Hiberno-English medial-object perfects reconsidered:
A case of contact-induced grammaticalisation

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Abstract

PerfecS of the type I have my dinner eaten are a well-known feature of Irish English dialects. They can be linked to a functionally similar construction in Irish, of the type tå mo dhinneár ite agam (literally “is my dinner eaten at-me”), but also to earlier constructions in Standard English. The issue has sometimes been treated as a competition between two seemingly mutually exclusive explanations, a “substrate” and a “retentionist” hypothesis.

This dichotomy can be overcome on the basis of a model of “contact-induced grammaticalisation” (Heine/Kuteva 2005): an existing source structure in the receiving language (English) expands along normal paths, but under a triggering effect of a contact language (Irish), ultimately leading to an apparent duplication of a foreign model.

Empirical data comes from historical 18th/19th century corpus material. It provides evidence about the time frame and sociolinguistic situation in which the relevant changes took place. It supports a scenario where both Irish-English bilingualism and exposure to the English source constructions played crucial roles.

Key words: language contact, grammaticalisation, English, Hiberno-English, Irish.
This paper will review an issue that has given rise to a good amount of previous discussion in the literature: the non-standard word-order option in Hiberno-English transitive perfect constructions of the type *I have my dinner eaten*, and the question of a contact-related explanation for this construction, based on the Irish *tá mo dhinneár ite agam* (literally “is my dinner eaten at-me”). A framework based on current grammaticalisation theory will be outlined to account for the development of this construction type, and some new data from a corpus of 18th and 19th century written Irish English will be adduced in its support.

Perfect constructions and their functional equivalents in Irish have been at the centre of attention in the study of Irish English dialects at least since Henry (1957), Bliss (1972), Greene (1979) and Harris (1984); see also Filppula (1999), Siemund (2004). The most well-known use types of tense/aspect constructions in this domain said to be characteristic of Hiberno-English, as classified by Harris (1984: 313), are the following:

a) the use of the preterite for indefinite anterior events;

b) the use of the present tense for states persisting into the present from a specified point of time in the past (“extended-now time”);

c) the use of the *be after V-ing* construction for recent past events (“Hot-news perfect”, in Harris’ terminology “P I”);

d) the retention of *be* perfects with some mutative intransitive verbs; and

e) the use of a transitive *have* perfect with the word order *have* + object + participle, henceforth “medial-object perfect”, in Harris’ terminology “P II”.

Harris sums up the semantic values of these constructions in Hiberno-English in contrast with the (British) Standard English equivalents, as shown in Table 1 (adapted from Harris 1984: 313). The table implies that, at least in the most “basilectal” (ibid.) forms of Hiberno-English, the five morpho-syntactic options form a consistent, closed system, in which the Standard English perfect is not used at all.

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1 For a discussion of this construction and why and in what sense it is parallel to the English one, see section below.
Of these non-standard use types, the present paper will focus on the history and development of the medial-object perfect, contrasting it in some respects with that of the *be* perfect. Like several of the other features involved here, both have been discussed in the literature under the perspective of a dichotomy between “substratal” and “retentionist” explanatory hypotheses. Under this perspective, the question is to what degree the Hiberno-English constructions are either a result of structural transfer from Irish, or a retention from some earlier dialectal form of English. A debate has been swinging to and fro between the two positions; most recently, Siemund (2004) has argued in favour of an overall retentionist view. However, fresh evidence from corpus work on older forms of the dialect supports earlier findings by Filppula (1996), suggesting at least some crucial role played by the Irish substrate in the genesis of the medial-object perfects (as opposed to the *be* perfects, which virtually all scholars now seem to agree are a direct retention from Late Modern English).

I shall thus argue for a reconciliatory approach to the substrate-vs.-retention debate: while the medial-object perfects demonstrably do go back to a source construction present already in older mainstream British English, their perspicuous role in Hiberno-English grammar, including their crucially extended functional range and increased frequency, is very likely due to influence from Irish. This influence, in turn, was operative through a process of a kind that is not restricted to situations of language contact, but which, in this case, was probably triggered and aided by it. We are thus dealing with an instance of contact-induced change in the weak sense of Thomason (2001: 62): a linguistic change which, though not necessarily impossible, would have been less likely to occur if the contact situation had not existed.

The processes in question will be shown to parallel developments that are well documented for perfect constructions in many other languages. In recent work by Heine/Kuteva (2003, 2005, 2006) this kind of process has been studied under the term of “contact-induced grammaticalisation”: a development which, while drawing upon an existing input construction in the receiving language (English), as well as on universally available pathways of linguistic change, was nevertheless helped and triggered crucially by the presence of a functionally and formally related construction in the model language, Irish.
In order to show how this definition can be applied to the case in question, I shall argue that the Hiberno-English medial-object perfects arose neither by means of a direct copying from an Irish source, nor by means of a direct re-organising of the Standard English transitive perfect. The English construction that served as the input to the development of the new medial-object perfects in Hiberno-English was not the existing standard transitive perfect itself, and thus the mechanism involved was not one of a change of word order. Rather, the input was a construction whose word order was already formally identical to the medial-object perfects, and which in Standard English formed a syntactic doublet to the standard perfect: resultative constructions of the type *I have (got) the work finished*, called the “conclusive perfect” by Brinton (1994). By extending the use of this construction, rather than just changing the form of the perfect proper, Irish-English speakers actually *re-invented* a new perfect category out of something else.

I shall present evidence from a preliminary diachronic evaluation of data from a corpus of historical Irish-English texts, indicating that the “conclusive perfect” construction was present in earlier forms of English spoken in Ireland. Among populations of speakers who were switching from Irish to English, apparently during a relatively late stage of the development of Hiberno-English, this construction then went through a process of fairly rapid functional expansion, taking over functions of the standard perfect. This development essentially replicated grammaticalisation processes that had been going on within Irish at the same time (and also quite similar to the much earlier processes that had led to the emergence of the standard perfect in English in the first place). In the end, it effectually resulted in a re-invention of the transitive perfect category in Hiberno-English.

The paper is organised as follows: In section 1, I provide an outline of the theoretical framework of this study, as based in current grammaticalisation research. This will first deal with the relation between universal processes of grammaticalisation on the one hand, and the special conditions of language contact on the other. I then sketch out a model of common, cross-linguistic developmental properties of perfect constructions, to serve as a descriptive background for the discussion that follows. Section 2 provides a comparative characterisation of the perfect constructions found in Standard English on the one hand, and in Irish on the other.
Section 3 then presents the evidence from the corpus of early Hiberno-English writings, first discussed under a qualitative and then under a quantitative perspective. The paper ends with a concluding discussion of how the corpus evidence fits in with the model of contact-influenced grammaticalisation processes as presented in the opening section.

**Grammaticalisation and universals of linguistic change**

**Grammaticalisation under conditions of language contact**

It has long been recognised that tense-aspect constructions tend to evolve along highly recurrent paths (for surveys within the framework of modern grammaticalisation studies, see Bybee/Perkins/Pagliuca 1994, Dahl 2000). During grammaticalisation, a construction moves through a series of semantic-pragmatic use types (a so-called “grammaticalisation chain” in the terms of Heine 1993: 53), where the development of each new use type can be seen as an extension of the older ones, driven by pragmatic factors such as metaphorical extension or conventionalising of conversational implicatures. At any point in time, any single construction may have a range of different functions, corresponding to successive segments in the grammaticalisation chain. This is because the process of extension from one use type to the other is a gradual one and older use types are retained side by side with newer ones. Nevertheless, it is often possible to identify one or a small number of central, prototypical use types (or “focal senses”) for each construction at some points along these continua, and it is also possible to identify stages that are prototypical in a cross-linguistic, comparative sense.

Where grammaticalisation processes occur under the special conditions of language contact, they may take on a special type of dynamics which has recently been studied extensively by Heine/Kuteva (2003, 2005). In their terminology, the development of the Hiberno-English medial-object perfects can be identified as an instance of contact-induced “replica grammaticalisation”. This process is defined in the following way (where M stands for the “model language”, Irish, and R for the “replica language”, English):

(1)  Replica grammaticalization [Heine/Kuteva 2003: 539]

    a. Speakers notice that in language M there is a grammatical category Mx.
b. They create an equivalent category $\text{Rx}$ in language $\text{R}$, using material available in $\text{R}$.

c. To this end, they replicate a grammaticalization process they assume to have taken place in language $\text{M}$, using an analogical formula of the kind $[\text{My} > \text{Mx}] : [\text{Ry} > \text{Rx}]$.

d. They grammaticalize $\text{Ry}$ to $\text{Rx}$.

In this summary definition, certain assumptions are made that are obviously problematic if taken too literally. Nevertheless, I will argue here that the model as a whole can be maintained if the cognitive processes involved are re-stated in a more realistic way. As worded by the authors, the model seems to imply that speakers, as the agents of grammaticalisation, have knowledge of historically prior grammaticalisation processes in the model language: they must have mental access to diachronic processes that they “assume to have taken place”. Moreover, the wording suggests that speakers act in a goal-directed way: they actively bring about a grammaticalisation process “[t]o this end”. Both assumptions, if taken at face value, must certainly be rejected. However, the crucial fact which, as I would argue, may rescue the model as a whole is that diachronic change tends to be mirrored in synchronic functional overlap and ambiguity. Thus, synchronic form-function relationships are often iconically transparent with respect to older use types. Older and newer use types, representing subsequent stages along a grammaticalisation chain, exist side by side in the language. The use types within the chain will be linked to each other by principles of metaphorical and/or metonymical extension of meanings, and synchronic equivalents of these are available to speakers and hearers as conventionalised discourse strategies.

The resulting situation may then be described as a specific form of linguistic motivatedness that makes synchronic states transparent for their underlying diachronic processes. To borrow an expression coined by Kuteva (1994: 79f.) – speaking of emerging auxiliary constructions – it may be characterised as a state of “triadic” iconicity: a transparent relationship between (a) the formal structure of a construction, (b) its semantic source structure, and (c) its semantic target structure. In such a case, the motivating relation between grammaticalisation sources and targets is accessible to speakers, and this motivatedness may in fact provide speakers with the necessary data that makes grammaticalisation chains possible objects of the mental manipulations involved in language change.
Thus, iconic motivatedness will be instrumental in guiding bilingual speakers’ perceptions and expectations regarding grammatical categories in their two languages. As bilingual speakers can perceive functional similarities and correspondences between elements of their two languages, this will influence their discourse strategies in such a way that grammaticalisation processes in one language can be initiated which appear to reduplicate earlier grammaticalisation in the other language. Thus, it is not implausible that grammaticalisation should be sensitive to transfer effects under language contact. The following discussion will serve to substantiate the claim that the development of the Hiberno-English medial-object perfects and their Irish counterpart construction is a likely case in point.

**Grammaticalisation of perfect constructions**

One particularly well-studied set of grammaticalisation paths in the domain of tense and aspect constructions is that of perfect constructions (for a state-of-the art survey, see Lindstedt 2000). Both the English perfect and its principal Irish counterpart, together with many perfect constructions in other European languages, are examples of a common grammaticalisation type. Its developmental possibilities reflect the semantic and structural properties of its grammatical source category, a past participle.

Past participles in Indo-European languages denote a state resulting from a past event. The original syntactic behaviour of the participle in many languages is determined by the fact that the resultant state is predicated of that participant of the action which is construed as bearing the results, the ‘undergoer’ (patient or theme) argument (Shannon 1990). Prototypical ‘undergoers’ are subjects of mutative intransitive verbs (verbs of change of state or location) on the one hand, and objects of transitive verbs on the other hand. With these two groups of verbs, predication of a participle gives rise to two typical periphrastic construction types using a copula: *be* perfects on the one hand, and passives on the other (cf. Jacob 1998).

As a third periphrastic type, used originally with transitive verbs, many languages have developed a construction combining an expression of possession with a secondary predicate on the object, i.e. constructions originally of the type illustrated in (2).
Following Heine (1997), we can call these constructions and their later grammaticalised reflexes “possessive perfects”. They originally have a two-proposition semantic structure, expressing separately that the subject is in control of the object and that the object is in the state denoted by the participle (3). This bipartite semantic structure is iconically mirrored in the two-part syntactic structure, consisting of a matrix clause expressing the possessive relation, and an embedded predication structure containing the participle.

(3) \( \text{HAVE}(x, y) \land P(y) \)

Possessive perfects of this type are known to be an areal feature of European languages (Haspelmath 2001:1495, Heine/Kuteva 2006). While in many languages, like in English, they are formed with the help of a verb meaning \textit{have}, there are several other possible sources that share the same semantic source domain but where possession is syntactically expressed in a different way. This is true for the Irish construction that will form the backdrop for our discussion of possible contact effects on English, the perfect of the type \textit{tá mo dhinneár ite agam}. Its structure and development will be discussed more fully below. Another, similar example is found in certain dialects of Russian, where a perfect is formed based on a locative possessive periphrasis (Heine 1997: 197, quoting Orr 1992: 254):

(4) \[
\text{Um} \text{enja} \quad \text{bylo} \quad \text{telenka} \quad \text{zarnano} \\
\text{at me} \quad \text{was} \quad \text{calf} \quad \text{slaughtered}
\]

‘I have slaughtered a calf.’

Perfect constructions of these and similar types may go through very similar paths of development in grammaticalisation as \textit{have} perfects proper and can therefore be subsumed together with them under the same category of “possessive perfects”.

Several changes in the form and function of such constructions are recurrent across languages and can be seen as typical effects of grammaticalisation. One of them is the functional extension of the perfect constructions to verbs other than the telic verbs which they are first applied to. Typically, both \textit{be} perfects and possessive perfects originate with telic verbs that have prototypical ‘undergoer’ arguments. Other verbs, whose arguments fit the ‘undergoer’
prototype less closely, are later integrated into the system in the course of grammaticalisation. The extension of possessive perfects to intransitive verbs (primarily those that do not closely fit the mutative type characteristic of the *be* perfects) is the source of the phenomenon of split intransitivity, the opposition between so-called unaccusative and unergative verbs among the intransitives (Shannon 1990). A possible further development is the subsequent loss of the *be/have* distinction and the unification of the perfect paradigm with a single auxiliary. This has happened, for instance, in Standard English and in Spanish, while other related languages (including some forms of English) have retained the *be/have* distinction.

Another set of changes relates to the semantic value of the construction. At the outset, constructions of the *have* perfect type have the semantics indicated in (3). Semantic enrichment, through a very common type of pragmatic inferencing, leads to a stage when the construction comes to denote not only that the result state P holds for the object y, but also that this result state was brought about by prior action of the subject x. At this stage, the construction still simultaneously entails that the subject x possesses or is in some other sense in control of the object y. We can call this the stative-possessive use type.

A next step, leading to what we can term a purely resultative or completive construction, occurs when the possessive meaning is lost. *Have* perfects can then be used also in cases where (a) the object of the verbal action is not or no longer in the possession or under the control of the subject, and/or (b) the result state denoted by the construction as a whole is not a state that can be predicated of the object itself. This type of resultative meaning is among the focal senses of the Modern Standard English perfect construction, as illustrated in (5).

(5)  a. I have eaten my dinner
   b. I have lost the book

In both examples in (5), we are dealing not with whatever physical states the dinner or the book are in, as a result of having been eaten or lost. Instead, they imply that some state of affairs, in a more general sense, has been brought about as a result of the completion of the action denoted by the verb (e.g. no longer being hungry, or no longer having the book), and that this state of affairs still holds.
The second principal semantic use type that perfects typically get used for are experiential and existential uses, which denote the occurrence of an event at an unspecified point in the past, as in (6).

(6) I have been to Paris once.

These uses typically imply that the occurrence of the event has some ongoing relevance for the present, but not necessarily that a specific result state brought about by the event still holds. Cross-linguistically, grammatical categories that combine the resultative and the experiential/existential use types among their focal senses can be identified as prototypical perfect constructions, or ‘anteriors’ (Dahl 1985). Another concomitant effect frequently observed in grammaticalisation processes is that the newly developing construction becomes obligatory in its focal use types, whereas in earlier stages of grammaticalisation it was only an optional circumlocution.

In some languages, the development of the semantic use types sketched out here has proceeded in parallel with a set of formal changes that can be interpreted as effects of reanalysis of the formerly two-part, bi-clausal syntactic structure (where have or its equivalents are genuine expressions of possession) to a mono-clausal structure (where have is purely an auxiliary). It is evident that such a development iconically mirrors the semantic development by which the original two-proposition semantic structure (3) gets replaced with a single-proposition reading. Effects that can be connected directly or indirectly to this set of developments are the loss of object agreement on the participle (in Germanic and Romance), and the change of word order from have + object + participle to have + participle + object in English. It is crucial to note that these formal developments do not necessarily coincide exactly with the semantic ones, and that they do not necessarily occur in the same ways and at the same times in all languages. Iconicity plays a part in motivating these formal changes, but it does not necessitate them in any strict sense.
**Perfec**ts in **Engli**sh and **Irish**

Having outlined a general typological framework for the description of perfects and related constructions, we can now turn to a comparison between the relevant constructions in Standard English and Irish.

**Standard English and Settler English**

From the description in section it is evident that, in the sense of Bybee/Perkins/Pagliuca (1994), the perfect in English is a typologically ‘old’ gram, i.e. one that has advanced quite far along its universal grammaticalisation path in many respects. It is used for all verbs with no distinction; it has a unified form common for all verbs (having lost the *be/have* contrast); it is obligatory in many of its uses; its conditions of use are to a large degree sensitive only to temporal semantics and independent of individual semantic properties of each lexical verb.

Compared to the situation in present-day Standard English, the English varieties spoken by the British settlers in Ireland in the 17th and 18th centuries (Settler English) differed in some details, all of which can be characterised by saying that the perfect had not yet progressed quite as far along its typical grammaticalisation path: it still conserved remnants of the formal distinction between the *be* and *have* perfects; and its use – in place of the preterite – was not obligatory in some of the contexts where it is in present-day Standard British English. These conservative properties have been preserved in Irish English dialects to some degree. Nevertheless, the temporal semantics of the perfect in Settler English were, on the whole, quite similar to those in present-day English.

Both in present-day Standard English and in the 17th century settler varieties, as far as they can be reconstructed, the *have* perfect lacks all formal traces of its former two-clause structure, owing to the complete loss of all grammatical properties that gave the participle the status of a secondary predicate dependent on the object NP. At the same time, the *have* perfect stands in a formal opposition to several other, newer constructions that retain just this bi-clausal structure: *have* + object + participle. It is these constructions that, as I will argue further on, provided the input to the later innovative development of the medial-object perfects in Hiberno-English.
Participle constructions with medial-object position occur with several distinct meanings in Modern English. They all can be characterised as “syntactic doublets” of the transitive perfect proper, and of each other:

(7)  

a. She should have the article finished by next Monday.  
b. She had the car repaired by a mechanic.  
c. She had her purse stolen by pickpockets.

The meaning of all these sentences is derived from the original two-clause structure of possession-plus-predication, but in each of them a particular semantic relation between the matrix subject and the event denoted by the participle has been conventionalised and has become part of the semantic value of the construction as a whole (thus constituting separate “constructions” in the technical sense of e.g. Goldberg 1995 and 2006). Possession, or some other type of physical or metaphorical control of the matrix subject over the action or the object of the action, may or may no longer be involved. In (7a) the matrix subject is understood to be agent or instigator of the event denoted by the participle, and the outcome is understood to be something that the agent desires to accomplish. In (7b) the matrix subject is the instigator but not the agent of the event, and in (7c) the matrix subject is the ‘maleficiary’, the person negatively affected by the event.

It is only the first of these three constructions, the one termed the “conclusive perfect” by Brinton (1994), that is of interest to us here. As Brinton shows, there is little or no historical continuity between this construction in Modern English and the older use type of participle-final word order in the perfect construction proper as found in Old and Middle English. The participle-final perfects of Old and Middle English were arguably a natural consequence of the V2 and right-headed-VP (OV) syntax of older stages of Germanic (cf. Pintzuk 1991; Kroch/Taylor 2000), and thus typologically related to the similar word orders found in Modern German. As such, they became gradually obsolescent during Middle English, giving way to the fixed word order have + participle + object that is characteristic of Modern English left-headed-VP (VO) syntax. Occasional instances of medial-object word order with perfects (in the proper sense) found in Early Modern English, which have sometimes been taken as evidence for a
possible continuity with later Irish English (cf Siemund 2004), have been shown by Brinton to be no more than isolated remnants of a long obsolete structure, preserved only in archaising registers such as verse.

Brinton demonstrates that the later medial-object constructions of Modern English were not a direct outgrowth of these obsolescent right-headed-VP structures, but a new development. According to her data, there is a temporal gap between the demise of the right-headed-VP perfects of Middle English and the re-emergence of medial-object constructions in Modern English. The right-headed-VP perfects of Middle English were monoclausal, fully grammaticalised auxiliary structures, with the full semantic range of real perfects/anteriors, and as such not restricted to stative and/or possessive uses. It was only after their disappearance that a new bi-clausal construction, superficially homonymous but quite different in terms of clause structure, became free for a new round of grammaticalisation, drawing on the original structure of possession-plus-predication. This led to the emergence of the “conclusive perfect”. As will be shown in the corpus analysis below, these “conclusive perfects” can be found with moderate frequency in the English used by Irish writers in the 18th century. At that point, they were both formally and semantically distinct from the normal transitive perfect. Yet another innovation happened only later in the development of Hiberno-English: the medial-object constructions extended their function further at the expense of the standard perfect, thus become true (non-stative) perfect constructions of the type “I have my dinner eaten”.

Irish

In comparison with the typologically old system of perfects in English, Irish has a system of perfect constructions that has all the marks of being typologically younger. First and foremost, Irish has not one perfect construction but two: side by side with the possessive participial perfect, which forms the issue of this paper, there is also the so-called after perfect, which is also often discussed in language contact studies but will be described only in passing here. Neither of the two is integrated into the rest of the tense-aspect system nearly as tightly as the English perfect. Moreover, there is considerable dialectal variation in the use of these two forms, indicating that their development has been a matter of fairly recent linguistic change.
following discussion of Irish is based on articles by Greene (1979), Ó Sé (1992, 2004) and Tristram (1995), as well as on the grammars by the Christian Brothers (Bráithre Criostait 1960) and Ó Siadhail (1989).

The *after* perfect is a periphrastic construction consisting of a preposition and a verbal noun as illustrated in (8a). This construction has a certain notoriety in language-contact studies because Irish English has developed a close calque of it (8b), but this is not at issue for the moment (on the mechanisms of contact-induced grammaticalisation involved here, cf. most recently McCafferty 2004, Heine/Kuteva 2003). The construction – formed with a range of different, synonymous prepositions – is attested in Irish since the 15th century (Greene 1979: 125).

(8) a. Tá s é tar éis imeacht
   is he after going
   ‘He has just gone.’

   b. He is after going (‘He has just gone’)

In Modern Irish, the *after* perfect is used primarily to express recent past and therefore is also sometimes called the ‘hot-news’ perfect, just like its Hiberno-English counterpart. According to Greene (1979: 125) and Gagnepain (1963: 266f), it had a somewhat larger range of possible meanings in Early Modern Irish, where – although rare – it could be used more loosely in a completive sense more similar to a Modern English perfect.

(9) an saoghal atá ar n- a dhéanamh ó Dhia

   the world which.is after its making from God
   ‘The world which has been created by God.’
   [F. Conry (1560–1629), quoted by Gagnepain 1963: 266]

A similar situation holds in modern Scots Gaelic. Apparently, the range of uses of this construction was reduced in Irish through the functional competition with the other perfect, the possessive-participial type, which is peculiar to southern Irish and lacking in Scots Gaelic. This second type will form the subject of the rest of this discussion.

The Irish possessive participial perfect (10) consists of a copular verb (traditionally called ‘substantive verb’ in Irish grammar, in distinction to the particle-like ‘copula’ proper), a passive
participle (called ‘verbal adjective’ in Irish grammar, for reasons discussed below), and an
optional agent phrase headed by the locative preposition \textit{ag} (’at’).

\begin{center}
\begin{tabular}{l}
\text{(10)} Tá an litir scriofa agam \\
Is the letter written at me \\
‘I have the letter written / I have written the letter / The letter has been written by me’
\end{tabular}
\end{center}

This construction displays the argument mapping relations of a passive, with the patient
argument coded as the grammatical subject. At the same time, however, it can typologically be
likened to the active \textit{have} perfects in other European languages, as explained above in section .

Irish has no verb corresponding to \textit{have}, and possession is generally expressed by a locative
periphrasis (11a). In this possession construction, the possessed item is encoded as the
grammatical subject and the possessor as an oblique phrase. The same relation applies also to
the possessive perfect construction in (10). It can therefore formally be analysed as the
possession construction expanded by a secondary predicate. It transparently displays the
original bi-clausal structure of possession and secondary predication that is characteristic of
possession-derived perfect constructions. When used without the oblique agent/possessor
phrase, its most natural English translation equivalent is a stative passive (11b) (cf. Noonan
1994).

\begin{center}
\begin{tabular}{l}
\text{(11) a. Tá litir agam} \\
is letter at me \\
‘I have a letter’
\end{tabular}
\end{center}

\begin{center}
\begin{tabular}{l}
\text{b. Tá an litir scriofa} \\
Is the letter written \\
‘The letter is written / has been written’
\end{tabular}
\end{center}

Compared with the Irish \textit{after} perfect, the participial perfect seems to be an even more recent
innovation in the Irish language, being attested only from the 16th or early 17th century
onwards (Ó Sé 2004: 198, 207). Its predecessor in earlier forms of Irish was a purely stative
passive construction, usually lacking the expression of the agent. It is described by Tristram
(1995: 291) as “infrequent and in no way grammaticalised as yet to form an aspectual
paradigm”. Example (12) shows an instance from Old Irish. Ó Sé (2004) argues that the
extension of this pattern to allow expression of an agent was first made with prepositions other than *ag* ‘at’, namely ó ‘of’ and le ‘with’. According to him, it was only in a later, secondary development that the pattern of the possessive construction with *ag* was conflated with that of the participial passive, leading to the present-day structure with its predominantly possessive perfect semantics.

(12) ó ro-bátar ind liss dúntai since was the ramparts closed
‘since the ramparts were closed’
[from Tristram 1995: 291; quoting Mac Eoin 1993]

The participle (or ‘verbal adjective’, in the terminology of Irish grammar) involved in this construction was not originally a freely productive inflectional category available with all verbs. It was originally formed only from that subclass of transitive verbs whose semantics was compatible with a stative reading, i.e. those where the object could be construed as affected by the verbal action and as the carrier of a resulting state. Other transitive verbs with non-affected objects, such as ‘find’ or ‘see’, not only failed to occur in the perfect periphrasis, but also lacked the required word form in the first place (Greene 1979: 130, Ó Sé 1992: 62). Intransitive verbs could not enter in this construction either.

Modern Irish has extended the construction in a number of respects, in ways that are quite typical of grammaticalisation processes of this kind. One important step is the introduction of the (optional) prepositional agent phrase as part of the construction. Another is the increase in the productivity of the pattern across different classes of verbs, going hand in hand with an increase in the productivity of the participle formation as such, which at least in some dialects now seems to have reached the status of a general inflectional category applicable to almost all verbs.

However, there are several properties of both perfect constructions that still mark them as far less strongly grammaticalised than the English perfect. First, their overall textual frequency is much lower. Greene (1979: 123) reports that in a 100,000-word corpus the participial perfect construction was almost 15 times rarer than the use of the simple perfective past tense (with the *after* perfect even rarer, occurring only in one single instance). As a corollary to this, neither of
the two perfect constructions is obligatory in their most typical contexts of use; either can in
principle be replaced with a simple past tense form. According to Ó Sé (1992: 59), there are
only a few types of contexts in which the use of either the past tense or the participial perfect
makes a significant meaning difference.

Moreover, the range of meanings for which the perfect constructions are used differs notably
from that in English. Along the grammaticalisation chain from stative through completive to
anterior use, the Irish participial perfect has progressed far less than the English perfect. Its
central, primary meaning is still the stative use and it is only in the process of being extended
marginally into the domain of a true anterior, for instance by allowing indefinite-past usage
(Greene 1979: 137, 141; Ó Sé 1992: 57). In many instances, it corresponds semantically more to
an English “conclusive perfect” than to a true English perfect.

In addition to their restricted semantic range of use, low overall frequency, and lack of
obligatoriness, both Irish perfect constructions are also sensitive to semantic and syntactic
context factors in a way that is not characteristic of fully grammaticalised categories that are
part of a tightly organised categorial paradigm. For instance, Greene (1979: 129f.) reports that
the Irish after perfect cannot naturally be used in the negative. Similarly, the participial perfect
construction is not typically used when negated with \( \text{ní } \ldots \text{ ariamh} \) (‘never’), even when the
corresponding positive indefinite-past assertion is possible. In a similar vein, Ó Sé (1992: 58)
reports that the perfect is not normally used whenever the agent phrase would have to be moved
away from its normal, topical position in order to be focussed, for instance when it is the focus
of a \( \text{wh}- \) question.

\[
\begin{align*}
\text{(13) } & \text{Cé aige atá sé déanta?} \\
\text{who at.him REL is it done} \\
\text{‘Who has done it?’}
\end{align*}
\]

In the course of the ongoing grammaticalisation of the perfect construction, considerable
differences have emerged across dialects. Very broadly speaking, Irish dialects can be described
in terms of a south-to-north dialect continuum, with Munster (south-western) dialects at the one
end, Connacht at an intermediate position, and Donegal (Ulster) dialects – bordering in many
respects on Scots Gaelic – at the other (Ó Siadhail 1989). Within this continuum, it is
consistently the southern dialects, especially Munster, that show signs of stronger grammaticalisation of the participial perfect construction, whereas Scots Gaelic has grammaticalised the after perfect to a higher degree.

First, the southern dialects have been more progressive regarding the innovation of the optional oblique agent phrase as part of the perfect construction. According to Greene (1979: 131), this innovation did not happen in Scottish Gaelic and has remained marginal in Ulster Irish. Second, overall textual frequencies of the use of the perfect construction seem to be higher in the south than in the north (Ô Sé 1992). As may be expected based on these facts, Munster Irish is also more progressive in its tendency to extend the use of the perfect construction beyond the narrowly resultative (stative or completive) use types. Ô Sé cites occasional examples of experiential uses of the perfect such as (14)

(14) is dócha go bhfuil muarán goidithe agat i gcathamh do shaeil riamh?
   is likely that.is a.lot stolen at.you in.the.course of.your.life yet
   ‘You have probably stolen a lot in the course of your life?’
[Ô Sé 1992: 57]

On the other hand, northern (Donegal) dialects are reported to be more restrictive also with respect to semantic co-occurrence restrictions of the construction, for instance regarding the dispreference for the perfect construction under negation with ‘never’. Sentences of that type, which are relatively rare throughout, are reported to be excluded in Donegal Irish (Ô Sé 1992: 58, citing a judgment by Ô Baoill).

Most notably, the dialects differ as to the productivity of the perfect construction across different verb types. The descriptions agree that Ulster Irish preserves much of the restrictions of earlier stages of Irish. The construction is still limited to transitive verbs, or even more narrowly to transitive verbs with affected patients, barring, for instance, forms like feicthe (‘seen’) or cloiste (‘heard’) (Ô Sé 1992: 62). More southern (Connacht and Munster) varieties have no such restriction within the transitives, and they have also innovated an intransitive version, corresponding typologically to the be perfects of other languages. This construction occurs most readily with prototypical mutative and movement verbs (‘unaccusatives’) such as imithe (‘gone’), tagtha (‘come’), fústa (‘grown’). Unlike in their transitive (passive)
counterparts, the logical subject retains its grammatical subject role when used in this perfect construction (tí mé imithe ‘I am gone’). Southern dialects are also extending the participial perfect to intransitive verbs other than then prototypical mutative ones. There is variation between two ways of doing this (Ó Sé 1992: 48–52). The first is an extension of the basic transitive/passive construction: just like in it, the agent (the logical subject) is expressed as an oblique. The syntactic subject slot remains empty, there being no underlying object available to fill it, resulting in an impersonal construction (15):

(15) Tá scríthe agam chuige
    is    written    at.me    to.him
    ‘I have written to him.’

There is a second, competing pattern, which can be interpreted as an extension of the basic intransitive construction originating with the mutative verbs. Unlike in the former pattern, it is the agent (the logical subject) that takes the syntactic subject role here:

(16) Tá an coilech glaoite
    is    the    cock    crowed
    ‘The cock has crowed.’

According to Ó Sé (1992: 51), the impersonal version in (15) is restricted to Munster, the southwesternmost of the Irish dialect areas and the one that is generally most progressive in terms of the grammaticalisation of the participial perfect construction. The development of these impersonal structures can be seen as a step towards a stage of ‘split intransitivity’ — that is, mutatis mutandis, a development structurally analogous to the extension of have perfects to ‘unergative’ intransitive verbs in other languages. In contrast to this, structures like () are evidence of quite a different strategy. Where this option is predominant, the perfect construction can be described as displaying an overall ergative argument-mapping pattern: transitive objects on the one hand, and all intransitive subjects on the other hand, are treated in the same way, contrasting with transitive subjects (Noonan 1994). In any case, in both dialects the argument mapping patterns for the perfect construction differ considerably from the straightforward nominative-accusative pattern found in the syntax of the finite verb in Irish. Both this fact, and the fact that there is considerable cross-dialectal variation in the applicability of the perfect
construction to different verb classes, can be seen as a further sign that the perfect construction is far less tightly integrated into the basic system of verbal grammatical categories, and hence less grammaticalised, than the perfect in English and other European languages.

**Perfec**{}ts in early Hiberno-English

Having given a sketch of the state of grammaticalisation of perfects and perfect-related constructions in English and Irish, we can now proceed to a discussion of what can be seen about the development of these constructions in the written record of older forms of English in Ireland. This discussion is based on a corpus of historical Irish-English writings. It contains mostly private letters, most of them written in the context of emigration from Ireland to America and Australia. While private letters form the bulk of the material, they are complemented with instances of some other sub-literary text types of a generally similar linguistic nature, such as diary entries, letters written to the authorities by semi-literate writers (for instance petitions for aided emigration, or petitions for the restitution of farm land to evicted tenants); letters from prison; as well as a couple of anonymous threatening letters and documents of secret underground political societies written in the context of the political struggles of the 19th century. In all, in the preliminary form used for this study, the corpus consisted of 415 texts (total 220,879 words) from 167 writers. The texts span a time period from ca.1700 to the early 20th century.

I will analyse, at first qualitatively and then quantitatively, the distribution of medial-object perfects and related constructions and their functions. I shall not, at this point, attempt an exact quantitative account of the effects of competition between the medial-object perfects and the standard perfect. One reason for this is that the corpus texts are probably not completely

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2 Some of this material is available in published collections: Miller et al. (2003), Fitzpatrick (1994), O'Farrell (1984). To the editors of these works I also owe many of the hints for further material, which I was able to collect in the Public Record Office for Northern Ireland (Belfast), the National Library (Dublin), the National Archives (Dublin), the Pennsylvania Historical Society (Philadelphia), the New-York Historical Society, the University of Michigan (Ann Arbor), and several other institutions.

3 I thank Gregory O'Connor, archivist at the National Archives, Dublin, for his invaluable help in identifying many of these sources.
representative of the spoken contact varieties themselves. We must keep in mind that most of
the writers in the corpus were, in a sense, bilingual: not just between Irish and English (which
was probably the case for some but not all of them), but also between their spoken dialects on
the one hand and something approaching Standard English on the other. In writing their letters,
they were obviously attempting, more or less successfully, to emulate what they thought was
Standard English. Thus, if standard perfects occur side by side with medial-object perfects in
these writings, this fact alone may tell us fairly little about how and if standard perfects were
also used in the spoken registers. According to 20th-century sources (Henry 1957, Milroy 1987:
162–163), some forms of spoken Irish English seem no longer to have used the Standard
English word order at all, as the medial-object perfect, together with the simple Present and Past
as well as the be perfects, had completely ousted the Standard English perfect.

Qualitative analysis

The first thing that can be noted in the corpus is the conspicuous absence of the characteristic
Hiberno-English medial-object perfects with non-stative or non-possessive meanings (of the
type I have my dinner eaten) in its earlier parts. What we do find in the texts, however, are
examples of medial-object constructions of the “conclusive perfect” type, the
possessive/resultative use that is also found in Standard English. Towards the younger parts of
the corpus, from about the middle of the 19th century onwards, we find examples that illustrate
the grammaticalisation development from this “conclusive perfect” towards a more general
perfect usage. The following discussion will trace that development.

“Conclusive perfect” constructions originally express that the object is under the control of
the agent, that the state predicated of the object has been brought about through an action of the
subject, and they typically imply that this resultant state is evaluated as a positive
accomplishment desired and attained by the subject. These sentences could alternatively also be
expressed with a get or have got periphrasis in Standard English, and indeed this alternative
construction is also sometimes found in the corpus. These possessive-resultative constructions
are found in writers of all social groups, and during all sub-periods covered in the corpus.
Typical occasions for their use in the corpus letters, in keeping with some of the typical topic
domains covered in them, are the following: getting a house built, i.e. in a state ready for living in (17); getting land prepared for agriculture, i.e. in a state ready for growing crops (18); getting a letter written, i.e. in a state ready for posting it (19).

(17) he Settled there in 8 M° 1800 & bought a Section on which he has a good house nearly finished [Wright02, 1801]

(18) I have about 30 acres ecleerd [CrockJ01, 1822]

(19) When your letter came to hand we had a letter prepared to send to you [Brenna04, 1872]

Note that in example (17), the position and scope of the adverb (nearly) suggests that the participle is actually being treated as the syntactic head of an adjectival phrase, which is quite in keeping with the stative reading. The same is true for (20), another instance of the ‘have a house built’ semantic pattern:

(20) we Have a very nice cottage House all selleld and Papered and painted Inside [PorteR02, 1875]

It should also be noted how in example (19), which is in the past tense, the intended meaning is not simply one of an event – i.e. writing the letter – preceding some other, as is typical of a Standard English past perfect. The writer is speaking specifically about the state of having the letter ready for posting, and then being prevented from actually posting it through some unexpected other event. Exactly the same semantic pattern can be observed in (21):

(21) 1. I had them [i.e. the letters] tied up and directed on the stamps on and went away to the bush that day [McCance08, 1862]

2. your Aunt and cousins had a letter wrote about six months ago. I would not let them send it because they were encouraging you to come out and that was what I did not like [Madill02, 1874]

The above and similar examples represent the use type closest to the original lexical meaning of have, insofar as the direct object denotes a tangible entity that is physically in the possession or under the control of the agent. There are, however, also cases where this is not the case or where the actual state of possession appears not to be a particularly salient aspect of the situation that the utterance describes. Instead, the situation is conceptualised more generally in terms of a

\footnote{For selleld, the intended meaning is probably sealed.}
desirable result state of a previous action accomplished by the agent. These usages may be seen as a first metaphorical extension from the original one, along the typical grammaticalisation path from more concrete to more abstract meanings. It draws upon the conventionalised implicature already inherent in the first type, that the result state is a positive accomplishment brought about intentionally by the agent. Examples (22)a though (22)d further exemplify this use type.

(22) a. as we wish to have a door and floor laid before we go into it
   [WrightH01, 1802]

   b. railways is a little backward at present but they have the lines engineered
   [Armita01, 1908]

   c. At this time I intended going home and had passage agreed to go home
   [McSpaW01, 1861]

   d. I have the promise of two good jobs as soon as I have this finished
   [MearaM02, 1910]

   e. We must feel proud to have things so near squared up [Anon_34, 1882]

While a door or a house floor (as in example 22a) are physical objects that can be possessed, their possession as such is hardly as salient a state as possessing a house is (cf. 17 above). Thus, instead of the state of possession, it is primarily the agent’s success in bringing about the new state that is expressed by these utterances. The examples in (23), all describing the accomplishment of agricultural tasks such as sowing and planting, also belong to this type. This use type is typically associated with actions that require some effort or difficulty, and whose successful completion can therefore be construed as particularly noteworthy.

(23) a. a great many have done sowing, we have our oats sowed & will commence setting potatoes immediately [BrownW07, 1821]

   b. I have also a little of all the flower seeds sowen which you sent but the{y} are not up yet
   [McCanc02, 1858]

   c. We have a good deal of our garden seed sowen and above the ground such as the frost will not Kill. [McCanc02, 1858]

   d. I thought I would have had a good many potatoes planted by this time [Millik02, 1887]
The difference between this type and the former, more prototypically possessive one is not always a clear-cut one. However, we can observe a third step, where the emancipation from the literal source meaning becomes much more obvious. This is in sentences where the agent’s accomplishment consists precisely in giving up possession of the object. Most characteristically this is the case with acts of selling, paying or similar economic activities:

(24) a. they have 150 tons sold for the farmer Bailie, & not a pound made of it  
[BrownW07, 1821]

b. I am shure you have them woods sold before this time  
[MearaM03, 1912]

c. I have one years rent paid on it and has got my licens  
[Madill02, 1874]

While the literal source meaning of have is no longer directly involved in such examples, it they nevertheless still share with the earlier types a measure of iconic motivatedness related to that source meaning. The concept of possession, in these instances, has been extended along the lines of a conceptual metaphor that treats the attainment of an abstract state of affairs as the taking possession of a physical object. Through this conceptual, the construction can still be said to be iconic, in the sense that there is still a one-to-one relation between the formal elements of the construction, notably the element have, and the components of its semantic structure.

In all the use types discussed so far, the element have formally maintains the character of a main verb of possession, rather than being a mere auxiliary. This is shown by the fact that it may occur in environments where perfect auxiliaries are typically excluded, such as imperatives (25):

(25) lose no time in Getting him forward to confession and have him well prepared to receive holy comunion  
[MckayJ01, 1869]

In addition, it may itself combine with a perfect have (26):

(26) I would have had a Cargo of Salt shipped to you a month ago  
[BrownG01, 1819]
It is also the case that use types discussed up to now retain an exclusively stative quality. The participle denotes a state predicated either directly of the object, or of the resulting situation as a whole. In that role and with the same meaning, it could also appear in other predication constructions such as a stative passive. This can be used as a diagnostic test for the stative quality of the medial-object construction: Example (191), here repeated as (27a), implies the stative-passive version (27b):

(27) a. they had the letters tied up  
   b. the letters were (already) tied up

While the examples cited previously would all be perfectly grammatical also in Standard English, instances of medial-object constructions that deviate from this pattern and would at least be stylistically odd in present-day Standard English begin to appear in the corpus data at around the middle of the 19th century. In these examples, the verb may denote a state that does not directly affect the object in a salient way, and is therefore not such a plausible candidate for being predicated on it. At the same time, the sentence may also lack the semantics of successful accomplishment as described above.

(28) a. Bessy had a Bonnet Bought to go and many other things [Fife__03, 1860]  
   b. I have my peace made with God [DalyM_01, 1903]  
   c. I am informed you have Mr. Clark's Estate bought [ForreH01, 1904]  
   d. you have The land bought from which I was Evicted [ForreH02, 1904]

These examples do still have a resultative quality, in the sense that the result of the preceding action is presented as salient for the situation as a whole, particularly with respect to the agent; however, they no longer denote a state predicated specifically of the object.

An expected consequence of the semantic development from the original stative towards a more event-oriented use of the medial-object construction is a loosening of the original bi-clausal structure towards clause union. Formal developments reflecting such a change can indeed be found, though not in the form of a re-ordering of the major clause constituents. Signals for mono-clausal rather than bi-clausal structure can sometimes be found in the placement and scope of elements such as adverbials or negators.
In example (29), there are two adverbial adjuncts: *myself* and *in one*. Of the two adverbials, *myself* can be construed semantically as modifying either the event (‘I myself set them’), in which case it would naturally form part of a mono-clausal eventive perfect, or the state of possession (‘I myself have them’), in which case it would have to belong to the matrix clause of a bi-clausal structure. The other adverbial, *in one*, can be construed as modifying either the event (‘I set the locks in a brooch’), or the resulting state of the locks (‘the locks are set in a brooch’). In the latter case, the adverbial would have to form part of the embedded, predicative part of the biclausal structure. Since the word order excludes the possibility that the first adverbial should belong to the matrix and the second to the embedded clause, the only option is that both belong to the same clause; hence the whole structure must be a mono-clausal structure with a perfect auxiliary and correspondingly an eventive-resultative reading.

Similarly, in example (28a), repeated here as (30), the presence of the adverbial of purpose (*to go*), which semantically modifies the event of buying the bonnet rather than the state of possessing the bonnet, seems to enforce a mono-clausal, perfect reading:

(30) Bessy had a Bonnet Bought to go and many other things [Fife__03, 1860]

Finally, in example (31), the presence of the negation *not ... yet* marked on the matrix (auxiliary) verb seems odd for a stative reading and suggests an event-oriented construal instead; the context would otherwise call for either a Standard English perfect (*we haven’t christened the baby yet*) or possibly a resultative preterite, which would not be uncommon in the dialect either (*we didn’t christen the baby yet*).

(31) As for our baby we have not it Christened yet [Hammon11, 1859]

Other, later examples of the typical Hiberno-English medial-object perfect, with an event-oriented, completive rather than stative reading, include the following:

(32) a. i was shure he had the children cut up in bits with the spade [DalyM_02, 1903]

b. I have the case placed in a Solicitor Hands [TreacD02, 1913]

c. We have it herd on best authority [Anon__62, 1882]
An interesting development parallel to that of the eventive medial-object perfects can be seen in the development, attested somewhat earlier in the corpus, of a medial-object version of the obligatory \( \text{have...to} \) periphrasis. Here too, it may be argued that an originally bi-clausal type in which the verb \( \text{have} \) still functions as a genuine verb of possession, and which is compatible with Standard English (33), apparently gives rise to a generalised use type \( \text{have NP to V} \) (34) which is functionally indistinguishable from the Standard English \( \text{have to V NP} \).

(33) I have the Best of all to tell you yet. [Fife__11, 1875]

(34) a. When you write you may as well direct to me as your father for I have them to release at any rate.
   [Tallon01, 1832]

  b. if they dont do much for me they will be able to do for themselves and I will not have them to Keep
   [McCanc07, 1861]

  c. Where I have the fence to put up is on low ground
   [Millik02, 1887]

  d. hens are as dear as geese as they have them to feed
   [Sloane01, 1892]

  e. you will have a home {,} you will have no more to travel
   [Madill05, 1876]

Summing up, I have demonstrated that texts of Irish-English writers in the 19th century show evidence of two types of medial-object participle constructions, which bear all the marks of being members of a grammaticalisation chain: one that is also found in mainstream Standard English, closer to the source meaning of the verb \( \text{have} \) and to the original meaning of the bi-clausal possession-plus-predication structure; and one whose meaning has abstracted away from the source meaning of \( \text{have} \) and shows formal signs of clause union, and which is characteristic of Hiberno-English. There is much functional overlap between the two and the borderline is by no means always clear-cut. This, again, is just what we would expect from one member of a grammaticalisation chain developing out of another (Heine 1993: 48–53). If it is true that – as I suggested earlier and will go on to demonstrate in more detail in the next section – the second type is a structural innovation that begins to appear in the written record only at about the
mid-19th century, while the first type was previously available as a plausible source category, then the hypothesis is strengthened that we are indeed dealing with an ongoing grammaticalisation process here, a process which in many respect follows standard universal paths as found in the developments of perfects throughout Europe. What is more, we are dealing with a grammaticalisation path that essentially duplicates another that had happened within the same language previously: linguistic consensus has it that the Standard English have perfect must have developed following very much the same route, only centuries earlier. We are thus dealing with the re-invention of a morphosyntactic category – and, strikingly, a morphosyntactic category that we would hardly think was in need of being reinvented, since the Standard English model of the transitive have perfect, fulfilling just the same function, was available to Irish-English speakers at the same time.

If such a reinvention was indeed what was taking place, then the time and place of this development certainly lends some prima facie plausibility to the idea that the English-Irish contact situation was playing some role in it. But we are still left with the question of exactly what this causal role was. Before I return to a final discussion of this issue, I will first provide some further corpus-based evidence regarding the historical locus of the change: I shall argue, in the next section, that the reinvention of the transitive perfect based on the medial-object word order pattern was indeed driven by just those sections of the Irish population who had an immediate background in the Irish language and whose English varieties show strong effects of contact-induced change in many other respects too.

**Quantitative analysis**

Having up to now relied on qualitative analysis of individual examples from the corpus to sketch out a model of how the one type of medial-object construction may have arisen out of the other, I shall now turn to the use of quantitative measures, in order to show that the historical record is consistent with a view that this development is indeed a case of contact-induced grammaticalisation: while it started out from a pre-existing source construction available in mainstream English, and while it proceeded along standard universal paths of
grammaticalisation, it was nevertheless triggered and aided by the contact situation and by structural interference from Irish.

In order to lend support to this scenario, we will have to provide evidence for the following claims: that the medial-object perfects of the genuine Hiberno-English type developed later than the other medial-object constructions; that the first writers to use them in the corpus come from a linguistic background that shows marks of heavy Irish contact influence in other respects too; and that other use types in the domain of tense-aspect constructions that have often also been described as typical of Hiberno-English, namely the be perfects and the use of the preterite instead of the experiential perfect, show a crucially different diachronic and social pattern of distribution. Although many of the quantitative implications of this scenario cannot easily be tested rigorously with statistical methods, owing to small token counts and uneven data distribution, it will be shown that the available evidence nevertheless points in this direction.

The available tokens of medial-object constructions were first classified, following the semantic criteria as discussed in the previous section, as either of the Standard English “conclusive-perfect” type or of the genuine Hiberno-English type (non-possessive and/or non-stative). In addition, token counts for a number of other non-standard grammatical phenomena were collected from the corpus, for use as reference variables. For a first comparison, the following two reference variables from the domain of tense-aspect usage were chosen: use of the preterite instead of the Standard British English present perfect in experiential contexts (e.g. “I never saw a better place in all my life”), and be perfects (e.g. “He is arrived”). Table 2 sums up the resulting evidence in diachronic terms, tabulated across four sub-periods. It indicates that medial-object perfects of the genuine Hiberno-English type are absent from the older parts of the corpus and that they only begin to appear in the written record around the middle of the 19th century, showing a marked increase towards the most recent parts of the corpus, after c.1880.5

[Table 2 here]

5 The significance level for the increase during the last period is <0.001; that for the smaller-than-average token count during the first period is <0.02, using a binomial distribution measure. A χ² test provides a significance value of <0.001 for the whole column, testing the zero hypothesis of equal distribution across all time periods, but this test is unreliable owing to small token counts.
What is noteworthy here, in comparison, is the fairly even distribution of the three reference variables across the time periods. Unlike the genuine medial-object perfects, the reference variables (medial-object constructions of the “conclusive perfect” type, experiential uses of the preterite, and the be perfects) show no clear diachronic trend, except possibly for a decline of the be perfects after 1880. This is consistent with the view that, unlike the medial-object perfects, these use types are inherited from older forms of English and have been taken over into Irish English varieties more or less unchanged.

We can also sum up the distribution of the medial-object perfect attestations across different social groups of writers within the corpus, although, owing to small absolute counts, these figures are again hardly statistically conclusive (Table 3). Of the 16 unambiguous tokens of true medial-object perfects, eleven come from informants originating in the southern provinces of Ireland, while only five are from Ulster. Moreover, ten tokens come from Catholic informants and only three from Protestant informants. (In the remaining three cases, the religious provenance of the writer is unknown, although in at least two of them a Catholic background seems more likely). The comparison with the total word counts, which are fairly evenly distributed across the different groups of informants, shows that these differences in absolute token counts correspond to a similar difference in text frequencies. In short, the data suggest that southern, Catholic writers are overrepresented among the users of the medial-object perfect. This finding is again consistent with the hypothesis of a causal role played by the Irish contact language, because it is exactly in these groups that, on socio-historical grounds, we would expect to find the strongest effects of the contact situation.

[Table 3 here]

The picture can be rounded off if we include more comparative information about the distribution of other grammatical variables that occur in the texts by the same writers. Most of the writers who use medial-object perfects also display other linguistic features that are strongly indicative of Irish substratum effects. Before providing a systematic statistic measure of such
correlation effects, it is instructive to look at the co-occurrences in the production of individual writers. For instance, Mary Daly, the writer of examples (28b, 32a) above, also uses the hot-news after perfect, as well as a type of subordinating and clause (35) – a feature that has been analysed as another likely instance of a grammatical loan from Irish (Häcker 1999, Filppula 1991), and which is not particularly frequent in many other writers in the corpus.

(35) I asked him to let out the children and they crying and they roaring inside

The picture is similar for Philip Mahony, who produces examples like (36):

(36) Johney has it hung up in his own room. [Mahony02, 1887]

Among other features, he also has after perfects; non-use of perfects in ‘extended-now’ situations; non-reflexive (unbound) emphasising use of -self forms (37a) (Filppula 1999: 77–88); as well as a peculiar usage of nominative pronoun forms in the subject positions of non-finite gerund clauses (37b), a feature that I argue elsewhere is also likely to have an Irish contact background.

(37) a. You will no doubt think myself amongst the many friends you have got in Australia very ungrateful for not corresponding with you more regularly. [Mahony02, 1887]

b. Her uncles & aunt was very much dissapointed in She not coming. [Mahony02, 1887]

The picture is similar for Isabella Wyly, the writer of (29) above, and her aunt Elizabeth Wyly. Besides medial-object perfects, they show non-use of perfects in ‘extended-now’ contexts, as well as finite be forms to express habituality. Lilly Doorley, the writer of (38) below, and other members of her family, have ‘extended-now’ presents, subordinating and, habitual do be V-ing, as well as usage of the preterite instead of the perfect in clearly resultative situations where the perfect would not only be preferred but obligatory in most forms of English.

(38) Dear Maria we have you and your husband likeness and baby framed. [Doorle03, 1879]

The situation is similar for Sophia McCormick, the writer of (31) above, and her relatives (cf. Fitzpatrick 1994: 373–387 for the whole family correspondence).

In the latest portions of the corpus, we find occasional tokens of medial-object perfects slipping into the production of writers who, judged by their provenance, are likely to have had a
fairly strong Hiberno-English dialectal background, but who succeed in their writing at maintaining a fairly standard-conforming, formal register in other respects. This goes for David Treacy, the writer of (32b), and for Hannah Forrest (28c–d), both evicted smallholding farmers from Munster.

In order to quantitatively assess the hypothesis that the use of Hiberno-English medial-object perfects correlates with the use of other, presumably contact-influenced, grammatical variables by the same writers, statistical procedures were performed to identify those linguistic features which correlate with each other and which, within the overall range of varieties and registers represented in the corpus, are characteristic of a specifically Hiberno-English, strongly contact-influenced linguistic profile. The statistical measure chosen for this task is only a rough one and fraught with some uncertainties, but it nevertheless provides some useful hints about the structuring of linguistic variation within the corpus. Tokens illustrating each of 40 non-standard grammatical phenomena – in addition to those of the medial-object perfects themselves – were systematically excerpted and tagged from all 162 writers in the corpus. (For the full list of variables used, see Appendix .) Among these reference phenomena were some that are plausible candidates for Irish substrate influence. Others are likely to have the status of archaisms, i.e. features that are generally characteristic of older forms of English, both inside and outside Ireland. Yet others are dialectal features that are known to be widely attested in source dialects outside of Ireland, and hence may be assumed to have been transported to Ireland more or less independently of any Irish substrate influence. Examples include the use of zero-plurals on measurement nouns, zero-marked genitives, and the use of to and from as temporal conjunctions governing subclauses. A matrix representing individual token scores for each informant and each reference phenomenon was derived. Then, pair-wise correlation coefficients were calculated for each pair of phenomena, indicating the degree of similarity in the occurrence patterns of the two variables across all informants. From the resulting similarity matrix, clusters

---

6 To reduce the number of empty cells in the grid, which is due to low overall frequencies of many of the variables involved and to small quantities of text contributed by many informants, some informants with similar profiles and from similar backgrounds, especially members of the same family or local setting, were pooled together for this purpose.
of phenomena that had high correlation values between each other were identified. The most conspicuous of these clusterings was found to include the following phenomena. It will be noticed that this list contains several items that were already encountered in the description of the individual informants above:

(39) a. use of subordinating and;
   b. use of the second person plural pronoun ye;
   c. use of nominative-marked pronoun subjects in non-finite -ing clauses;
   d. use of the preterite instead of a resultative perfect;
   e. use of the present instead of an ‘extended-now’ perfect;
   f. use of obvious phrasal loan constructions from Irish, including ‘hot-news’ after
      perfects; constructions with an animate experiencer argument coded as an oblique;
      or constructions with a preposition plus gerund mirroring similar Irish verbal-noun
      constructions.

It is noteworthy that this cluster contains several variables that have been treated in the literature as prime candidates of Irish contact features (cf. Filppula 1999) – the only exception being the ye-pronouns, which are a regional feature of southern Irish as opposed to Ulster English. The high correlation values indicate that these features tend to co-occur in the same groups of writers, which suggests that at least some of them are likely to have a common historical source.

As a next step, a cluster of informants was identified who showed most affinity with this linguistic profile, having higher-than average token counts for at least several of the reference variables involved. A group of 43 out of the total of 167 informants could be assigned to this cluster. They together were responsible for 165 out of a total of 243 counted tokens of all the relevant variables taken together.

It is important that the difference between this group of writers (called Group A in the following discussion) and the rest of the writers in the corpus is not simply one between writers of non-standard and writers of more standard-conforming registers. To control for this possibility, the distribution of a second cluster of non-standard reference variables was

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7 Some spuriously high correlation values, which were due only to apparently random over-representation of some phenomena in very few individual writers, had to be discounted for this purpose.
investigated for comparison. This cluster of non-standard features, which tended to correlate with each other but not or not strongly with the features of the first cluster, was found just as frequently or even more frequently in writers outside of Group A. It included the following features: zero subject relatives, *this* used as a plural determiner and/or as to head temporal adverbials in the sense of *for* (as in “*I have lived here this three months*’’); object-case strong pronoun forms (*him, her, them, us, me*) in subject function; *them* used as a plural demonstrative; zero-marked genitives, zero-marked plurals; copula drop; *for to* complements; *to* used as a temporal conjunction; redundant use of perfect *have* in *to*- infinitive complements (as in “*I intended to have sent him a present*’’); reduction of perfect *have* (to “of”, “a” or Ø) in infinitive complements after modals (as in “*she would a gone*’’); progressive constructions with an *a*- prefix on the verb; *youse* as a 2nd person plural pronoun. Again, a group of informants (47 individuals) could be identified that had higher-than-average scores for several of these variables but not for those of the first cluster. The remaining informants in the corpus could not be placed in either cluster, be it because they showed relatively little non-standard usage, or because they displayed less marked writing styles involving a mixture of phenomena from both clusters, or their total contribution in terms of text quantity was too low.

The accumulated scores for both clusters of reference variables – those of the typical Hiberno-English cluster (I) and those of the second, dialectal cluster (II) – are shown together with the counts for the tense/aspect-related constructions in Table 4, cross-tabulated against the two groups of informants, A and B. The table shows that the grammatical phenomena of cluster (I) occur with a much increased frequency, almost ten times more frequently on average, in informants of group A compared with group B. In reverse, phenomena of cluster (II) are concentrated, though not quite as strongly, in informants of group B. All of the features in cluster (II) are markers of dialectal, non-standard speech. This indicates that the corpus represents not just a single spectrum of writing styles ranging from dialectal to non-dialectal, but that within it there are different, relatively distinct non-standard linguistic profiles represented, probably based in a range of different non-standard dialects. Not surprisingly, among the informants in group A, writers from the south of Ireland are strongly over-
represented, and those who are from Ulster are almost exclusively rural Catholics. In reverse, Ulster Protestants are dominating among the informants in group B.

What is important for our purposes is that the distribution of medial-object perfects strongly correlates with that of the other variables of cluster (I): informants of group A contributed tokens of medial-object perfects almost 5 times as often (in relation to text size) than those of group B. Also noteworthy is the fact that some of the related phenomena in the domain of tense-aspect constructions seem to pattern quite differently from the medial-object perfects. This is true for the experiential preterite and for the be perfects. Although these have sometimes been discussed in the same breath as the medial-object perfects, and although according to Harris (1984) – as discussed in the beginning – they are supposed to be their systemic counterpart in the tense-aspect system of typical Hiberno-English dialects, their distribution across the corpus is far more even. They are thus much less strongly marked as features of southern/Catholic writing styles than the medial-object perfects. This may strengthen the view that their historical development differs crucially from that of the latter.

[Table 4 here]

As for the over-use of the preterite over the present perfect in comparison with Standard British English, there is only a relatively slight over-representation among Group A as far as the preterite in experiential contexts is concerned. The use of the preterite in resultative contexts, on the other hand, a much more marked deviation from the Standard British pattern, is somewhat more strongly correlated with the Hiberno-English cluster – as mentioned earlier, it was subsumed under the reference variables of cluster (I) and is therefore not shown separately in the table. 10 out of a total of 18 tokens of this variable occur in writers of Group A. The same, not unexpectedly, is true for the one remaining member in Harris’ scheme of Hiberno-English equivalents of the Standard English perfect: the after perfect, the only uncontroversial pure ‘substrate’ feature in this domain. It too was found to pattern together with the Hiberno-English cluster (5 out of a total of 8 tokens occurring in Group A).
Summing up, we can conclude from the quantitative evidence that some, but not all of the typical features of Hiberno-English tense/aspect usage in the domain of the perfect can be linked to one typical linguistic profile within the spectrum of 19th-century Irish-English varieties represented in the corpus. This characteristic profile also includes other markers of non-standard speech which can be ascribed to Irish substrate influence on independent grounds. Thus, the evidence strengthens the hypothesis that Irish substrate influence played a substantial role in the development of these tense/aspect constructions too. The medial-object perfects were shown to belong to the group of features that can be linked to the Irish substrate, as its use was shown to correlate strongly with that of the other Irish-related reference variables. Moreover, they were also shown to be strongly over-represented in Catholic as opposed to Protestant, and in southern as opposed to northern writers. These are just the groups in the population were an immediate Irish influence is historically likely to have been strongest. All in all, we can conclude that the crucial step in the development of the medial-object constructions, the functional extension from the “conclusive” to the truly perfect usage, happened primarily among groups of speakers who were heavily influenced by language contact with Irish. We can also conclude that it seems to have happened at a relatively late date during the development of Hiberno-English, surfacing in the written record only about the mid-19th century. This links it to the period of most rapid language shift, made by large parts of the population at around that time.

Conclusions

It has been shown that the distribution of the different kinds of medial-object constructions in the written record of Irish English varieties bears all the marks of an ongoing grammaticalisation process, leading to the emergence of the characteristic Hiberno-English type of medial-object perfect, more or less functionally equivalent to the Standard English completive and/or indefinite-anterior transitive perfect, at some time during the 19th century. Evidence has also been brought forward to the effect that it was native Irish parts of the population (i.e. those people, mostly Catholics of Irish descent, whose communities had
relatively recently switched, or were still in the process of switching, from Irish to English) that were the principal agents of this development.

We can now turn to the question of what exactly the causative role of language contact was in this development. The aim of this paper has been to demonstrate how the present case was an instance of contact-induced “replica grammaticalisation”, as defined by Heine/Kuteva (2003: 539), repeated here as (40):

(40) Replica grammaticalization

a. Speakers notice that in language M there is a grammatical category Mx.

b. They create an equivalent category Rx in language R, using material available in R.

c. To this end, they replicate a grammaticalization process they assume to have taken place in language M, using an analogical formula of the kind [My > Mx] : [Ry > Rx].

d. They grammaticalize Ry to Rx.

In the present case, the “model language” (M) is Irish, the “replica language” (R) is English. The source gram in the replica language (Ry) is the medial-object “conclusive perfect” in English; the target gram is the Hiberno-English medial-object perfect in its more advanced state. The model gram (Mx/My) in Irish is, if anything, the participial perfect construction of the type tá mo dhinneáir ite agam, which itself exists in a continuum between an original, less grammaticalised (My) and a more advanced, more grammaticalised (Mx) version. The model assumes that bilingual speakers act on the basis of perceived equivalence relations between grammatical categories in their two languages. This equivalence relation was perceived because of the similar core functions of both constructions and because of the shared iconic relationship between this core function and the syntactic form.

We may assume that it was this semantic-syntactic transparency of the medial-object construction, its iconic motivatedness, that was the decisive factor in leading Irish learners of English to seize upon the medial-object construction, rather than the transitive perfect proper, as a perceived functional equivalent of their own, Irish, emergent participial perfect construction. As will be remembered from the discussion in Section 1, the Irish construction in question was still in its early stages of grammaticalisation; its focal sense lay in the domain of the stative-
resultative rather than an indefinite-past reading, and its formal structure bore a strong iconic correspondence to the bi-clausal, possessive-stative source out of which it was only just beginning to emerge. It is quite possible that the development of the Irish construction itself was also influenced by English, in which case we could speak of a mutual influence (cf. Tristram 1995, who speaks of common structural drift within an English-Celtic sprachbund situation.)

Whatever the origins of the Irish structure itself, bilingual Irish/English speakers and Irish learners of English were confronted with two competing English structures that could be conceptualised as structural and functional equivalents of the Irish construction: the standard perfect with its *have V-ed NP* word order, and the “conclusive perfect”, of the type *I have the building finished*. In all forms of native, mainstream English, the first of the two, being grammaticalised to a much higher degree, would have been vastly more frequent in natural speech than the latter. However, it offered only an imperfect match as a functional equivalent of the emergent Irish construction: its semantics were different, and the iconic form-function correspondence was much less transparent. If, then, Irish learners were looking for a construction in English that could fulfil the specific tasks that the Irish participial construction was typically used for, then the medial-object construction, whose formal layout corresponded more closely with the envisaged function, was the more attractive choice. This is why, despite its much lower frequency in the input, this construction type may have been more salient to Irish learners. As a result, Irish speakers would have tended to over-use the English medial-object construction, thus increasing its textual frequency. In contrast, we must assume that the standard form of the perfect was either under-used or acquired less reliably.

Once a certain, critical frequency of use was reached, universal mechanisms of grammaticalisation came into play, which led to the construction gradually extending its domain of use further into the direction of a true perfect. This may well have happened in parallel to the Irish construction itself, which, seems to have been undergoing a similar extension process in some dialects of Irish, quite possibly during the same time.

If this scenario is correct, then we can indeed say that the development of the Hiberno-English medial-object perfect is a case of contact-induced change: not so much because speakers simply transferred a pattern on the basis of some superficial similarity, but rather
because the system of the substrate language was shaping learners’ expectations about what was salient in the target language input and what were prototypical senses of different constructions in the target language.

A. Appendix

A.1 Sources

(Only the sources that are quoted explicitly in the text are listed here.)

Armita01 Michael Armitage, 1908, NAI: 999 617.
BrownA01 Brown (first name unknown), 1820, PRONI: D.3688/F/22.
BrownG01 George Brown, 1819, PRONI: D.3688/F/15.
CarloM01 Martin Carlos, 1906, NAI: Evicted Tenants Files 1013.
DalyM_01 Mary Daly, 1903, NAI: CRF 1902 D.7602.
DalyM_02 Mary Daly, 1903, NAI: CRF 1902 D.7602.
ForreH01 Hannah Forrest, 1904, NAI: Evicted Tenants Files 1101.
ForreH02 Hannah Forrest, 1904, NAI: Evicted Tenants Files 1101.
GaughP01 Patrick Gaughan, 1903, NAI: Evicted Tenants Files 1007.
Madill02 Matthew Madill, 1874, PRONI: T.1488/1-5.
Madill05 Matthew Madill, 1876, PRONI: T.1488/1-5.
Mahony02 Phillip Mahony, 1887, printed in Fitzpatrick (1994: 261-262).
McKayJ01 Jemina Crosby McKay, 1869, PRONI: T.3539/7.
McLeeJ01 John McLees, 1828, PRONI: D.904/2B.
McSpaW01 William McSparren, 1861, PRONI: T.2743/1/1-33.
MearaM02 Martin Meara, 1910, NAI: 999 617.
MearaM03 Martin Meara, 1912, NAI: 999 617.
A.2. Reference phenomena extracted from corpus

<table>
<thead>
<tr>
<th>Feature</th>
<th>Example</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation cluster I: Characteristic of southern Irish/Catholic linguistic profiles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subordinating use of <em>and</em></td>
<td>John came by and he going to the diggings</td>
<td>27</td>
</tr>
<tr>
<td>Nominative subjects in non-finite clauses</td>
<td>After he leaving, they sold the house</td>
<td>22</td>
</tr>
<tr>
<td>Irish loan constructions / calques: human experiencers expressed as obliques</td>
<td>It turned to a fever on him</td>
<td>4</td>
</tr>
<tr>
<td>Irish loan constructions / calques: preposition-plus-gerund periphrases</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>After</em> perfects</td>
<td>The captain is after arriving</td>
<td>8</td>
</tr>
<tr>
<td>“Extended-now” use of present tense</td>
<td>I live here for two years</td>
<td>70</td>
</tr>
<tr>
<td>Second-person plural <em>ye</em></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td>Resultative use of past tense</td>
<td>There’s no rain, all the rivers went dry</td>
<td>18</td>
</tr>
<tr>
<td>Correlation cluster II: Characteristic of Ulster/Protestant linguistic profiles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second-person plural <em>youse</em></td>
<td></td>
<td>46</td>
</tr>
<tr>
<td>Copula drop</td>
<td>It a good thing</td>
<td>21</td>
</tr>
<tr>
<td>Progressive prefix <em>a-</em></td>
<td>It is a-waiting</td>
<td>12</td>
</tr>
<tr>
<td>Zero genitives</td>
<td>His father house</td>
<td>46</td>
</tr>
<tr>
<td>Zero (measurement) plurals</td>
<td>I went for two mile</td>
<td>40</td>
</tr>
<tr>
<td><em>For to</em> infinitives</td>
<td>I went for to see them</td>
<td>13</td>
</tr>
<tr>
<td>Use of <em>me/him/her/us/them</em> as subject-case pronouns</td>
<td>Her and I corresponds regularly</td>
<td>26</td>
</tr>
<tr>
<td>Use of <em>them</em> as demonstrative</td>
<td>You have them woods sold</td>
<td>27</td>
</tr>
<tr>
<td><em>pronoun/determiner</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of <em>this</em> as plural determiner</td>
<td>I write you this few lines</td>
<td>33</td>
</tr>
<tr>
<td>Use of <em>this</em> in temporal adverbials</td>
<td>I have lived here this few months</td>
<td>20</td>
</tr>
<tr>
<td>Use of <em>to</em> as clausal subordinator</td>
<td>I waited to he came</td>
<td>22</td>
</tr>
<tr>
<td>Redundant use of perfect <em>have</em> in infinitive complements</td>
<td>I intended to have sent him a present</td>
<td>13</td>
</tr>
<tr>
<td>Reduction of infinitive perfect <em>have</em> (of, a or Ø)</td>
<td>I thought you would a been married</td>
<td>27</td>
</tr>
</tbody>
</table>
Zero subject relatives
They lost all was in their possession

Other control variables

Free periphrastic do
To you I do address this letter

Neutralised passive progressive
The road has been building

Use of existential there with event verbs
There has an accident happened

Zero subjects
I waited for John, and Ø didn’t come

Finite indicative be
They be often going

Inversion in embedded clause
I’d like to know are all our friends well

Clefting of adverbial or verbal elements
It’s often I have told them that

Use of that/this as local deictics
He lives 60 miles from this

Temporal use of with
I live here with two years

Be perfects
They are arrived

Perflects with definite past-time reference
I have come here last year

Medial-object “conclusive” perfects
They have a house almost built

Full-verb syntax of progressive be
Michael doesn’t be inquiring after me

Experiential use of past tense
I never saw such a sight in my life

Which relatives with human antecedents
I met a friend which I hadn’t seen in years

Relatives with resumptive pronoun
That’s a house that he can’t turn her out of it

Unbound -self forms
He considers himself his friend

Unbound -self forms in coordination
He gave it to John and myself

Obligative have ... to with medial object
They have the work to do

B. References


### Tables

**Table 1.** Coding of six tense-aspect distinctions in StE and HibE

<table>
<thead>
<tr>
<th>StE form</th>
<th>Semantic value</th>
<th>HibE form</th>
</tr>
</thead>
<tbody>
<tr>
<td>preterite</td>
<td>then time</td>
<td>preterite</td>
</tr>
<tr>
<td>perfect</td>
<td>indefinite anterior</td>
<td>after perfect</td>
</tr>
<tr>
<td></td>
<td>hot news</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>resultative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>medial-object perfect (dynamic V)</td>
</tr>
<tr>
<td>present</td>
<td>extended-now time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>now time</td>
<td>extended-now time</td>
</tr>
</tbody>
</table>

**Table 2.** PfMO tokens and wordcounts by period.

<table>
<thead>
<tr>
<th>period</th>
<th>medial-object perfects</th>
<th>“conclusive” MO constructions</th>
<th>experiential preterite</th>
<th>be perfects</th>
<th>word count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1690–1820</td>
<td>–</td>
<td>16</td>
<td>3.0</td>
<td>19</td>
<td>3.4</td>
</tr>
<tr>
<td>1820–1850</td>
<td>2</td>
<td>0.7</td>
<td>9</td>
<td>2.9</td>
<td>22</td>
</tr>
<tr>
<td>1850–1880</td>
<td>4</td>
<td>1.3</td>
<td>16</td>
<td>1.7</td>
<td>46</td>
</tr>
<tr>
<td>1880–1920</td>
<td>10</td>
<td>2.2</td>
<td>10</td>
<td>2.2</td>
<td>22</td>
</tr>
</tbody>
</table>

(Left columns: absolute token counts, right columns: tokens per 10,000 words.)

**Table 3.** Medial-object perfects across social groups

<table>
<thead>
<tr>
<th></th>
<th>medial-object perfects</th>
<th>words</th>
<th>tokens per 10,000 words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catholics</td>
<td>10</td>
<td>89,962</td>
<td>1.1</td>
</tr>
<tr>
<td>Protestants</td>
<td>3</td>
<td>102,543</td>
<td>0.3</td>
</tr>
<tr>
<td>unknown</td>
<td>3</td>
<td>34,711</td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>11</td>
<td>98,251</td>
<td>1.1</td>
</tr>
<tr>
<td>North (Ulster)</td>
<td>5</td>
<td>118,737</td>
<td>0.4</td>
</tr>
<tr>
<td>unknown</td>
<td>–</td>
<td>10,228</td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>16</td>
<td>227,216</td>
<td></td>
</tr>
</tbody>
</table>
Table 4. Token counts of selected groups of phenomena, across two clusters of writers.

<table>
<thead>
<tr>
<th>Phenomena</th>
<th>Informants Group A</th>
<th>Informants Group B</th>
<th>others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N weight*</td>
<td>165 0.80</td>
<td>42 0.09</td>
<td>36 0.11</td>
<td>243</td>
</tr>
<tr>
<td>clustered reference variables (I)</td>
<td>10 0.78</td>
<td>5 0.16</td>
<td>1 0.06</td>
<td>16</td>
</tr>
<tr>
<td>medial-object perfects</td>
<td>37 0.49</td>
<td>47 0.25</td>
<td>25 0.27</td>
<td>109</td>
</tr>
<tr>
<td>experiential preterite</td>
<td>23 0.30</td>
<td>73 0.39</td>
<td>29 0.31</td>
<td>125</td>
</tr>
<tr>
<td>“conclusive” MO constructions</td>
<td>5 0.18</td>
<td>36 0.51</td>
<td>73 0.32</td>
<td>53</td>
</tr>
<tr>
<td>clustered reference variables (II)</td>
<td>40 0.20</td>
<td>310 0.61</td>
<td>37 0.19</td>
<td>383</td>
</tr>
<tr>
<td>word count</td>
<td>46,573</td>
<td>116,777</td>
<td>57,529</td>
<td>220,879</td>
</tr>
<tr>
<td>number of informants</td>
<td>43 0.20</td>
<td>47 0.25</td>
<td>77 0.25</td>
<td>167</td>
</tr>
</tbody>
</table>

* The “weight” measure in this table is a measurement of relative text frequency for each phenomenon in each group of informants, abstracting away from the different overall frequencies of the various phenomena. It is calculated by dividing the token count in each cell by the total token count for that phenomenon, and then by the ratio of total words for that group of informants by the total words in the corpus. Thus, e.g., the figures 0.49 vs. 0.25 in the row for the be perfects indicate that informants of group A contributed roughly twice as many tokens of that phenomenon per 1000 words as informants of group B. For the variable clusters (I) and (II), such weights were first calculated separately for each of the phenomena involved and then their average was taken. This was done to obtain a measurement which, within each cluster, gives equal weight to each phenomenon independently of their different total token counts.