

Theoretical limits on borrowing through contact; not everything goes

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Yellow highlight, added for review A; blue added for review B, green for review C

Abstract

The traditional derivation of Middle English (ME) from Old English (OE) is highly problematic.

- i. Essentially no Scandinavian borrowing in OE (Baugh and Cable 2002; Strang 1970).
- ii. In a short period (1030-1200) when English wasn't written, most OE vocabulary was lost.
- iii. The earliest ME texts (from 1200, *Ormulum*; Collins 1959) are the first to contain numerous daily life Scandinavian "borrowings".
- iv. Roughly *half of the ME grammatical lexicon* is cognate with Old Norse.
- v. ME syntax shares with North Germanic (NG) over twenty syntactic properties that West Germanic (WG) lacks. (Emonds & Faarlund 2014)

From these facts, these authors conclude that ME is *an NG language* "Anglicized Norse" (AN) with many OE borrowings rather than the other way around. This paper proposes to strengthen this hypothesis by arguing on theoretical grounds that *several NG syntactic properties of ME could not have been borrowed from NG*. They must have resulted from internal developments in AN. That is, the paper justifies a hypothesis that limits the *type* of morpho-syntax that can be borrowed via language contact.

Emonds & Faarlund (2014) discuss several NG constructions in ME that are not instances of single lexical items. The first four below are well attested in earliest Mainland NG and ME.

- a. A full system of *post-verbal directional and aspectual particles*, contrasted with WG pre-verbal separable prefixes.
- b. *Preposition stranding*, including in sluicing (*who with, what about*, etc.)
- c. Unmarked *head-initial word order in VPs*, in both main and dependent clauses.
- d. *Subject and object raising*, absent in both OE and WG generally.
- e. *Parasitic gaps*, freely formed only in NG; restricted or absent in WG.
- f. *Tag questions*, based on syntactic copies of Subjects and Tense in NG but not in WG.

It is difficult to see how these properties, taken as changes from OE to ME, could be "borrowings" of lexical items via language contact of OE with Norse in England. Whole classes of verbs and prepositions would have to be borrowed *en masse*. The properties in italics satisfy no independent sense of "lexical item." Though these all are properties particular to NG (*none seem to be Indo-European*), there is no clear evidence that any have ever been borrowed by contact into or from neighbouring Germanic, Romance, or Slavic languages. At one time in the past, these constructions have developed, *internal to NG*. Consequently, properties (a)-(f) could not have entered ME through simple contact with Scandinavian even in a rapidly evolving OE language. Properties (a)-(f) rather testify to *an unchanging NG character of ME*.

1. A-theoretical perspectives on Language Contact

Middle English (ME), in contrast to Old English (OE), has many words of Scandinavian origin, conventionally attributed to language contact and borrowing. However, recourse to such an account doesn't stand up to even moderate scrutiny. Traditional scholarship, e.g. Campbell 1959 and Strang 1970, locates the great bulk of this borrowing from c. 1170 onwards, starting with the ME period, while in the OE period, hardly any Scandinavian words were borrowed (Baugh and Cable 2002: 99). Yet, the Scandinavian language in England, of which there are no records in the OE period, is taken to have died out

by 1150 (Thomason 2016; Baugh and Cable 2002: 96), before serious borrowing from it even started. Hence this borrowing can't be ascribed to contact, at least contact with the living.

This inconsistent dating has been a fertile source for creative sociolinguistic scenarios, although no facts actually confirm these speculations in the contact literature.¹ A centre piece in such thinking is often some kind of 'spoken Old English' (there are no texts) which must have borrowed extensively from the English variant of Scandinavian before the latter died out. Subsequently, these extensive borrowings, including much daily life vocabulary, suddenly came to light in written Early ME.

Moreover, this (allegedly borrowed) Scandinavian vocabulary was not limited to content words, counter to normal contact situations, as was the massive influx of French words into Late ME when French speakers in England all switched to English as their first language (14th c.). The fact is, not only did hundreds of daily life terms in ME have a known Scandinavian origin, so also did roughly half of its grammatical lexicon (For more on how this component differs from the open class lexicon, consult Ouhalla 1991 and Emonds 2000: Chs. 3 and 4). Something other than 'borrowing through contact' must have transpired, not only because of dating but also because of the types of 'borrowed' words and morphemes.

2. The importance of Middle English syntax

Another discrepancy between OE and ME is the key to understanding all these puzzles. If one assembles the data patterns of ME syntax, the language groups typologically with North Germanic (NG), while OE has unmistakable West Germanic (WG) syntax (Gianollo, Guardiano and Longobardi 2008: 133). On the basis of such patterns, Emonds and Faarlund (2014) argue that ME shares with Mainland Scandinavian more than twenty syntactic properties that OE and other WG languages lack. They conclude (1):

- (1) **English as North Germanic.** Middle English was a direct descendent of the Mainland Norse spoken by Scandinavian settlers in England.

The presence in ME of Norse morphophonology and daily life and grammatical vocabulary is thus explained. The familiar facts that this hypothesis now makes strange is the daily life and grammatical vocabulary of OE found in ME; because of this factor, Emonds and Faarlund call Early ME by the name "Anglicized Norse". Under this view, in the realm of syntax there is basically nothing to explain, since, they argue, ME *shares no syntax or morpho-syntax with OE* that is not common to Germanic languages in general.

According to this study's guiding hypothesis (1), ME continues Mainland Norse and not Icelandic. I continue to follow Emonds and Faarlund (2014: Ch. 1 and p. 127), who

¹ One variant (Thomason and Kaufman 1988, 286-287) proposes that when in the 10th c. Norse died out in various areas, Anglo Saxon speakers introduced numerous aspects of Norse grammar and phonology into (unattested) OE dialects such as 'East Mercian' and 'East Saxon'. These 'packets' of dozens of 'Norse grammatical elements' then spread southward and westward to the whole country, ultimately resulting in 'Norsified English' (i.e. Early ME). The authors devise this *sui generis* scenario of contact to account for why, a century or more later, these diverse Norsification features first appear as a group in written ME: "These features of Simplification and Norsification ... did not appear gradually; *they appear in the earliest Middle English documents of the Danelaw.*" (op. cit. 278-279, my emphasis).

In place of elaborate contact scenarios, Emonds and Faarlund (2014) claim that ME but not OE was a development of North Germanic Norse, eventually learned as a second and then first language by all Anglo-Saxons. Consequently, much ME grammatical vocabulary and morphophonology was Norse.

exclude any particularities of Icelandic, because all known or plausible Scandinavian immigration into the Danelaw was directly from Denmark and Norway, and also because Icelandic centrally differs from both Mainland Scandinavian and ME in maintaining productive proto-Germanic morphological case.²

In the new perspective that ME is basically the written down form of Anglicized Norse, there remains no reason why the earliest ME texts must follow the last OE texts. Indeed, a British Library webpage concludes that the first text in ME, a translation of a Latin homily, dates from c. 1150. <http://www.bl.uk/learning/timeline/item126539.html> This dating is suspiciously late (possibly to reconcile its language with the notion that it must post-date OE texts), since Ralph d'Escures's original must have pre-dated his debilitating stroke in 1119 (d. 1122). https://en.wikipedia.org/wiki/Ralph_d'Escures Though traditional histories of English don't acknowledge any dating overlap, works arguably in OE, e.g. the poem *The Owl and the Nightingale*, were written at least until close to 1200.³

When Anglicized Norse began to be written extensively around 1200 (e.g. the text *Ormulum*), it was considered to be a version of English, what is now called the East Midlands dialect of ME. Uncontroversially this dialect is the forerunner of Modern English, which therefore descends from Norse, not from OE. The latter became the Southern and Western dialects of ME, which eventually ceased being written/ spoken.

This paper proposes to strengthen the hypothesis (1) by arguing on theoretical grounds that *several of NG syntactic properties of ME could not have entered ME by borrowing*. They must have resulted from internal developments in Anglicized Norse. That is, the paper puts forward a claim that limits the *type* of morpho-syntax that can be borrowed via language contact. It is of course not disputed that changes is sometimes simply internal to a language (e.g. in Modern English, the sharply differing syntax of modals and lexical verbs, the development of the progressive). My proposal here is that several Early ME syntactic properties must have developed this way. If these properties are moreover typical of NG, it must be that Early ME is also.⁴

Before continuing, I should acknowledge an extensive attempted refutation of hypothesis (1), the review of Bech and Walkden (2015). About a quarter of it consists of a section on method,⁵ and the rest proposes different interpretations of mostly well-known patterns. Space limitation obviously precludes an evaluation of their 20 page work in this study, which focuses on presenting another type of argument for (1). I can indicate, however, that one syntactic argument which they stress (their Sect. 3.3.1) concerns their claim that ME

² A reviewer objects that because the latter's texts are older, arguments about ME must be primarily based on Icelandic. This logic comes down to a version of 'post hoc ergo propter hoc': 'if the texts of X are older than the texts of a related language Y, then a third related language Z must descend from X not Y.' To see the fallacy, take X to be the oldest Italian texts, Y to be medieval French, and Z to be any dialects of Quebec French.

³ This poem is said to be in the ME 'southern dialect', again to preserve the idea that OE 'changed' diachronically into ME in a short period around 1150. Historians of English allude to a long hiatus in written English to allow for this 'development', but the hiatus was no more than 50 years; the two different written languages may have even co-existed for a short time.

⁴ Rephrasing, if Early ME simply continues WG OE, and yet displays the NG properties discussed in Section 4, ME would have had to acquire them by borrowing. I will argue that certain such borrowings are impossible (contrary to the literature of language contact, which essentially holds that under contact, 'anything can happen'.)

⁵ That section takes issue with the decision of Emonds and Faarland (2014) to argue on the basis of syntax and morpho-syntax, leaving aside studies of DNA, whether the bilingualism of the time was social or individual, sound change, etc.

and Scandinavian ‘verb-second’ systems are different, and that the former continues at least one salient OE pattern, allowing scene-setting PPs in pre-subject position. Emonds (2016) argues that a better account of this ME construction is available in terms of Universal Grammar, and is unrelated to a language-particular continuation of OE.

3. Borrowable Syntax: the Lexical Entries of Borer’s Conjecture

Emonds and Faarlund (2014) discuss over 20 morpho-syntactic properties that indicate that ME has NG syntax. Some 15 of these can be formally expressed, without much difficulty, as single entries in its Grammatical Lexicon. According to Borer’s Conjecture (Borer 1984:29), now widely adopted in generative studies, such entries are the essence of language-particular grammars.

As a result, it is possible in principle that a rapidly evolving OE could have borrowed (or lost) such properties/ entries through contact with Scandinavian speakers. Nonetheless, as Emonds and Faarlund argue, the sheer number of these entries and the short interval in which they were borrowed or disappeared (leaving aside speculations about a distinct ‘spoken OE’), constitutes a strong argument in favour of the Anglicized Norse Hypothesis (1).⁶ Here is a list of the changes that can be associated with individual grammatical morphemes: The last two (2p-q) have been brought to my attention after publication of Emonds and Faarlund (2014).

(2) **Single entries in the ME Grammatical Lexicon** (attributable to Norse)⁷

- a. As in NG, certain modals start to express the future tense in ME. In contrast, OE uses present tense and Modern WG uses non-modal (agreeing) auxiliary verbs.
- b. The ME infinitival *to* is a free morpheme like Old Norse *at*; both can be split from V. WG uses only bound prefixes (Dutch *te*, German *zu*), and this includes OE *to* (S. Pintzuk, pers. comm.).
- c. No passive/ past participle prefix is the general rule in Old Norse and ME. But in OE and German the prefix *ge-/y-* is frequent and sometimes obligatory. (*Ge-* was also lost in some WG dialects bordering on NG areas, but these were not sources of ME.)
- d. The NG languages including ME have a perfect infinitive *to have V+en*. OE does not (Fischer 1992: 336-7).⁸
- e. Like NG, ME expresses sentence negation with free morphemes that are initial in VP (Norse *ikke*, ME *naht*). OE uses a pre-verbal bound morpheme *ne-*.⁹

⁶ The traditional view (OE → ME) must locate this avalanche of changes and several others inside a single century.

⁷ These constructions are all discussed separately in Emonds and Faarlund (2014: Chs. 3 thru 6). I don’t formalize these entries here because specific notations might be controversial and/ or difficult to grasp at a glance. It is unfortunate that three decades of lip service to Borer’s Conjecture have produced so few actual proposals for formalizing these entries, now the sine qua non for truly generative grammars. CF. Emonds (2000) for extensive arguments favouring syntax-based formalized lexical entries.

⁸ A reviewer observes that the modern ‘West Germanic languages Dutch and German also have a perfect infinitive.’ But even so, no one suggests that these languages influenced the change from OE to ME, so this observation is beside the point. The only issue here is then whether the OE lack of a perfect infinitive was typical of WG or was somewhat special.

⁹ Early ME puts together the OE prefix *ne-* and the post-verbal free morpheme *noht* (i.e. ‘double negation’), but eventually drops *ne-*, and so syntactically adopts the NG pattern. Three reviewers bring up ‘Jespersen’s cycle’, a descriptive name for the preceding process,

- f. As in Old Norse, ME *that* appears in complex subordinators like *now that*, *if that*, *before that*, *in that*, *etc.* while OE and WG typically don't use general subordinators (*þe*, *dass*) in this way (Emonds and Faarlund 2014: 143-4; Fischer 1992: 295).
- g. The OE "correlative adverbs" *swa...swa*, *tha...tha*, etc. are unknown in Mainland Scandinavia and disappear in ME.
- h. Early ME loses OE relative pronouns that display case or gender (*se þe*; Mitchell and Robinson 1992). As in Old Scandinavian, Early ME relativizers are invariant.
- i. ME, like NG, grades long adjectives analytically (*more*, *most*). OE does not.
- j. As in Mainland Scandinavian, the ME subjunctive is no longer used to mark indirect speech, as it could in OE (Fischer 1992: 314).
- k. Subject pronouns could be pro-clitics on second position Vs in OE, but not in NG languages. ME came to resemble NG in this regard (Kroch, Taylor and Ringe 2000).
- l. The copula selects infinitive complements in both ME and NG, but not in OE (Fischer 1992: 336-337).
- m. The derived nominal suffix in OE is *-ung* (like German). NG also allows *-ing*, and in ME the latter form is the only possibility.
- n. The general patronymic suffix in NG for new families is *-son*; it replaces OE *-ing* throughout England in c. 1200 (Strang 1970).
- o. OE genitive case appears on the head *and* pre-modifiers in a possessive phrase. But in both ME and NG a single enclitic *-s* follows a possessive phrase, whether its head is final or not.
- p. In WG (OE and German), some intransitive verbs, with meanings "of movement and change of state" form the perfect with *be* (Denison 1993). But in *the earliest Norse texts*, the *perfect auxiliary* was uniformly *hafa* 'have' (J. T. Faarlund, pers. comm.) Similarly in England, the change to uniform use of *have* (ME) rather than *be* (OE) with motion verbs begins just after the Conquest. Denison (1993: 350-355)
- q. Mainland Scandinavian and Modern English (but not Icelandic) share the possibility of a null complementizer in a range of finite clauses (Holmberg: 2016). It is difficult to search for null items in corpora, so this may be a medieval NP property or a more recent shared innovation.

On point (2o), a reviewer asks if it isn't 'very unlikely that the version of Norse that was spoke in the British Isles only marked genitive by adding *-s* at the end of the entire NP'? As there are no texts prior to ME, one can only note that this device, unknown in OE and WG generally, is restricted to and yet general in Mainland Scandinavian *throughout the ME*

combined with the possibility that free negation morphemes can also become bound (Modern English *not* → *n't*). As always, the issue is, can we explain such replacements? Emonds and Faarlund (Sect. 7.2.6) argue that its occurrence in ME is simply a part of Anglicized Norse replacing West Saxon.

One reviewer, after commenting that this 'similarity of ME and NG is indeed striking,' cites Breitbarth (2009) to the effect that negation developed similarly in Dutch, German and Frisian. If so, the question is again, which of Norse and these WG languages were in contact with Early ME, so that one of them could have either influenced OE (the traditional view) or replaced it (the view of this essay). Under either view, the historical facts point unambiguously to Norse.

period. Chalupová and Chavratová (in preparation) give numerous examples, including these from Kroch and Taylor (2000).

(3) Middle English:

ani ancre Iesu cristes spuse (*Ancrene Riwe*, II.98.1173) (1215-1222)

Q hermit Jesus Criste-s spouse

sein gregories wordes (*Ancrene Riwe*, II.61.632) (1215-1222)

Saint George-s wordPL

te holy gostes helpe (*Ayenbite of Inwyte*, 98.1923) (1250-1350)

the Holy Ghost-s help

þe dome of godes spelle (*Ayenbite of Inwyte*, 11.125) (1250-1350)

the judgment of god-s story

These authors further point out what most corpus dating obscures; mature authors are presumably using grammar acquired as children, often easily thirty years earlier than the date of a text. In particular, they report the last two examples as penned by a 70-year old in 1340. Hence these examples of phrasal -s no doubt reflect the spoken language of 1185-1275.

The question that emerges from such data is, where else could this highly unusual type of case-marking (a phrasal suffix in an otherwise analytic head-initial language) have come from, if not from a Norse continuously spoken in England throughout this period? We expect odd borrowings only into contracting or dying languages (the reviewer exemplifies with Prince Edward Island French), but ME was not dying out.

For purposes of discussion, I grant that at least singly, the Norse features of Early ME in (2) could have been borrowed through contact. Individually they all conform to Borer's Conjecture, and plausibly, changes in particular grammars involve borrowing or deleting single entries in Grammatical Lexicons.

Thus, looking through the list (2) one by one, *no single one of these properties is in itself implausible* as "contact borrowing in syntax" from Norse into an evolving OE.¹⁰ A rather transparent interpretation of Borer's Conjecture is thus that changes in particular grammars are simply changes in the lexical entries of individual functional category morphemes, and as such, they can be borrowed through contact.¹¹

4. Language-particular architecture: syntax which cannot be borrowed

In addition to the constructions in (2), Emonds and Faarlund (2014) discuss six NG constructions in ME that *cannot be expressed as lexical entries for single morphemes*. That is, these constructions are generalizations that lexical entries may reflect, but the entries

¹⁰ But taken together, as noted above, it is completely implausible that the long list in (2) could be borrowings effected within a century. And sociologically, why would monolingual Anglo-Saxon speakers borrow so copiously from the supposedly dying language of their former adversaries?

¹¹ One reviewer provides a sequence of alternative scenarios for many of the points in (2). There is no unified pattern in these disparate and sometimes complex suggestions; it is simply a list of separate diachronic events which must be postulated to counter the unified explanation of (1), namely that in the syntactic development of early ME, nothing happened.

In a few instances, the reviewer supports suggestions with evidence. Thus, there are ME remnants *y-* of the WG participial prefix *ge-*. I suggest this *-y* was due to bilingual Saxons, and predictably disappeared after a few generations. In other instances, data seems misinterpreted. E.g. ME and Norse both uniformly use *have* in the perfect tense, unlike the WG and Romance languages cited by the reviewer, where *have* and *be* alternate.

themselves do not suffice for expressing them in single statements. Because of their more general nature, I call them ‘architectural’ rather than lexical properties. The first four in the list (4) are well attested in earliest Mainland NG as well as ME; the last two are easily found only in the modern period. Discussion and references for each property are given in the sections indicated from Emonds and Faarlund (2014).

These generalizations that describe these language-particular configurations cannot be adequately expressed formally by single lexical entries, e.g. P-stranding is not a property that different Ps accidentally have in common. To maintain an adequate model, either Borer’s Conjecture or the notion of lexical entry will have to be modified in some way. However this is to be accomplished, the content in (5) below of “lexical specifications of only single functional category items: should remain unchanged.

(4) **North Germanic architectural properties of ME, not part of OE:**

- a. *Head-initial word order within VPs* is unmarked, in both main and dependent clauses (Section 3.1).¹²
- b. A system of *post-verbal directional and aspectual free morpheme particles*, contrasted with WG systems of pre-verbal separable prefixes (Section 3.2). **This change may be facilitated by (4a), but the two properties are definitely not the same (Emonds and Faarlund, 2016).**
- c. *Preposition stranding*, at first in relative clauses and eventually even in sluicing constructions (*who with, what for*, etc. Sections 3.7-3.8)
- d. *Subject raising*, both into subject and object position after epistemic verbs. These are absent in in both OE and WG generally (Denison 1993: 221; Hawkins 1986: 82; Section 3.3-3.4).
- e. Freely formed *parasitic gaps*; these appear freely only in NG, and are restricted or absent in WG languages (for German, see Kathol 2001; for Dutch, see Bennis & Hoekstra (1985); Section 6.4).¹³
- f. *Tag questions* based on syntactic copies of the Subject and Tense in NG but not in WG (Section 6.5).

These constructions all seem to be language-particular properties of NG languages. For example, *there is no widely accepted evidence that any of them are Indo-European*. This suggests that all must have developed *internally* in NG languages during the Germanic phase of their history. There is no evidence, outside the issue at hand (the relation of OE to ME)

¹² A reviewer feels that Norse could have changed English word order by contact. Keeping in mind that Norse was dying out under this traditional scenario, this is as likely as French shifting to VSO order in the face of Breton dying out. The reviewer also claims that the I.E. shift away from verb-final orders was ‘arrested’ in Indo-Aryan by contact with Turkic and Dravidian. But arrested change is no change and requires no convoluted contact explanations. This reviewer also repeats a widespread assumption that ‘Southern Semitic languages have shifted to head-final orders...due to contact with Nilotic’ [sic; presumably Cushitic, JE]. For a carefully argued alternative to this scenario in terms of diglossia, see Ouhalla (2015).

¹³ As a reviewer notes, these sources indicate that the basic OV character of West Germanic seems to preclude many parasitic gaps that exist in English. A more complete future understanding of them may lead to deriving property (4e) from (4a). This does not affect this study’s conclusion; it simply would mean that of the six architectural properties listed here, only five are independent.

that any of the six constructions in (4) have ever been borrowed by contact *either into or from* neighbouring West Germanic, Celtic or Slavic languages.

There are 72 ways one of these 6 properties could have been borrowed from one of these four language families into another.¹⁴ While I cannot categorically state that none have ever occurred, the number of such borrowings is minuscule, compared to the implication of traditional histories of English. These contend that contact with dying Norse (or pure accident) caused Middle and Modern English to acquire all 6 NG architectural properties, 4 in the space of at most 200 years.¹⁵

Given these considerations, I wish to strengthen the hypothesis that ME is Anglicized Norse (1), by proposing that *the NG syntactic properties in (4), or at least most of them, could not in principle have been borrowed into late OE from NG*. They must have resulted from internal developments in Norse, most of which we know predated or were simultaneous with Scandinavian settlement in England. That is, I suggest a restrictive and historically justified hypothesis that limits what aspects of morpho-syntax that can be borrowed via language contact. Under this hypothesis, the NG syntax of ME cannot in principle be due to “OE + contact with Norse speakers”.

To formulate this hypothesis, the morpho-syntactic properties that distinguish ME from OE (and group it with NG) have been divided into two types. As explained above, I coin the contrasting labels “lexical” and “architectural” for language-particular properties, according to which the second group has properties that cannot be reduced in a trivial way to the first, i.e. to the format required by Borer’s Conjecture.

- (5) **Restricted Borrowing Hypothesis.** Under language contact, a living language L_1 can borrow from L_2 lexical specifications of *only single functional category items*.

That is, lexical properties can be (sparingly) borrowed under contact, but architectural properties cannot be.

It follows that properties (4a-f) could not have entered ME even in a rapidly evolving OE (a fortiori, essentially simultaneously) through language contact of OE with Scandinavian. The ME properties (4a-f) testify rather to *an unchanging NG character of ME*. That is, changes in patterns that we here call the syntactic “architecture” of a particular language can only arise through internal developments, not through simple contact of adjacent languages.

I note in conclusion how strongly this view contrasts with the traditional claim that OE \rightarrow ME, and hence that all the properties in (4) developed in a very short time, at least four of them in the 12th and 13th c., via language contact with a language which had already died out (c. 1150) before the evidence of borrowing is attested (after 1170). The traditional view of the genesis of Early ME, when one reflects on its actual claims, violates not only the canons of a restrictive diachronic theory, but also those of common sense.

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Ayenbite of Inwytt. The Penn-Helsinki Parsed Corpus of Middle English (PPCME2).

¹⁴ Given 4 families A, B, C, D, possible borrowings for each property are $A \Rightarrow B$, $B \Rightarrow A$, $A \Rightarrow C$, $C \Rightarrow A$, $A \Rightarrow D$, $D \Rightarrow A$, $B \Rightarrow C$, $C \Rightarrow B$, $B \Rightarrow D$, $D \Rightarrow B$, $C \Rightarrow D$, $D \Rightarrow C$, 12 total. There are six properties, so the total conceivable borrowings are 72 in all. Even if the source family for these properties is taken as certain, there are still 18 possible but unattested borrowings.

¹⁵ There is one problematic instance that might require some revision in (5). Current research may point to a relation between Celtic and NG languages in the syntax of tag questions. When the import of this research becomes clearer, we can re-assess its relation to (5).

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