advances a hypothesis about a substrate concentrated in northwestern Europe, where it could have influenced Celtic more strongly than Afro-Asiatic. However, Hewitt's hypothesis in fact suffers from the same lack of hard evidence as the other approaches because the alleged parallels turn out to be quasi-parallels, undermining the basis for a possible common substrate.

Isaac (2007) offers an even harsher criticism of the Afro-Asiatic hypothesis of Insular Celtic innovations by extensively discussing the features proposed by Gensler (2007). Isaac shows that several of the proposed features are implicated by the others and thereby not independent (e.g. clausal and phrasal word order, or the difference between copying and gapping, related to the difference between a relative particle or zero). Some features are trivial because the alleged similarities are in fact widespread (such as narrative verbal noun, which is found in Latin narratives as well), and others are problematic because of their incidental occurrences and different distribution in Insular Celtic and/or Afro-Asiatic. Most importantly, Isaac shows that a whole set of features must have emerged only after apocope in Insular Celtic,[11] i.e. in historic times. This holds for

[9] Yes/no answers with an auxiliary, typical of Insular Celtic, are not characteristic of Semitic.

[10] This is the case with the genitive after numerals, used above 20 in Celtic, but starting from 11 in Afro-Asiatic. Idiomatic genitive kinship relations (Irish *mac tíre* 'son land.GEN' = 'wolf') are frequent in Semitic, but rare in Celtic.

[11] Apocope is assumed by Greene (1973: 127) to have taken place probably in the sixth century AD.

- conjugated prepositions (e.g. OIr. *ante sūs* > *intiu*, MB *do tī* > *dit*);
- prepositional relative clauses, which appeared only later in Old Irish;
- special relative forms of the verb, which emerged in Insular Celtic only after the apocope period;
- the polypersonal verb, which may have had Indo-European origins, but was shaped through apocope;
- the definite article in genitive embedding could have emerged only after grammaticalization of the definite article, not long before the historical period;
- non-agreement of the verb before full-NP subject, assumed to have been as recent as the 10th century;
- predicative particle, which is general only in Welsh, assumed to have developed in Insular Celtic in historic times;
- the prepositional periphrastic continuous tense cannot have developed before 400 AD because it must be dated after the dissolution of Brythonic unity; in Afro-Asiatic it is found only in Egyptian;
- the DO periphrastic is found in Brythonic and Egyptian, but also in other unrelated languages such as German and may therefore be trivial; and
- syntactically conditioned word-initial mutation could only emerge as side-effect of apocope (5th-6th centuries).

All these phenomena are of relatively recent origin, from times in which at least Roman historians would have noticed an Afro-Asiatic element of the British Isles, if there had been any. On the other hand, the above-mentioned Afro-Asiatic phenomena are about 3,000 years older. The conclusion is that the Afro-Asiatic hypothesis is simply wrong and provides no basis for assuming that the discussed features emerged outside of Indo-European itself.

Of course, this does not mean that absolutely no traces of possible contacts exist; it means only that the relevant structural phenomena cannot be ascribed to any identifiable substrate. Concerning the lexicon, Schrijver (2000) assumed that the following Irish lexical items could originate from non-Indo-European: *partán* 'crab', *Partraige* (ethnonym) (*partaing* > Lat. *parthicus*), *pattu* 'hare', *petta* 'hare', *pell* 'horse', *pít* 'portion of food', *pluc* '(round) mass', *prapp* 'rapid', *gliomach* 'lobster', *faochán* 'periwinkle', *ciotóg* 'left hand', *bradán* 'salmon', *scadán* 'herring'. Matasović (2009) pointed to specific lexical elements found across Celtic, which are not attested in Indo-European outside of Celtic, with the implication that they may have been borrowed from a non-Indo-European language in Proto-Celtic times. Matasović's examples are:

- Middle Irish *ainder* 'young woman', Middle Welsh *anneir* 'heifer', perhaps Gaulish *anderon* (possibly connected with Basque *andere* 'lady, woman');
- Old Irish *berr* 'short', Middle Welsh *byrr* 'short', Gaulish *Birrus* (name);
- Old Irish *bran* 'raven', Middle Welsh *bran* 'raven', Gaulish *Brano*-;

- Middle Irish *brocc* 'badger', Middle Welsh *broch* 'badger', Gaulish *Broco-*;
- Old Irish *carpat* '(war) chariot', Gaulish *carpento-*, *Carbanto-*;
- Old Irish *eó* 'salmon', Middle Welsh *ehawc* 'salmon', Gaulish **esoks* (borrowed into Latin as *esox*);
- Old Irish *cuit* 'piece', Middle Welsh *peth* 'thing', Gaulish **pettia* (borrowed into Latin as *petia* and French as *pièce*);
- Old Irish *molt* 'wether', Middle Welsh *mollt* 'ram, wether', Gaulish *Moltus* (name) and **multon-* (borrowed into French as *mouton* and into English as *mutton*).

Lexical borrowings occur in virtually any situation of language contact. For a structural change, however, far-reaching contact is required, for which lexical evidence of a relatively limited extent cannot provide sufficient evidence (and Matasović did not claim that it did).

Against the background of the aforementioned inadequate evidence and structural and chronological counterevidence for Afro-Asiatic, we must examine the alternative hypothesis, namely, that the supposedly exotic features of the Insular Celtic languages "could have developed internally, without a push or even guiding force of an external linguistic entity" (Eska 2010: 542). In this line of reasoning, Eska (2010) compared Insular Celtic with Continental Celtic and showed that the allegedly exotic structural features of Insular Celtic were present in Continental Celtic as well – implying that their final shape was the result of a long development, not a ready-made adoption of external structural models.

Continental Celtic apparently had incipient constructions which feature prominently in all the hypotheses about an Afro-Asiatic substrate. Conjugated prepositions of Insular Celtic (such as *do* 'to' +*–m* '1st person'> *dom* 'to me', *duit* 'to you', *dó* 'to him', *dí* 'to her', *dó* 'to it', *dún* 'to us', *dúib* 'to you, pl.', *duaib* 'to them'), which have a parallel in Hittite (e.g. *katti=tti* 'with you'), are reported by Eska (2010: 543) to also have a structural parallel in Transalpine Celtic *du=ci* 'to here' < *do*+**ke̯i̯*.

Verb-initial clausal configuration is partially matched by Continental (Cisalpine and Transalpine) Celtic, which had basically free, predominantly verb-second word order (Eska 2007: 543), yet by Vendryes's Restriction second-position pronominal clitics could only be hosted by the verbal complex, which drew the verb to clause-initial position, as in example (1). At the same time, example (2) illustrates left-dislocation of topic/focus to clause-initial position.

(1) *sioxt* *=i* *albanos* *panna*
add.3SG.PRET 3.ACC.PL.NEUT A.NOM.SG vessel.Acc.PL
extra *tuđ(đon)* *ccc*
beyond allotment.ACC.SG 300
'Albanos added 300 vessels beyond the allotment' (Eska 2010: 543)

(2) *Akisios Arkatoko{k}materekos to= śo$_i$=*
A.NOM.SG A.NOM.SG PV 3.ACC.SG.MASC
kote atom$_i$ teuo-xtonion
give.3.SG.PRET border.ACC.SG god-man.GEN.PL
'Akisios Arkatokomaterekos,
he gave the boundary (stones) of gods and men' (Eska 2010: 544)

The Old Irish special relative forms of the verb in the first and third person plural (e.g. **beronti=i̯o* > *berate* 'who bear, 3.PL'), with cognates in Middle Welsh *yssyd* and Middle Breton *so/zo* 'who/which is' (<**esti=i̯o*), have parallels in Transalpine Celtic *dugijonti=jo* 'who serve' and *toncsijont=jo* 'who will destine' (Eska 2010: 544).

Continental Celtic also had infixed and suffixed pronominal elements comparable to Insular Celtic, as illustrated by (2a).

(2a) *to= śo= kote*
PV-3.ACC.SG.MASC give.3SG.PRET
's/he gave it' (Eska 2010: 544)

Eska (2010: 545) concluded that "purely Celtic internal factors are responsible for the development of some of the exotic features of the Insular Celtic languages", but that "external linguistic contact may have helped push the evolution of these features forward". He added that "the presence of a particular configuration, however incipient in Insular Celtic, but also present in a substratal language, may have been a necessary precondition for such influence to take place".

Given the fact that the roots of the Insular Celtic verb complex apparently go back to a relatively early stage in the development of Celtic, it is necessary to investigate a possible Indo-European basis for these developments. In an attempt to reconstruct the morphosyntactic development of the verb complex starting from an Indo-European basis, McCone (2006: 278) points to two generally admitted rules of Proto-Indo-European word order: a) clause-initial position was reserved for a fully accented topic or focus constituent, and b) enclitics and/or pronouns occurred directly after the initial stressed constituent (Wackernagel's Law).[12] McCone remarks that the fronting of topic/focus and the integration of the verb, preverb(s) and the negative were only embryonic in Old Hittite, but, by the final stages of Proto-Indo-European, fronting of topic/focus was, in his analysis, firmly established as an option. The negative (if present), preverb(s) (if present) and the verb formed a single

[12] These rules were quite apparent in Anatolian; they predate its (early) separation from the other Indo-European languages.

semantic complex, into which, however, sentential enclitics had not yet been incorporated.[13]

In McCone's view, Proto-Celtic thus inherited from Proto-Indo-European a verb complex, which had the capacity to develop into the Insular Celtic verb complex.[14] Starting from the negative and one preverb preceding the verb, extension to accommodate a second preverb probably occurred during the development towards Insular Celtic; univerbation of *tmesis* patterns occurred in a comparable way to Old Indic and Homeric Greek. McCone (2006: 280) writes that the only innovative characteristic of Gallo-Insular Celtic was the replacement of the accented inflected initial relative pronoun **i̯ó-* (which had been in complementary distribution with **de-*), while Celtiberian preserved it. Further innovations occurred during the Insular Celtic phase and were influenced in a major way by apocope. McCone (2006: 282) assumes that the initial verbal forms with an enclitic were interpreted as distinctively emphatic (for topic or focus) and provided a model for forms without enclitic. At the next stage, complex syntagms (such as copula plus predicate, preposition or article plus noun, or accented preverb or negative plus accented verb) were accentually integrated. The initial verb complex was generalized at this stage, paving the way for cleft constructions for topicalization/focus in other instances. As sentential clitics were regularly attached to the first constituent of the verb complex, non-sentential clitic connectors were lost in Insular Celtic and turned into proclitics (such as **kwe-*, which became *fa/ba* in Old Irish; McCone 2006: 284). Lexical compounds with two preverbs became firmly established in Insular Celtic, and more preverbs became possible. McCone assumes furthermore that the final major innovation in the evolution of the verb complex occurred probably in the 6th century AD, when a number of hitherto accented personal pronouns underwent cliticisation. He concludes (2006: 285) that virtually all the building blocks of the verb complex were inherited from Proto-Indo-European and fitted together step by step, particularly in the Insular Celtic period.

Assuming that the sequence of events concerning the verb complex is more or less clear, I shall focus on how and why the verb complex developed as it did and on Indo-European parallels, particularly in Slavic, which shows a number of striking similarities. In order to discuss these issues, I shall investigate the most striking features of Insular Celtic (word order and the verb complex) in relation to further typological properties in a comparative Indo-European perspective.

[13] In the latest stages of Proto-Indo-European, an accented relative pronoun **i̯ó-* was fully inflected and introduced its clause (McCone 2006: 278).

[14] McCone (2006: 279) assumes that the Proto-Indo-European primary/secondary endings were also preserved in Proto-Celtic.

2. Celtic word order and the verb complex

The central grammatical properties of Insular Celtic which have attracted attention since Morris Jones formulated them in 1900 are: a) word order, b) pronominal affixes (Morris Jones spoke about 'suffixes'), and c) periphrastic conjugation (most commonly consisting of the verb 'to be', a preposition and the verbal noun).[15] We have seen that these properties were present in Continental Celtic as well, but the verb complex must have undergone some modification and/or morphologization because tmesis (the separability of verbs and preverbs) was still present in Early Irish (according to Wagner's 1959 investigation of the Early Irish corpus). Watkins (1976) and following him most researchers (for example, Ahlqvist 1977, Sims-Williams 1984) assumed that fronting of the simplex verb or the first preverb of a compound verb, to which clitics (principally non-emphatic pronouns co-referential with the goal argument) could be attached, was an Indo-European archaism, attested in archaic languages such as Vedic Sanskrit in addition to Celtic. In Celtic, as well as preverbs, conjunct particles, including negative, interrogative particles and certain conjunctions also functioned as hosts to pronominal clitics. This presumably had the effect of pinning simplex verbs and the first preverb of the verbal complex to clause-initial position whenever a clitic or an object relative pronoun was present in this clause (Eska 1994: 8). Eska assumed that Vendryes's Restriction (i.e. whenever there is a pronominal object element, it has to stand next to the verb) combined with the Wackernagel Rule for clitics in second position was largely responsible for the generalization of verb fronting in Insular Celtic.[16]

Following up on these findings, the present analysis will start from the assumption that the central syntactic features of Insular Celtic of a) verb-initial word order, b) pronominal affixes and c) periphrastic conjugation are all connected and hinge on the clause-second clitic position (i.e. Wackernagel's Rule). In addition, the possibility that pragmatic considerations played a role in word-order variations (as also proposed by McCone 2006) can be illustrated

[15] The latter includes the preposition 'in' (Welsh *yn*) employed to designate the present tense.

[16] In Indo-European, a PVB+V combination standing at the head of the main clause was accented P´VB V (e.g. **pró bhereti* 'carries forth'), in contrast to closely compounded verb complexes such as *probhéreti* in IE subordinate clauses. In deuterotonic compounds, the second element bore the accent and the first preposition could be separated (e.g. *do·ad-bat* 'shows'). In prototonic forms, on the other hand, the accent fell on the first element. This was the case in imperatives, with conjunct particles (i.e. the negative particle *ní* (e.g. *ní-s·ro-thechtus* 'I have not had them', Ml. 44[b]11, Thurneysen 1946: 29), the interrogative particle *in*, prepositions combined with the relative particle (*s*)*a*, the conjunction *ara* 'in order that', and rarely introducing a relative clause. As stated by Koch (1991), Old Irish differs from Indo-European in having closely compounded verb complexes whenever it has conjunct forms of simple verbs, including V-medial and -final; when there were several PVBs, only the first was loosely compounded in Old Irish.

by the following Continental Celtic examples (including Tartessian, if Koch's analysis of Tartessian is accepted), which indicate that a pragmatically marked constituent (i.e. topic or contrastive focus) was fronted.

(3) Gaulish, Larzac, RIG, L-98 (Lambert 2003: 163, 165)
Insinde se bnanom bricto[m i- -n eianom
cast:IMPR:2SG PTL woman:GEN:PL charm[:ACC:SGPRP they:GEN:PL
anuana sanander[
name:ACC.PL below
'Cast the charm of these women in their names below'

(4) Gaulish, Chamalières, RIG, L-100 (Lambert 2003: 153f.)
Andedíon uediíumí diíuion risun- artiu
?invoke:PRS:1SG god:GEN:PL PRP-good- health:INSTR:SG
mapon arueriíatin
Maponos:ACC:SG arueriíatin
'(?) I invoke gods in good health Maponos *arueriíatin*'

(5) Gaulish, Chamalières, RIG, L-100 (Lambert, op.cit.)
Exsops pissiumi
Blind see:PRS:1SG
'blind, I see'

(6) Tartessian formula (Koch 2011: 100)
Uar(n)b^{a}an t^{e}e·ro-b^{a}are naŕk^{e}ent^{i}i
To heaven:ACC:SG carry away:PF remain:PRS:3SG
'to heaven carried away remains'

The Wackernagel Rule of clitic second-placement was a syntactic rule (clitics followed the first constituent) and a prosodic rule (clitics adjoined an accented constituent, e.g. *ní-s·ro-thechtus* 'I have not had them'; Ml. 44^{b}11, Thurneysen 1946: 29). Additional factors mentioned in the literature were subject deletion after the negative *ní* (Koch 1991) and Vendryes's Restriction, by which clitics are attached to the verb. All these factors contributed to the emergence of the verb complex, as discussed by Eska (1994) and McCone (2006). The maximal possible verb complex in Old Irish is given in (7), exemplified by (8), and a Gaulish parallel in (9).

(7) Old Irish verb complex (Schrijver 2007: 18)
1. Conjunction
2. Negation
3. Connector
4. Pronominal goal/object
5. Up to five pre-verbs
6. Verbal root
7. Tense and modality markers
8. Pronominal agent/subject
9. Emphatic pronouns

(8) Old Irish (Schrijver 2007: 18)
Arnaduim-foiprea-sa
So-as-not-and-me under-up-bring:CONJ:3SG I/me
'and so that he would not attach *me*'

(9) Gaulish Stelle Voltino (Schrijver 2007: 18)
To-me-d(e)- ec- la- i Obalda natina
At-me-away-out-layed-she Obalda daughter
'Obalda's daughter has me (i.e. the stone) erected'

What these examples show is that the verb complex contains the entire nuclear predication, with the predicate and infixed pronominal elements referring to the predicate arguments. With active or deponent forms of transitive verbs, a pronominal element expresses the direct object, e.g. *ní-s˙ágathar* 'he does not fear them'; with the verb 'to be' (except with *fil*), it expresses the (dative) experiencer, which is otherwise expressed by means of the preposition *do*, e.g. *ro-t˙bia* '*erit tibi*, thou shalt have'; with passive forms, the pronouns of the 1st and 2nd person regularly indicate the subject , e.g. *ro-b˙hícad* 'you have been saved', *ní-n˙incébthar* 'we shall not be reproached' (Thurneysen 1946: 255-70).

According to these rules, the verb complex consists essentially of two parts: the initial part to which pronominal clitics are added following Wackernagel's Rule, and the second part which contains the verb with its non-initial preverb(s). Preverbs of compound verbs (including the aspectual preverb *ro-*) are followed by pronominal clitic(s), and in their absence, the verbal particle *no-* is inserted to host the pronominal clitic(s). This shows that the verb complex is modelled after the pattern of compound verbs, and that in Old Irish its structure was syntactically still bipartite.

I assume that this bipartite syntactic structure became integrated into one unit due to the emergence of fixed accent in Old Irish. The terminus *ante quem* for the emergence of the fixed accent was syncope (as syncope revealed the presence of initial accent). Incidentally, during this period the other distinctive properties of Insular Celtic also emerged, as shown by Isaac (2007). Reanalysis of the verb complex was an important outcome of the introduction of initial accent in Insular Celtic.

3. Indo-European parallels

The word-order properties of Celtic are complex but not without parallels in Indo-European. As best exemplified by Archaic Irish (as defined by Greene 1977), the finite verb could occupy absolute initial position, the initial position preceded by an 'absolute nominative' topicalized element, the medial position preceded by a cleft construction, or final position. In non-initial position, the verb had the conjunct form, but Archaic Irish also had instances of absolute verb forms in final position. As discussed by Greene (1977: 21), "the normal

word-order in Old Irish is VSO: *Sligid Níall slógu* 'N. kills hosts'. In Irish, as in the other Insular Celtic languages, cleft sentences in which the subject or object are fronted are very common; in such cases the verb has a specifically relative form: *Is Níall sliges slógu* 'it is N. who kills hosts'; *It slóig sliges Níall* 'it is hosts (nom.) which N. kills'. If, on the other hand, some other element of the sentence is fronted, the verb is non-relative: *Is i cath sligid Níall slógu* 'it is in battle that N. kills hosts'." However, as discussed by Greene (1977: 21), sixteenth century poetry in Classical Modern Irish also contained sentence-final verbs (even in absolute form), as in *A chlú ar chomairci a chinidh / ar gCú Chonnaichtne cuiridh* 'our Cú Chonnacht puts his fame under the protection of his clan',[17] where the word order is object-adverb-substantive-verb. This order is viewed as inversion, placing the verb at the end of the sentence for reasons of emphasis (appropriate for solemn speech). This inversion was allowed in (Bardic) verse in order to satisfy the requirements of metre and rhyme.

Word-order variation occurs in New Testament Greek (cf. e.g. 3rd Epistle of John, 4) as well:

(10) *μειζοτέραν τούτων οὐκ ἔχω χαράν*
greater-ACC all-GEN.PL not have-1.SG.PRES joy-ACC
'greater joy have I none than this'

Word-order variation for pragmatic reasons, particularly fronting of constituents in the topic or contrastive-focus function as illustrated by New Testament Greek, is a widespread phenomenon, known also from Celtic (McCone 2006).[18]

Medieval Slavic had a word order pattern comparable to New Testament Greek and Celtic, as can be illustrated by the following Novgorod birch-bark private letter written in Novgorod at the end of the 11th or the beginning of the 12th century (Zaliznjak 1995: 235).

(11) *грамота : wтъ жизномира : къ микоуле :*
letter-NOM from Žiʒnomir-GEN to Mikula-DAT
коупилъ еси : робоу : плъскове :
buy-PERF.PPP.MASC be-PRES.2.SG slave-ACC.FEM Plŭskov- LOC.SG
а ныне мѧ: въ томъ : ѧла кънѧгыни :
and now me-ACC in it-LOC take-PERF.PPP princess-NOM
'Letter from Zhiznomir to Mikula. You have bought a slave in Pskov, and now in this (matter) I am accused by the princess.'

[17] Greene (1977: 21) translates *ar gCú Chonnaichtne* 'my Cú Chonnacht'.
[18] Within narrative texts, there was presumably a clear distinction between direct speech, with deictic co-indexicality, and narration, with anaphoric and possibly cataphoric indexicality. I assume that this underlies the different patterns also established for the Middle Welsh by Poppe (1991) and for Cornish by George (1991).

After the statement of the sender and the addressee, the actual text starts in line 2 with a perfective verb. This sentence-initial predicate contains the crucial, focused information.[19]

(12) *покланѧние wт петра к аврамоу*
greeting-NOM from Peter-GEN to Abraham-DAT
матьеви еси молви-
Matthewson-DAT be-PRES.2.SG say-IPF.
ль толико мнѣ емати скота боле же
PPP.MASC only me-DAT catch-IMPF.INF cattle-GEN more
за мьне скота не поусти …
PTCLafter me-ACC cattle-GEN not leave-IMP
'Greeting from Peter to Abraham Matthewson. You have been saying that only I should catch/keep cattle. Do not leave any more cattle with me.'
(Birchbark 550, mid. 60-s – mid. 90-s of the 12th century)[20]

Example (12) begins (after the greeting) with an imperfective predicate. However, it is not the main verb, but the auxiliary, which occurs at the beginning and signalises the perfect tense. The distinction between initial perfective main verbs and initial auxiliaries with imperfective verbs in the perfect tense is a general pattern, which illustrates the role of aspect in pragmatic word order rules.

The first chronicle of Novgorod, originally written contemporaneously in the years 1016-1333/1352, presents an even clearer pattern. 95% of the descriptions of the years 1017-1136 start with a verb (including past passive participles) and of these, 77% are perfective, 13.8% are determinate motion-verb forms, 5% are indeterminate motion-verb forms and 5% are imperfective verbs. In the description of the events in each year, a new state of affairs introduced by perfective verbs is systematically fore-grounded, in clause-initial position. Besides verbs, highly topical proper names, such as *Volodimirŭ* and *Novŭgorodci*, and highly significant events related to heavenly signs such as *znamenie zmievo* [*na nebesi javisja*] ('sign of a snake [appeared in Heaven]', s.a. 1027) and *gnevŭ boži* ('anger of God', s.a. 1068) occupy initial position for topic/focus reasons.

It is important to emphasize that both the (presumably) colloquial medieval Russian of the private Novgorod birchbark letters and the more formal chronicles had the verb-initial word order pattern strongly reminiscent of Celtic. In addition to pragmatic considerations, verb-initial word order was predominantly influenced by the perfective aspect.

[19] In the second part of the coordinated sentence (literally, 'and now me in it took princess'), the pronominal clitic 'me' follows the first accented word 'now' (whereas the coordinating conjunctions were unaccented), in accordance with the Wackernagel Rule still in effect in medieval Russian.
[20] See http://titus.uni-frankfurt.de/texte/etcs/slav/aruss/gramoty/gramot.htm.

This survey leads to the conclusion that grammatical aspect has an influence on word order. Moreover, historical Indo-European languages such as Greek, Slavic and Celtic, which were characterized by aspect in the early stages and developed attested tense systems only later, apparently exhibit word order variation along comparable lines. As perfective aspect in Celtic was based on preverb-verb compounds (primarily with the preverb *ro-*, *do-* in Celtic), which provided the locus for insertion of pronominal clitics, this can be assumed to have contributed to the formation (and to fronting) of the verb complex in Insular Celtic alongside the other factors mentioned by the previous researchers.

Parallels for the impact of (lexical and grammatical) aspect exist elsewhere in Indo-European as well. For Old High German (henceforth OHG), Sasse (1995) pointed to verb fronting conditioned by monoargumentality (i.e. when the verb was either intransitive or reflexive), verb semantics (particularly verbs of appearance or disappearance and so-called psychverbs), and ingressive, punctual or resultative modes of action. Petrova (2011) also established the strong influence of modes of action on initial verb placement in OHG, in line with the situation in Old English reported by Hopper (1979) and Leiss's (2000) evidence that initial verb placement was a perfectivisation strategy in Old Norse. Modern Spanish and Italian reported by Sornicola (1995) exhibit similar strategies. For OHG, Petrova (2011) finds frequent initial occurrence of verbal derivatives with *gi-* (traditionally deemed perfective) and of what she calls inherently perfective verbs such as *beginnan* 'to begin'. Significantly, stative and durative verbs take on an inchoative interpretation in initial position.[21]

(13) *giloubtun in inan thó sine iungiron* (Petrova 2011: 219)
believe-3.PLPRET in he-ACC then his disciple-NOM.PL
'his disciples became convinced by his words/started to believe in his words' (T 56, 10)
Lat. *Crediderunt in eum discipuli eius*

Given the general preference for perfective-like modes of action to occur in clause-initial position and the effect of clause-initial position imposing an inchoative interpretation, we are justified in assuming that verbal aspect was a major driving force behind development of the verb-initial pattern in Celtic. This tendency was stronger in Celtic than, for example, in Germanic because the grammatical category of perfective aspect in Celtic could promote initial

[21] This pattern is corroborated by sentence-initial temporal adverbial *tho* 'then', which in this position refers to the established narrative time, whereas post-verbal *tho* refers to a new time interval.

placement irrespective of lexical semantics and monoargumentality. In this sense, medieval Celtic resembled medieval Slavic.

Having established that aspect must have been a major factor contributing to word order, we now turn to clitics. Following Wackernagel's Rule, clitics followed the first constituent in the clause. In Celtic, the preverb of a perfectivised verb counted as the first constituent, to which clitics were attached. In Slavic, which also developed grammatical aspect and perfectivisation originally by means of preverbs, preverbs became prefixes at a stage during which they were still preverbs in Celtic. According to Wackernagel's Rule, clitics were attached following the verb in most cases in Slavic, but not to preverbs (i.e. perfectivising prefixes), although they could follow prepositions and certain conjunctions. This was the main reason for the different developments of Celtic and Slavic (which did not develop the verb complex).

Around the middle of the first millennium AD in Insular Celtic, a fixed initial accent arose. It was at this point that preverbs and clitics became integrated with the verb stem, giving rise to the verb complex of Insular Celtic.

To summarise: in addition to Wackernagel's Rule for the second position of clitics and Vendryes's Restriction for clitics to be hosted by the verb, it was the perfective aspect, which contributed decisively to the verb fronting and the formation of the verb complex. The main means of perfective-aspect formation were preverbs; preverb-verb sequences consequently developed a pattern of initial placement. In Celtic, preverbs retained their constituent status longer than in Slavic, and attachment of clitics to preverbs (in order to comply with the Wackernagel Rule) was conducive to the establishment of the verb-initial (neutral) pattern in Celtic. This factor had no effect in Slavic, where preverbs became prefixes of verb compounds at an earlier stage, thereby prohibiting emergence of a similar verb complex in Slavic. In Celtic, on the other hand, the final relevant stage of verb-complex formation arose due to the introduction of fixed accent in Insular Celtic by the middle of the first millennium AD.

For all the developments of Celtic discussed we have found system-internal explanations and Indo-European parallels, particularly in Slavic. Only the introduction of initial delimitative accent may (but need not necessarily) have been an effect produced by language contact.

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