Marked Subjects in Old Finnish
Internal and Contact-Induced Change

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Abstract

In the following article, I argue that syntactic borrowing is not an independent mechanism of change, but based on bilingual reanalysis and extension. As a case sample, I examine a frequent modal construction in Old Finnish, namely that involving the auxiliary pitää ‘must’. Where in Modern Finnish this auxiliary takes a genitive or nominative argument depending on such factors as agentivity and clause transitivity, the argument is object-like in a number of Old Finnish texts. I purport to show that this phenomenon rests on the influence of the Latin model pattern of oportet ‘must’ and its accusative and infinitive construction. At the same time, model patterns internal to Old Finnish, specifically those of participial complements to verbs of perception and communication, where the agent of the participle is syntactically the object of the matrix clause, may also have contributed to this development. I argue that in terms of mechanism, the influence of foreign model patterns (oportet) and internal model patterns (the participial constructions) cannot be distinguished: both proceed by reanalysis and (analytical) extension.

Keywords

language contact – extension – Old Finnish – modal verbs – accusative and infinitive

1 Introduction

In the framework proposed by Harris and Campbell (1995; see also Deutscher, 2001 and Harris, 2003), there are only three mechanisms of syntactic change: reanalysis, whereby a surface form acquires a new underlying syntactic reading; extension, where the new reading is analogically extended to new contexts...
where it forces changes in surface form; and *borrowing*, defined by Harris (2003: 532) as “a mechanism of change in which a replication of the syntactic pattern is incorporated into the borrowing language through the influence of a host pattern found in a contact language”. Of these three mechanisms, the first two have a very long pedigree in historical linguistics, going back to the Neogrammarians, and are widely accepted as two central mechanisms in syntactic change (Langacker, 1977; Timberlake, 1977; Fanego, 2004; Traugott, 2008). Syntactic borrowing, however, is far more controversial. First, many linguists (Silva-Corvalán, 1998: 225–226; King, 2000) regard the transfer of structural patterns from one language to another as a consequence of lexical borrowing. Second, contact-induced structural change has been regarded by such authors as Aikhenvald (2003) or Heine and Kuteva (2003; 2005) as closely linked to grammaticization. Drawing on a wealth of examples, Heine and Kuteva stress that in terms of underlying mechanisms there is no difference between contact-induced and ‘internal’ grammaticization (Heine and Kuteva, 2005: 258). On the other hand, structural or syntactic borrowing is upheld as a mechanism of change in Thomason and Kaufman’s framework (Thomason and Kaufman, 1988: 50), where ‘borrowing’ refers to a transfer of features from a foreign to a native language; it thus contrasts with shift-induced interference (where features are transferred from a native to a foreign language). Thomason (2003: 694) nevertheless stresses the similarity between ‘internal’ and contact-induced processes of change.

The point I am pursuing in this article is that not only can grammaticization be more or less contact-induced (Heine and Kuteva, 2003: 562) but reanalysis and extension can be so as well: syntactic borrowing is not a mechanism of change, but is based on reanalyses and extensions that draw on material from more than one language, carried out by a bilingual speaker (De Smit, 2006: 38–41). This notion has been put forward by Anttila (1989: 170) who stresses that syntactic borrowing is based on analogy between different languages, as well as by Andersen (2006: 70, 72; 2008: 33–34).

Bilingual extensions extend the use of a syntactic pattern in new contexts, where the surface realization of the new pattern is modified. The new pattern just happens to originate from a different language rather than from within the same language, as is the case with monolingual extension. The motivation for both changes lies in analogy: a perception of similarity between the internal relationships of two linguistic structures. I would regard bilingual reanalysis as the establishment of an interlingual identification (Weinreich, 1974: 39–40) or equivalence relation (Heine and Kuteva, 2003: 531; 2005:4) between forms of two different languages that are somehow identified as ‘the same’. Where monolingual reanalysis assigns a potentially new underlying structure to a
given construction, equivalence relations associate a given construction with one from a model language, potentially leading to the extension of its underlying structure to the recipient language. The establishment of such an equivalence relation is analogically motivated – but, as pointed out by Itkonen (2005: 112) and Fischer (2008: 354) this goes for monolingual reanalyses as well.

Contact-induced structural change mirrors also reanalysis and extension in that both tend to establish isomorphism between meaning and form, that is, a ‘one meaning – one form’ relationship (Itkonen, 1978: 61; Anttila, 1989: 177). Analogical extension, for instance, may establish isomorphism between meaning and form through the elimination of allomorphy in paradigmatic leveling (Hock, 2003: 445). With contact-induced structural change, isomorphism between meaning and form is established in that two constructions from different languages that are assigned, in an equivalence relation, the same underlying syntactic structure come to resemble each other in surface form as well. In the long term, contact-induced structural change can thus lead to the profound restructuring of one language on the model of another, to the extent that the relationship between them becomes wholly isomorphic – in that the two languages seem to share a single syntactic base into which differing sets of lexical items can be ‘inserted’. The classical example of this situation is that of the multilingual Indian village of Kupwar (Thomason and Kaufman, 1988: 86–88); the process is dubbed metatypy by Ross (2007).

The same mechanisms may be said to underly lexical borrowing: an equivalence relation is established between two lexical items on the basis of semantic similarity but possibly also phonological similarity (Campbell, 1987: 263; Aikhenvald, 2003: 2), extensions may then proceed through the import of a new phonological surface form for a given meaning (lexical borrowing), the semantic restructuring of one term after a foreign model (semantic borrowing), etc. The difference is that the class of phonological surface forms, and of meanings, is largely open, with the exception of some more or less paradigmatic, closed semantic fields (such as body-parts, family members, etc.), which are generally regarded as more resistant to borrowing. Grammar, however, is closed and analogical: any change will not be merely additive, but force a reinterpretation and restructuring of what is already there. This means that the distinction between ‘internal’ and ‘external’ mechanisms of change is much harder to draw with contact-induced grammatical change than it is with lexical borrowing.

The reason linguists have nonetheless often drawn that distinction lies, I believe, in the fact that there is a graded scale according to which lexical items and overt morphemes may be likely or unlikely to be borrowed: paradigmatic semantic fields (body-parts, family members) may be more resistant to
borrowing; bound morphemes are very rarely borrowed. There are exceptions (such as the fact that many Finnic female kinship terms are often borrowed from Baltic or Germanic sources) which may have specific historical explanations (such as, possibly, exogamic practices among prehistoric Finnic tribes) (Laakso, 2014). This is of great interest to comparative linguists as it helps them tease out inherited vocabulary from loanword layers. Attempts to place contact-induced grammatical change in this graded scale, however, have resulted in completely opposite statements: syntax is considered as highly likely to be borrowed by Birnbaum (1984: 34) whereas McMahon (1994: 209) regards it as more impervious to borrowing than lexicon, phonology and morphology. This reflects the diversity of our empirical material: we find, on the one hand, languages which appear to strongly resist lexical borrowing but which undergo deep-going contact-induced grammatical change, such as Tariana studied by Aikhenvald (2003: 4–7); at the other extreme there is Bai, a possible case of a Tibeto-Burman language in which massive lexical borrowing from Chinese has almost obscured its genetic inheritance (Yeon-Ju and Sagart, 2008: 379).

Rather than being statable in some absolute sense, the likelihood of contact-induced change in grammar appears to strongly dependent on the specific social situation, involving speakers’ attitudes. Thus in a situation of stable multilingualism in which vocabulary is taken to be a marker of a speaker’s ethnic identity, contact-induced syntactic change is more likely to happen than lexical borrowing, as the resultant structural isomorphism between languages may facilitate communication (McMahon, 1994: 213–214) while leaving the lexicon, a salient marker of speaker identity, untouched. Situations in which code-switching is socially acceptable or even prestigious, on the other hand, may lead to lexical borrowing and in some cases, where code-switching becomes a marker of a mixed ethnic identity, to the emergence of mixed languages (Auer, 1999).

In this article, I will be dealing with a case of contact-induced grammatical change in an emergent literary language of the reformation period, namely Old Finnish from the 16th and 17th century. The motivations of the writers of Old Finnish would lead them to simultaneously to resist, to some extent at least, lexical borrowing, as their purpose was to translate key legal and religious texts into a language reflecting that of the people, and to adapt their grammar to Latin and Old Swedish models, since both the translation of religious texts from Latin, and legal texts from Old Swedish, would, in the religious and political context of that time, needed to be precise (Häkkinen, 1994: 472). The specific phenomenon I will be dealing with is that of the case-marking of the argument of the necessive auxiliary pitää. I argue that what we find in Old Finnish is a competing between two case-marking patterns. In one of these patterns, found mainly in later (seventeenth and eighteenth-century texts)
we see an alternation between genitive –n and nominative -o which appears to reflect the division currently found in Finnish dialects: the genitive designates an agent to which deontic pressure can be applied, the nominative an involuntary (often inanimate) participant in the situation. In the other pattern, however, genitive and nominative alternate in the same way that the two phonological endings (-n and -o) do in the case-marking pattern for the Finnish singular total object. I argue that this case-marking pattern is motivated by analogies with both internal and external models. More specifically, a case-marking pattern found elsewhere in Old Finnish with certain participial constructions is extended to that of the argument of the necessive auxiliary pitää through the intervening model of Latin accusative and infinitive. In concluding, I will argue that this complex contact-induced change serves as the input for a long-term process of grammaticization.

2 Necessive Constructions in Modern Finnish

Necessive constructions in Standard Finnish involve a unipersonal modal auxiliary (such as pitää, täytyy and tulee, as well as a number of others, all meaning ‘must, ought to’) with a genitive or nominative-marked argument. The choice of argument case is based on the infinitival complement: for most transitive and intransitive infinitival complements, the argument appears in the genitive case (1 and 2), with the object of the infinitival complement appearing unmarked as in (2):

(1) Isännä-n pitää olla talo-ssa
    landlord-gen must be house-in
    ‘The landlord is to be in the house’

1 Traditional Finnish grammar speaks of a marked accusative (-n, and -t with personal pronouns) and an unmarked accusative (-o). The first of these is identical to the genitive marker though historically distinct, the second to the nominative. The most recent Finnish reference grammar (Hakulinen et al., 2004 §1226) has opted to use the term ‘genitive’ for the traditional marked accusative -n, but to retain it with the -t for personal pronouns. In this paper, I will compromise by using the term ‘accusative’ for the marked accusative only. The reason is that it allows us to retain a distinction between the, largely, adnominal genitive and the object marker -n, as well as that it allows for slightly more clarity in glossing.

2 The object in Finnish may be marked with the partitive (-tA) with the accusative (-n or -t with personal pronouns), or with the nominative. The partitive is used for a variety of cases, all of which are characterized by reduced transitivity: atelic verbs, verbs of emotion such as
rakastaa ‘love’, pelätä ‘fear’, objects that are quantitatively indefinite and negated clauses.

In the remaining cases, plural objects are always marked by the nominative; singular objects may be marked with -n in most transitive clauses, but with the nominative in certain constructions which can be synchronically characterized by the fact that no nominative subject may occur there – imperative clauses, the non-promotional passive, and necessive clauses with genitive subjects. In personal pronoun objects the alternation between -n and -t does not occur, but these are invariably marked with -t in Standard Finnish and East Finnish dialects. In West Finnish dialects as well as in Old Finnish, personal pronouns behave like full nouns in terms of object case-marking and show an alternation of -n and -o on the same conditions as full nouns.
This picture is complicated somewhat by a tendency for the nominative to be generalized, with or without co-occurring agreement markers on the necessive auxiliary, in some dialects bordering on Swedish-speaking areas; these include the eastern Southwest dialects, the southernmost Hämé dialects, and the varieties of Finnish spoken in the Tornedal valley in Sweden. Foreign model patterns have plausibly contributed to the generalization of nominative case-marking (Saukkonen, 1965: 123; Wande, 1982: 62; Laitinen, 1992: 42, 50).

An example from Tuusula, Uusimaa involving necessive täytyy, mentioned by T. Itkonen (1974: 392):

(5) *E-m miä *ymmärrä-m miikä minu-n on ku miä täyry-n aina itkee*

NEG-1SG I[NOM] understand-1SG what[NOM] I-GEN is as I[NOM] must-1SG always cry

‘I don’t know what’s wrong with me as I always have to cry.’ (Tuusula dialect)

The syntactic analysis of the main argument of pitää is a matter of controversy. The most recent reference grammar of Finnish regards the argument as the subject of the auxiliary (Hakulinen et al., 2004 §921), but it has traditionally been analyzed as an adverbial modifier of the infinitival complement (Sands and Campbell, 2001: 273–274), and is considered to have historically developed from such (Laitinen, 1992: 117–119). As a matter of fact, both analyses appear to influence case-marking patterns in Finnish dialects. Necessive auxiliaries agreeing with their nominative arguments, as in (5) above, suggest an underlying analysis as subject while on the other hand the argument may be replaced in some dialects with a possessive suffix on the infinitive, suggesting an underlying analysis as modifier of the infinitival complement (Saukkonen, 1965: 125):

(6) *pit-i mene-mä-ni kirko-lle*

must-IPF go-*mA*-INST-my church-to

‘I had to go to church.’ (Kuru dialect)

Example (6) exemplifies another area of variation: the infinitival complement is an instructive form of the -*mA* infinitive menemä-*n*. The nominalizing suffix involved, -*mA*, occurs in Finnish infinitives marked with local cases, but also as a kind of passive participle and widely as a derivational suffix in deverbal nouns, where it has resultative meaning (e.g. purema *bite*, pure-*‘to bite’*) (Hakulinen, 1979: 197–198) and denominal nouns, where it is locative

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3 This creates an acute problem of terminology. I will, in this article, opt for calling it the "argument" of pitää, even though on one analysis it is rather a modifier of the infinitival complement.
Saukkonen (1965: 112, 131) regards the usage of passive infinitives (which are fairly marginal in Modern Finnish) as conditioned by Swedish or German influence. It occurs as a participial suffix in a number of Uralic languages (Häkkinen, 1993: 133–135), and this usage may go back to Uralic times, though it must have originally been neutral to voice, as it still is in the Permic languages (Leinonen, 2000: 421–422). In Finnish dialects the instructive menemän is nowadays a rare form, restricted to the Southwest dialects (Ikola, Palomäki and Koitto, 1989: 357) and occurring only with the auxiliary pitää. In Old Finnish, however, pitää occurs almost exclusively with the -mA infinitive. The pitää menemän construction of Old Finnish (and, marginally, modern Southwest dialects) and the pitää mennä construction of modern Standard and dialectal Finnish may originally have been associated with different patterns of argument marking: Saukkonen (1965: 130) argues that the pitää menemän construction originally took a nominative subject and a marked object, unlike the pitää mennä construction with its genitive argument and unmarked object. This should be kept in mind in drawing any comparisons between the Old Finnish material and the situation in Modern Finnish.

3 Necessive Constructions in Old Finnish

In this article I restrict the discussion to one particular necessive construction: the pitää menemän construction in Old Finnish (i.e., the written language from the 1540s to 1809). There are two reasons for this. The first is that necessive constructions with pitää are frequent enough in Old Finnish texts to enable statistical generalizations, whereas other necessive auxiliaries, such as tulee and täytyy, occur far more rarely. There are for example over a thousand occurrences of pitää in Agricola’s New Testament translation from 1548, but necessive tulee occurs only a little over fifty times, and other constructions even more rarely. The reason behind the overwhelming frequency of pitää is that – due to its strong equivalence relations with foreign models and particularly with Swedish ska – it functions as a future auxiliary on a par with its deontic usage (Ikola, 1949: 199–205; De Smit, 2006: 119–120). The other reason is that the construction involving pitää has syntactic properties that differ from other necessive constructions: for example, pitää has a significant number of nominative arguments and may combine with passive infinitival complements whereas necessive tulee has a much higher proportion of genitive-marked arguments and occurs much more rarely with passive infinitival complements (De Smit, 2006: 133–136). There is thus not one abstract necessive construction in Old Finnish, but a

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4 Saukkonen (1965: 112, 131) regards the usage of passive infinitives (which are fairly marginal in Modern Finnish) as conditioned by Swedish or German influence.
number of lexically specific necessive constructions with their own patterns of argument case-marking, and probably their own historical origins.

The usage of *pitää* as a future auxiliary has been studied in detail by Ikola (1949: 163–205). Ikola (1949: 204) regards this usage as based primarily on the example of the Swedish future auxiliary *ska*, with some support from German models (*soll*) as well. In the Bible translation from 1642, necessivity and futurity are partially merged in that *pitää* does not appear as a future auxiliary if the activity expressed by the infinitival complement is wholly voluntary (Ikola, 1949: 176–177); this restriction, however, does not occur with an earlier writer such as Agricola (Ikola, 1949: 184). Obviously, the usage of *pitää* as a future auxiliary could be relevant to the case-marking of its argument in that the semantic and pragmatic distinctions that govern case-marking in Finnish dialects (with the genitive -n primarily signifying a speech act participant at whom deontic pressure is directed) cannot apply to it. Forsman-Svensson (1992: 56–57) indeed mentions that future constructions tend to support nominative case-marking and necessive constructions genitive case-marking. In the following, I will indicate one way in which this usage has, I believe, been relevant.

3.1 Agentivity-Based Case-Marking in Old Finnish

In a number of texts, the distribution of genitive and nominative arguments appears to straightforwardly reflect a transitivity- and agentivity-based split of the same type that is encountered in Finnish dialects. As an example, I will present data from the 1688 Finnish translation of the Swedish Church Law (*Kyrkio-Lag och Ordning*, 1686) by Henrik Florinus, *Kircko-Laki Ja Ordningi*, hence *KLO*. The distribution of case-markers found in the *KLO* is by and large similar to that of other, later legal texts, such as the 1648 Land and City Law translations by Abraham Kollanius, and the 1759 Finnish translation of the Swedish law of 1734 (De Smit, 2006: 141–147).

As Table 1 shows, argument case-marking differs according to the voice of the infinitival complement: with active infinitival complements genitive case-marking is more common, but with passive infinitival complements the patient argument, which could well be an object, is most often left unmarked.

<table>
<thead>
<tr>
<th>Active inf.</th>
<th>Genitive -n</th>
<th>Nominative</th>
<th>Partitive -tA</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>270</td>
<td>95</td>
<td>3</td>
<td></td>
<td></td>
<td>368</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Passive inf.</th>
<th>Genitive -n</th>
<th>Nominative</th>
<th>Partitive -tA</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>174</td>
<td>64</td>
<td>6</td>
<td></td>
<td>247</td>
</tr>
</tbody>
</table>
Some examples:

(7) _jo-n-qa_ pità _ilman_ wijytys-tä ylösottaman ja päättämän _Asia-n_  
who-gen-[KA] must without delay-part take up and decide matter-acc  
‘Who must take up the matter and decide it without delay’ (p. 66)

(8) _Cuca_ pità _edescatzoman ne_ Lapse-t  
who[nom] must look after those[nom.pl] child-nom.pl  
‘who is to look after those children’ (p. 21)

Examples (7) and (8) are both transitive clauses: (7) with a genitive, (8) with a nominative argument. Note that the singular object in (7) is marked rather than unmarked; this is completely in line with the general situation in West Finnish dialects (Laitinen, 1992: 74). The plural object in (8) is in the nominative plural; there is no plural accusative in Finnish.

(9) _Pitkäperjantai_ pità _nijn hywin Maa-lla cuin Caupunge-i-sa pyhite-ttämän_  
Good Friday [nom] must just as well country-on as city-pl-in sanctify-pass  
‘Good Friday must be sanctified in the country as well as in the cities.’ (p. 6)

Example (9) exemplifies a neccessive construction with a passive infinitival complement. The argument _pitkäperjantai_ is unmarked: genitive marking with passive constructions occurs very rarely. The syntactic analysis of this argument is highly problematic: in _KLO_ , the lack of genitive marking and the prevalence of partitive marking suggests it is in fact the object of a subjectless clause. However, in some Old Finnish texts, such as the earliest legal texts, the case-marking patterns of arguments in active and passive neccessive clauses are very similar (De Smit, 2006: 135–136). Furthermore, the passive in Old Finnish combines promotional and non-promotional features (De Smit, 2006: 97–102). Also, the prevalence of nominative arguments in passive neccessive constructions is completely to be expected if the genitive -n is (as it is in Finnish dialects) a marker of agentivity. With a passive construction, the argument is typically a patient: the agent of the action expressed in the infinitival complement is either not expressed, as in (9), or is expressed with an oblique NP, as in (10):

(10) _Caicki täydellisesti Mailma-an syndye-et ja eläwä-t_  
all[nom] completely world-to born-nom.pl and living-nom.pl
Table 2 plots genitive- and nominative-marked arguments and the presence/absence of an object. The correlation is very clear: the vast majority of nominative-marked arguments occur in objectless clauses.

| Argument case-marking and the presence of an object with active constructions in KLO. |
|---------------------------------------------|----------------|-|----------------|
|                                           | Object | No object | Total |
| Genitive argument                          | 182    | 88        | 270   |
| Nominative argument                        | 17     | 78        | 95    |

This picture is reinforced when argument case-marking is plotted against transitivity: genitive-marked arguments form an overwhelming majority with transitive infinitival complements; nominative and partitive arguments occur primarily with intransitive and existential infinitival complements.

| Argument case-marking and transitivity with active constructions in KLO. |
|---------------------------------------------------------------|----------------|----------------|----------------|
|                                                               | Transitive | Intransitive | Existential |
| Genitive argument                                             | 204        | 65            | 1             |
| Nominative argument                                           | 18         | 51            | 26            |
| Partitive argument                                            | 0          | 1             | 2             |

Finally, when we plot argument case-marking against lexical category and number, as in Table 4, we find that personal pronouns occur with the genitive relatively more often than other noun phrases - which is to be expected if case-marking is based on transitivity and agentivity. Otherwise, no clear relationship between case-marking and lexical category or number can be seen. In the table below, relative pronouns, quantifiers and the like were not taken into account, as they were too few in number to allow for quantitative generalization:

Lapse-t pitä Wanhim-m-t-lad-ns pyhä-än Caste-seen toimite-ttaman
child- must parent-pl-from-their holy-to baptism-to bring-PASS
NOM.PL

‘All healthily born and living children must be brought to holy baptism by their parents.’ (p. 8)
Table 4 depicts arguments with active infinitival complements only; with passive infinitival complements, personal pronouns are unmarked, as in (11). This notably allows for its interpretation as an objects, as personal pronouns may be unmarked as objects of passives in Old Finnish and contemporary Finnish dialects (Lehtinen, 1985: 271):

\[ (11) \text{nijn hän pitä Kirckoherra-lda ensimäise-n kerra-n oje-ttaman ja mana-ttaman} \]
\[ \text{thus he[NOM] must pastor-from first-ACC time-ACC chastise-PASS and admonish-PASS} \]
\[ \text{‘Thus, for the first time, he must be chastised and admonished by the pastor.’ (p. 67)} \]

On the whole, argument case-marking in the KLO thus reflects what we would expect on the basis of the agentivity-based case-marking system of dialectal Finnish. Typically agentive arguments, such as personal pronouns, underlying subjects of transitive verbs and so forth appear marked with the genitive, whereas non-agentive arguments, such as those of existential and possessive constructions but also the object-like arguments of \text{pitää} and passive infinitival complements, are marked with the nominative.

3.2 Accusative-Like Case-Marking in Old Finnish

3.2.1 Material

The system sketched above is encountered, aside from the KLO, in other legal texts, such as Kollanius’ 1648 legal translations and the 1759 translation of the Swedish law (De Smit, 2006: 141–147). In some earlier Old Finnish texts, however, a very different system can be found. These texts include early legal translations, such as Martti’s Land Law from c. 1580, and Ljungo’s Land and City Law translations, from 1601 and 1609 respectively (De Smit, 2005, 2006). They also include certain religious texts, discussed in the following. These comprise, first of all, three longer texts: 1) Agricola’s New Testament, \text{Se Wsi Testamenti} (hence \text{WT}) from 1548, 2) Eric \text{Sorolainen’s sermon collection Postilla} from 1621 and 1625 (hence \text{S}; what is analyzed here is an excerpt, namely
the first 700 pages of the Part 2), and 3) the New Testament portion of the first complete Finnish Bible translation, *Biblia*, from 1642 (hence B).

In addition, four briefer texts have also been taken into consideration. The first is Agricola’s brief *ABC-kiria* (1543–1544), consisting of an ABC and some key catechetical texts, and the larger *Rucouskiria* (1544) or Prayer Book (consisting, aside from prayers, of translated excerpts from both Testaments), which together form Part 1 of Agricola’s collected works (hence RK). The second is the so-called Westh text (hence WESTH), a liturgical text possibly from the 1540s named after its first known owner, Matias Westh. The third is the so-called Uppsala Gospel Book fragment (*UGB*), a brief (24-page) fragment of a liturgical text, probably dating from the 1540s as well. The fourth is the so-called Uppsala codex B28 (hence B28), a similar-sized fragment of a liturgical text thought to stem from the 1550s. The last two of these are very brief and offer little ground for statistical generalizations. *UGB* has been included because, like WESTH, it exhibits accusative-marked (-t) personal pronouns as necessive arguments, B28 because it is similar in size to *UGB* and similar in subject matter to *UGB* and WESTH. In the following tables, these four texts are combined as EARLY.

The three longer texts, WT, S and B, are interrelated: Agricola’s oeuvre consists, along with the printed 1548 New Testament, of individual books and sections of the Old Testament, but he did not succeed in producing a complete Bible translation. A committee dedicated to producing such a translation, under the direction of Eric Sorolainen – like Agricola Bishop of Turku – likewise failed in its mission. Sorolainen’s two-part *Postilla* contains gospel excerpts as well as sermons: the gospel translations appear to be based on Agricola’s WT, but are not identical with it. Sorolainen may have had a manuscript translation at his avail, which in turn may have been the work of the first Bible Committee. The 1642 Bible, finally, was the work of a second committee of translators, directed first by Isaac Rothovius, Bishop of Turku, then by the theologian Eskil Petraeus. Like Sorolainen’s *Postilla*, the *Biblia* is marked by a much more consistent orthography than that of Agricola’s works: the translators also attempted to remove some of Agricola’s more conspicuous foreign-model-based constructions, such as prefixated verbs.

The interrelationships between the four shorter texts combined here in EARLY are complex and partly unknown. Part of B28 is similar to WESTH, another part to one of Agricola’s other works, the handbook *Käsikiria* (Nikkilä, 1980: 49; 1985: 60). According to Penttilä (1932: 18), B28 and WESTH may both be based on an earlier source text, possibly the Swedish Church agenda from 1537 in its printed form from 1541; Agricola’s *Käsikiria* may be based on a 1548 edition of the same text (Nikkilä, 1985: 61).
On the linguistic background of the writers and texts involved, the following can be said: Agricola’s place of birth, Pernaja in Eastern Uusimaa, sits right on the boundary of the Swedish-speaking areas of Uusimaa and the Finnish-speaking areas to the east. Some linguistic peculiarities of Agricola’s works have led Ojansuu (1999) to conclude that his mother tongue was Swedish rather than Finnish. It is likely, however, that he was bilingual, as well as demonstrably competent in the other literary languages of his time, such as German, Latin and Greek (the relationship between Agricola’s wt and its source texts is discussed in detail by Itkonen-Kaila (1997)). In terms of its dialectal basis, Agricola’s wt exhibits both East and West Finnish forms: the accusative of personal pronouns may occur both as an East Finnish -t and as a West Finnish -n. Sorolainen was born in Laitila, in the Southwest dialect area, and this is reflected for example in the lack of distinction between adessive -lla and allative -lle cases in the Postilla (De Smit, 2011). Obviously, Sorolainen was competent in the classical languages, and the Postilla is brimming with quotes from Latin and Greek writers. Otherwise, German texts played an important role as models for the Postilla (Kouri, 1984). In general, the two later texts reflect a stronger orientation towards Turku and the West Finnish dialects. Of ugb, B28 and westh the authors are unknown.

3.2.2 Distribution of Case-Markers

Table 5 depicts the general distribution of case-markers with active and passive necessive constructions:

It is apparent from the table that, with the exception of B, nominative arguments are somewhat more common with active infinitival complements than in klo. As for EARLY, in rk nominative and genitive arguments are about equally common, but in westh genitive arguments are vastly more common. While genitive arguments occur somewhat more commonly with passive infinitival complements than in klo, nominative arguments are still much more common. As I show below, however, the apparent similarity to klo in this regard is misleading.

Table 6 plots case-marking and the presence of an object in the three texts. As in klo, there is a clear correlation in the three larger texts: nominative case-marking occurs most often in clauses without an object. The correlation is somewhat less strong, however, than in klo, where only a small number of nominative-marked arguments co-occur with objects; in the texts studied here, this is the case for about half the nominative-arguments with wt and S, and about a third with B. No such correlation can be found in EARLY: westh and rk show no statistically significant correlation between case-marking and
### Table 5  Distribution of case-markers in the religious texts.

<table>
<thead>
<tr>
<th></th>
<th>Active</th>
<th>Genitive -(n)</th>
<th>Pronominal accusative -(t)</th>
<th>Nominative -(o, t)</th>
<th>Partitive -(tA)</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY</td>
<td>354</td>
<td>17</td>
<td>146</td>
<td>7</td>
<td>23</td>
<td>536</td>
<td></td>
</tr>
<tr>
<td>wt</td>
<td>661</td>
<td>–</td>
<td>316</td>
<td>11</td>
<td>42</td>
<td>1030</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>746</td>
<td>–</td>
<td>403</td>
<td>14</td>
<td>20</td>
<td>1183</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>558</td>
<td>–</td>
<td>202</td>
<td>12</td>
<td>27</td>
<td>796</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Passive</th>
<th>Genitive -(n)</th>
<th>Pronominal accusative -(t)</th>
<th>Nominative -(o, t)</th>
<th>Partitive -(tA)</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY</td>
<td>9</td>
<td>–</td>
<td>32</td>
<td>6</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>wt</td>
<td>35</td>
<td>–</td>
<td>127</td>
<td>7</td>
<td>–</td>
<td>169</td>
</tr>
<tr>
<td>S</td>
<td>18</td>
<td>–</td>
<td>56</td>
<td>11</td>
<td>9</td>
<td>94</td>
</tr>
<tr>
<td>B</td>
<td>11</td>
<td>–</td>
<td>108</td>
<td>46</td>
<td>.</td>
<td>165</td>
</tr>
</tbody>
</table>

### Table 6  Argument case-marking and the presence of an object in the religious texts, active infinitives.

<table>
<thead>
<tr>
<th></th>
<th>Object</th>
<th>No object</th>
<th>Significant at p &lt; 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY</td>
<td>Genitive argument</td>
<td>159</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td>Nominative argument</td>
<td>54</td>
<td>92</td>
</tr>
<tr>
<td>wt</td>
<td>Genitive argument</td>
<td>304</td>
<td>357</td>
</tr>
<tr>
<td></td>
<td>Nominative argument</td>
<td>99</td>
<td>217</td>
</tr>
<tr>
<td>S</td>
<td>Genitive argument</td>
<td>427</td>
<td>319</td>
</tr>
<tr>
<td></td>
<td>Nominative argument</td>
<td>138</td>
<td>265</td>
</tr>
<tr>
<td>B</td>
<td>Genitive argument</td>
<td>253</td>
<td>305</td>
</tr>
<tr>
<td></td>
<td>Nominative argument</td>
<td>46</td>
<td>156</td>
</tr>
</tbody>
</table>

The presence of an object, while for UGB and B28 the size of the text is too small for any conclusion.

Table 7 plots argument case-marking against transitivity. With the exception of EARLY there is a clear correlation, with transitive infinitival complements
co-occurring mostly with genitive arguments; the correlation is less strong, however, than that found in KLO, where only a small proportion of nominative arguments were found occurring with transitive infinitival complements.

Table 8, finally, plots argument case-marking against lexical category and number. The table reveals correlations that are entirely absent in KLO. In the three larger texts WT, S and B, personal pronouns strongly prefer genitive

<table>
<thead>
<tr>
<th></th>
<th>Transitive</th>
<th>Intransitive</th>
<th>Existential</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY</td>
<td>Genitive</td>
<td>194</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>Pronominal acc.</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Nominative</td>
<td>65</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Partitive</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>WT</td>
<td>Genitive</td>
<td>398</td>
<td>259</td>
</tr>
<tr>
<td></td>
<td>Nominative</td>
<td>129</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>Partitive</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>S</td>
<td>Genitive</td>
<td>559</td>
<td>187</td>
</tr>
<tr>
<td></td>
<td>Nominative</td>
<td>185</td>
<td>185</td>
</tr>
<tr>
<td></td>
<td>Partitive</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>Genitive</td>
<td>320</td>
<td>237</td>
</tr>
<tr>
<td></td>
<td>Nominative</td>
<td>62</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>Partitive</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 7  Argument case-marking and transitivity in A, S and B.

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
<th>Singular</th>
<th>Plural</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NP</td>
<td>NP</td>
<td>demonstrative</td>
<td>se</td>
<td>demonstrative</td>
</tr>
<tr>
<td>EARLY</td>
<td>Genitive</td>
<td>60</td>
<td>3</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Nominative</td>
<td>42</td>
<td>45</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>WT</td>
<td>Genitive</td>
<td>81</td>
<td>2</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Nominative</td>
<td>98</td>
<td>69</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>S</td>
<td>Genitive</td>
<td>33</td>
<td>3</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Nominative</td>
<td>121</td>
<td>107</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>B</td>
<td>Genitive</td>
<td>68</td>
<td>13</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Nominative</td>
<td>60</td>
<td>71</td>
<td>2</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 8  Argument case-marking, lexical category and number in WT, S and B.
case-marking; singular nouns and the singular demonstrative pronoun *se* are split between genitive and nominative case-marking in *wt* and *B*, and tend towards nominative case-marking in *S*; plural nouns and the plural demonstrative pronoun *ne*, on the other hand, strongly favor nominative case-marking, especially in *wt* and *S*. In the table below, some lexical categories, such as relative and indefinite pronouns, quantifiers, etc. were not taken into account, as the numbers involved were too small to allow for quantitative generalization:

A similar correlation is found in Martti’s Land Law from approx. 1580 and in Ljungo’s Land and City Law translations from 1601 and 1609 respectively (De Smit, 2005; 2006).

Some examples follow. Personal pronouns strongly prefer genitive case-marking in both transitive (12) and intransitive (13) clauses:

*S*, II p. 342

(12) **että meidä-n pitä auttaman meidä-n lähimäis- caike-sa tusca-sa tät-n**

that we-gen must help we-gen neighbour-all-in hardship-in

‘That we must help our neighbour through all hardships.’

*WT*, Romans, Preface

(13) **mutta heide-n pite ilman oma Ansio-tta Wanhurska-xi tuleman**

but they-gen must without own merit-without righteous-as become

‘But they must become righteous, without their own merit.’

Exceptions to this are rare and mainly concern 3rd pers. personal pronouns, though in *RK* non-3rd. pers. personal pronouns may also occur with the nominative to some extent:

(14) **ette me piti andaman meide-n Babeli-n Kuninga-n ala**

that we[nom] must give we-acc Babylon-gen king-gen under

‘That we should serve the king of Babylon’ (p. 146)

Full singular nouns split rather evenly in *B* and *WT*, but favor nominative case-marking in *RK* and *S*:

*RK*, p. 146

(15) **ia ioca maakunda pite kylmi-llä oleman /**

and which[nom] province[nom] must cold-at be
ia eij kengen hene-sse pite asuman
and NEG anybody[NOM] it-in must dwell
‘And that land will be deserted, and no-one will dwell there.’

WT, Galatians 4:30
(16) Sille ette se Palckauaimo-n poica ei pidhe perime’
for that the[NOM] concubine-gen son [NOM] neg must inherit
se-n wapaha-n Poia-n cansa
the-gen free-gen son-gen with
‘for the slave woman’s song will never share in the inheritance with the
free woman’s son.’

WT, Colossians 1:19
(17) ette hene-sse pit-i cokonaise-n Teudhelisudhe-n asuman
that him-in must-IPF complete-gen fullness-gen dwell
‘(For God was pleased to) have all his fullness dwell in him.’

Plural full nouns as well as plural demonstrative pronouns strongly favor nominative case-marking in all texts:

S, II p. 391
(18) eij sentähden että Papi-t pit-i hei-tä puhdistaman
NEG for that that priest[NOM]-pl must-IPF they-PART clean
‘Not because the priests would cleanse them.’

Again, this is not exceptionless:

WT, Matt. 25: 46
(19) Ja nei-nen pite silloin menemen ijancaikis-en Pijn-an
and those-gen.pl must then go eternal-into pain-into
‘Then they shall go away to eternal punishment.’

As noted above, the data appear at first sight to show a split in case-marking between active and passive necessive constructions, similar to that found in KLO: in all three texts, nominative case-marking is much more common with passive necessive constructions. When lexical category and number are taken into account, however, this split appears to be much less clear-cut (Table 9): With passive constructions, there is a stronger tendency towards nominative case-marking with singular nouns and singular demonstrative pronouns (overwhelmingly so in B) but genitive case-marking does still occur to some
extent with these categories, while with plural nouns and plural demonstrative pronouns it does not. A majority of personal pronouns remain marked with the genitive in wt and S, whereas in B they are about evenly split between genitive- and nominative-marking. The distribution of case markers is thus similar to that found with active infinitival complements, but there is a stronger tendency towards nominative case-marking throughout. In addition to nominative and genitive, partitive arguments can easily be found with passive infinitival complements (cf. ex. 20):

S, II p. 49

(20) häne-n pitä mös hwtaman ia eij pidä hän-dä cuul-taman
    he-gen must also shout and NEG must he-PART hear-PASS

‘He will also shout, and will not be heard.’

However, this does not mean the argument found in passive necessive constructions is an object, as it seems to be in KLO. As arguments of passive clauses, personal pronouns remain unmarked in Old Finnish, which, by itself, is compatible with objecthood (De Smit, 2006: 88), the suffix -n that occurs with personal pronoun arguments in passive necessive clauses can, in Old Finnish, not be explained as an object marker. Rather, it must be considered the same as that occurring in genitive clauses, with passive constructions as a whole simultaneously showing tendencies towards object-like case marking and adaptation to the case-marking patterns of the argument of pitää in active necessive clauses.

All in all, the case-marking pattern found in these texts and outlined above resembles that of the total object in Modern Finnish, with -n (homophonous
with the genitive suffix) for singular NPs, demonstrative pronouns and personal pronouns, and with no particular marker for plural NPs and plural demonstrative pronouns.

Curiously, in UGB and WESTH, personal pronouns may show an East Finnish accusative -t as arguments of pitää. Agricola’s works provide one more example:

Weisut ia ennustoxet, Jeremiah 8:12

(21) Senteden heide-t pite yct-en coc-on catuman
    for that reason they-ACC must one-into heap-into fall
    ‘So they will fall among the fallen’

One possible explanation for this is editorial hypercorrection: an East Finnish editor could have replaced personal pronouns with West Finnish accusative or genitive -n suffixes with an East Finnish pronominal accusative -t. A test for this explanation would be finding pronominal accusatives in other syntactic positions as well, for example that of genitive modifiers. One such example indeed presents itself:

WESTH, p. 83

(22) ia me sama heidhä-t iälle-nssä
    and we[NOM] the same they-ACC after-their
    ‘And similarly we, after them.’

Closer scrutiny reveals, however, that (22) is the only such example. In WESTH the majority of plural personal pronoun objects remain marked with -n, as do all modifiers – with the single exception of (22). In both WESTH and UGB, the frequency of accusative personal pronouns as arguments of pitää is equal or higher than the frequency of accusative personal pronouns as object. Evidence of editorial hypercorrection is thus confined to (22). Another possible indication may be the clustering of constructions in the texts: two are found on p. 93, one on p. 95, and two again on p. 97. WESTH has 242 pages.

In WESTH, the five examples of accusative personal pronoun arguments all occur in intransitive clauses. For example:

---

5 The pronominal accusative -t of Standard Finnish is of East Finnish origin; West Finnish dialects, and commonly also Old Finnish, show an accusative -n with personal pronouns.

6 I owe this explanation to Tapani Lehtinen, personal communication.
I owe this observation to an anonymous referee. It should be noted that the origins of the accusative -t of personal pronouns in Finnic may well lie in such an analogically extended number suffix: languages such as Karelian and Ingrian still show object forms like minu-n, sinu-n for singular personal pronouns, but meidä-t and teidä-t for plural ones (Laanest, 1982: 190). This is not uncontested, however: Honti (1995: 65–68) reconstructs a pronominal -t accusative to Proto-Uralic.

The accusative personal pronoun argument of UGB, however, occurs in transitive constructions as well:

(23) Silloin pitä meidhät tuleman heidhen cansa-ns ychten
     then must we-ACC come they-GEN with-their together
     ‘Then we will unite with them’ (p. 93)

(24) ja meidhät pitä mutetu-xi tuleman-
     and we-ACC must changed-as become
     ‘And we will be altered’ (p. 95)

(25) Lw-ta eij teiidhät pidhä rickilömän häne-stä
     bone-PART NEG you-ACC must break him-from
     ‘You will not break any of his bones.’ (p. 105)

(26) ia heidhät pitapikwleman minu-n äne-nj
     and they-ACC must hear I-GEN voice-ACC.my
     ‘And they will hear my voice.’ (p. 112)

I suggest that the balance of evidence favors regarding these constructions as ‘genuine’, intentional accusatives, rather than as the product of editorial hypercorrection. There are some indications of the latter in westh, but none in UGB; furthermore, one accusative argument of pitää has found its way into Agricola’s writings as well (21 above). This said, there are grounds to regard the -t suffix in these cases as an analogically extended number marker rather than an object marker: all the personal pronouns involved are plural ones, and the occurrence of -t could be simply an extension of the pattern found elsewhere in Old Finnish: that singular arguments tend to be marked with -n but plural arguments with -t.7 These cases may thus lend credence to the view that the accusative-like case-marking pattern found in the other texts shows a real tendency towards accusative-marking, or at least that the pattern of sing. -n, plural -t found in Old Finnish is real and not a statistical artefact. This view stands or falls, of course, on whether it is possible to advance a sensible

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7 I owe this observation to an anonymous referee. It should be noted that the origins of the accusative -t of personal pronouns in Finnic may well lie in such an analogically extended number suffix: languages such as Karelian and Ingrian still show object forms like minu-n, sinu-n for singular personal pronouns, but meidä-t and teidä-t for plural ones (Laanest, 1982: 190). This is not uncontested, however: Honti (1995: 65–68) reconstructs a pronominal -t accusative to Proto-Uralic.
explanation of accusative case-marking with the argument of *pitää*. In the next section, I attempt an explanation.

3.3 Explaining the Object-Like Pattern

One alternative approach to variation in case-marking, such as that between genitive and nominative-marked arguments described above, is to assume that there is a direct syntactic basis for this variation. With texts such as KLO, this alternative seems valid: the syntactic ground is the agentivity- and transitivity-based variation that has been shown by Laitinen (1992) to underlie the situation in Finnish dialects. With the object-like marking in the religious texts, a possible syntactic basis might be that the argument of *pitää* is an underlying object. Although Saukkonen (1965: 114) stresses that necessive *pitää* was originally an intransitive verb, one could in fact imagine a way in which an original adverbial agent was reanalyzed as the direct object of the impersonal verb *pitää*. The problem with this explanation is that a hallmark of objecthood, namely partitive case-marking in negated clauses, appears, with active necessive constructions, to be almost completely absent in the corpus. Virtually all partitive arguments occur with (affirmative and negated) existential and highly intransitive clauses, where in principle they could be analyzed as subjects. Another explanation for the accusative-like pattern is that variation between two underlying competing grammars, occurring during a process of reanalysis and extension (Harris and Campbell, 1995: 59, 83), is ‘frozen’ along lines of lexical category or number. In this case, a process of reanalysis and extension could proceed from an underlying agentivity-based grammar, as apparent in KLO, to a mainly nominative pattern; but the reverse would be possible as well. With regard to the first possibility, it is possible that the writers of religious texts were in the process of generalizing nominative marking based on foreign model patterns such as that of Swedish *ska*, which takes a nominative-marked argument. An indication pointing towards this explanation is that in some texts, such as S and RK, but also the legal translations of Ljungo (De Smit, 2006: 149–150), nominative case-marking is generalized with singular NPs. Moreover, Ljungo’s translation of the City Law exhibits one case in which *pitää* is marked with a plural suffix, agreeing with a semantically plural argument (De Smit, 2006: 126–127). As to the second possibility, according to Saukkonen (1965: 130), the *pitää tekemän*-construction originally had a nominative argument rather than a genitive one, and the case-marker on the infinitive was a lative -n, signifying direction (Saukkonen, 1965: 127–128). In support of this argument, Saukkonen mentions dialectal examples in which the lative case-marker is replaced with a directional illative case. Such examples can be found in the corpus as well, as in (24) above. The construction which occurs in
Old Finnish, where a genitive-marked agent is combined with a -ma infinitive, would then be the result of contamination. If Saukkonen’s analysis is correct, nominative argument-marking with pitää may be archaic as well as innovative. Variation in Old Finnish could be regarded as involving the piecemeal generalization of the genitive as well.

As it is, there is reason to regard the former alternative as correct. The object-like pattern we see in some Old Finnish texts would constitute a more radical innovation if its historical source is a purely nominative argument than it would be if its historical source were the agentivity-based distribution of case-markers as found in KLO, where the markers that occur with the Finnish total object (-n and -O) are already present in case-marking. The emergence of the object-like pattern could then be partially explained by the use of pitää as a future auxiliary, which weakened the semantic basis for genitive case-marking as the marker of a speech-act participant at whom deontic pressure is directed.8

Nonetheless, if we are dealing with a process of reanalysis and extension in progress, the kind of lexical ‘freezing’ according to lexical category and number that we observe with the accusative-like case-marking pattern could be the outcome of a reanalysis proceeding first in categories which are unmarked from the viewpoint of the new analysis (Timberlake, 1977; Fanego, 2004). The Achilles heel of this alternative is the position of plural nouns and the plural demonstrative pronoun ne, which strongly prefer nominative case-marking in all the religious texts dealt with here. In Modern Finnish, overtly marked plural NPs and demonstrative pronouns tend to be fairly individualized and to refer to animate NPs relatively more often than their singular counterparts as arguments of pitää (De Smit, 2010: 120). If the object-like pattern of the religious texts were the product of a syntactic shift in progress, we would expect plural NPs and demonstrative pronouns to be marked with the genitive, either as holdouts or as early innovators. Their tendency toward nominative case-marking indicates that the object-like pattern is not directly the product of such a process of reanalysis and extension.

What then explains the object-like pattern? A starting point is that the argument of pitää is not the only agent which shows object-like case-marking in Old Finnish. Another construction showing a similar pattern is the participial construction, which semantically corresponds to an accusative and infinitive with verbs of perception and communication (Ikola, 1960: 63–64; 8 Here, it is interesting to note that all the texts where the agentivity-based pattern with dominant genitive case-marking is found are legal texts, where pitää usually has a clear necessive meaning. As I have not studied religious texts later than the 1642 Bible, however, this point remains fairly speculative.)
Forsman-Svensson, 1983: 5). In Modern Finnish, the agent of the construction is marked with a genitive, with the exception of existential and possessive constructions (28), much like the Modern Finnish argument of *pitää*:

(27) näe-*n* poja-*n* tule-*v*-n
see-1SG boy-GEN come-PTCP-GEN
‘I see the boy coming.’

(28) en usko iä-*ll*-ä ole-*v*-n enää merkitys-*t*-ä
NEG-1SG believe age-at be-PTCP-GEN any more meaning-PART
‘I don’t believe age has any meaning anymore.’ (Hakulinen et al., 2004 § 538)

The genitive agent of the participle was originally the object of the matrix verb, and marked accordingly with the accusative or partitive (Ikola, 1960: 72–73; Forsman-Svensson, 1983: 5). The syntactic shift from accusative-marked object to genitive-marked agent is described by Timberlake (1977) as a case example of reanalysis and extension. By and large, in Old Finnish the argument remains marked as an object (Forsman-Svensson, 1983: 175, 254), despite some tendencies toward the generalization of the genitive (Forsman-Svensson, 1983: 177). Its status as an object is confirmed by the presence of partitive case-marking with for example negated constructions (Forsman-Svensson, 1983: 179, 189). Some examples from B, mentioned by Forsman-Svensson (1983: 179–189):

B, Mark 1:10

(29) näk-i hän taiwa-t aukene-*w*-tja Henge-*n* tule-*w*-t alas
see-IPF.3SG he[NOM] heaven[NOM]-PL open-PTCP-GEN and spirit-ACC come-PTCP-GEN down
‘he saw heaven being torn open and the spirit descending on him’

B, Matthew 15:31

(30) he nä-i-*t* mykä-*t* puhu-*w*-t raajarico-*t*
they[NOM] see-IPF.3PL mute[NOM]-PL speak-PTCP-GEN cripple[NOM]-PL

terwe-*n* ondu-*w*-t käy-*w*-n ja sokia-*t* näke-*w*-n
healthy-as limp[NOM]-PL go-PTCP-GEN and blind[NOM]-PL see-PTCP-GEN
‘They saw the mute speaking, the crippled made well, the lame walking and the blind seeing.’

These examples conform to object marking: -n with singular full nouns, -t with plural full nouns and unmarked numerals.

It should be noted that object-like marking is syntactically motivated with the participial construction: the agent of the participle is syntactically the
object of the matrix verb. Such a motivation is absent with the object-like argument of *pitää*. The object-like pattern of the argument of *pitää* could thus be regarded as analogically extended from the object-like marking of the agent in the participial construction, but not the other way around.

To prove that such an extension has taken place, we need to explain the basis on which Old Finnish writers identified the two constructions as equivalent. There are some ways in which the two are connected in Old Finnish. First, *pitää* actually occurs as a matrix verb for participial constructions, with the meaning of ‘it is said that’ (Forsman-Svensson, 1983: 244). Second, contamination between the genitive participle suffix -vA-n and the 3rd infinitive instructive suffix -mA-n seems to occur to some extent in Old Finnish, leading to the usage of -mA-n with participial constructions governed by verbs of communication and perception (Forsman-Svensson, 1983: 117–118), as well as the use of -wA-n with *pitää* in apparently necessive constructions (Forsman-Svensson, 1983: 118). KLO includes one such example:

KLO, p. 58

(31) Täsä *pitä sij-tä waari ote-tta-wa-n ett-еi*

‘Care must be taken here, lest...’

According to Forsman-Svensson, these forms may be the result of misprints: an intended *m* would have been printed invertedly and vice versa (Forsman-Svensson, 1983: 117). The proof would obviously be the occurrence of similar misprints outside of the participle/infinitive suffix. I am not aware of any such cases; in their absence, examples such as (31) above can be regarded as proof of an equivalence relation between the two constructions. This equivalence relation could be facilitated by the structural similarity between the two suffixes: the genitive participle -vA-n and the infinitive instructive -mA-n both show overt nominalizing suffixes and phonologically identical case-endings; these are absent, for example, with the infinitive used nowadays with *pitää* (see 1–4 above).

The link between the two, however, should be sought from outside of Old Finnish rather than within it, namely in foreign model patterns. Before identifying such patterns, some features of the object-like pattern in Old Finnish should be kept in mind. First, it occurs in a wide variety of texts, including non-translated texts (S) and legal texts (Martti’s Land Law, 1580). Where the religious texts are based on a wide variety of sources in Latin, Greek, German and Swedish, the legal texts have Old Swedish sources. Second, it is an ‘old’ feature in Old Finnish, meaning that it occurs in the very earliest Old Finnish texts, such as westh and the works of Agricola. This means that the object-like pattern may have been a feature in religious genres of Finnish that precede
the emergence of written Finnish in the 1540s. The main ‘link’ between the Old Finnish participial construction and the object-like pattern with necessive pitää lies, I believe, in source patterns that employ accusative and infinitive (accusativus cum infinitivo, AcI) constructions; these are semantically and structurally similar to the participial construction of Finnish. In the Indo-European languages, AcI constructions occur natively; but in many of the early European literary languages their use expanded through the influence of Latin (Blatt, 1957: 65–68; Fischer, 1992: 22). Such influence could explain the occurrence of object-like arguments with pitää - if a plausible model pattern can be found. The most obvious candidate would be Latin oportet ‘it is proper, one ought’ which occurs with AcI, for example in Jerome’s Vulgate:

Matthew 16:21

(32) Exinde cœpit Iesus ostendere discipulis suis quia oporteret eum ire Hierosolymam
then begins Jesus to point out disciple-to his-to because must-SUBJ.1PF he-ACC go Jerusalem-ACC
‘From that time on Jesus began to explain to his disciples that he must go to Jerusalem’

Another Latin impersonal necessive, necesse est ‘it is necessary’, may likewise occur with AcI. Impersonal necessives governing an AcI occur in Ancient Greek as well, e.g. δέι ‘it is necessary’:

2 Timothy 2:6

(33) τὸν κοπιῶντα γεωργὸν δέι πρῶτον τῶν καρπῶν μεταλαμβάνειν
the hard-working farmer-ACC must first of the fruits-of partake
‘The hard-working farmer should be the first to receive a share of the crops.’

Of these two languages, Latin seems to be the more likely source language. Greek sources were used in Old Finnish religious texts, but the object-like pattern with the argument of pitää crucially also occurs in the early legal texts, whose source texts were exclusively in Old Swedish. Throughout the Old Finnish period, however, Latin was read and known widely enough to affect the variety of texts studied here. With the exception of Samuel Forseen, who produced the 1759 translation of the Swedish Law, and Abraham Kollanius, who produced the 1648 translation of the Land and City Law, all the known authors of texts studied here and in earlier research on legal texts (De Smit, 2005, 2006) were clergymen.

The hypothesis presented here concerns a fairly wide-ranging influence, visible in a variety of texts, rather than specific occurrences in a particular text; thus it cannot be proved (or for that matter disproved) by comparing specific
tokens with their source constructions. It must nonetheless be demonstrated that impersonal necessives with an AcI construction occur in the kinds of Latin texts to which the authors of Old Finnish were exposed with sufficient frequency: if their presence as source constructions of pitää is entirely insignificant, the hypothesis as to their impact on the case-marking of the argument of pitää cannot be upheld. As it is, the overwhelming majority of pitää-constructions in B thus correspond to future-tense verbs in the Vulgate, as in the following example:

1 Corinthians 11:22

\[(34)\] 
Mi-tä minu-n pitä tei-lle sanoman? Pitä-kö minu-n tei-tä kijittämän?

\textit{Quod dicam vobis? Laudo vos?}

what must you-to say must-Q I-gen you-part thank

‘What shall I say to you? Shall I praise you?’

Latin future tense constructions, however, probably did not contribute much to the usage of pitää as a future auxiliary, as the two constructions are very different. Swedish future auxiliaries (\textit{ska}) and German future auxiliaries (\textit{sollen}) correspond more closely to the Old Finnish construction in form and equivalence relations between them and the Old Finnish construction were therefore more likely.

Of the lexicalized necessive constructions in the Vulgate, \textit{oportet} is by far the most frequent. The verb \textit{debeo} occurs to some extent, but constructions involving \textit{necesse} are quite rare. Some examples:

Matthew 18:33

\[(35)\] 
Ei-kö myös sinu-n pitä-nyt armahtaman sinu-n cansapalwelia-ta-s

\textit{non ergo oportuit et te misereri conservi}

\textit{tui sicut et ego tui misertus sum}

\textit{tu[nom]} you-gen as too I[nom] you-gen pitied have

‘Should you not have had mercy on your fellow servant just as I had on you?’
At first sight, the notion that an equivalence relation was drawn between the Latin AcI and
the argument of *pitää*, with a subsequent extension of object-like marking, may seem rash,
as the Finnish accusative is very different from its Latin counterpart in terms of structure
(the Finnish accusative -*n* is homophonous with the genitive, while the unmarked object,
traditionally held to be an 'unmarked accusative' is of course homophonous with the nominative)
and function (unlike the Latin accusative, the Finnish accusative does not function at
all as the head of adpositional phrases). Yet 17th century Finnish grammarians, who applied
a Latin-type case model to Finnish, distinguished an "accusative" (involving both accusative
and partitive objects) (Häkkinen, 1994: 363–364) and the equivalence relation was further-
more mediated by the Finnish participial construction, which is similar in structure and
semantics to AcI constructions in other European languages.

Mark 9:11

(36) *mikä* se on cuin Kirjanoppene-t sano-wat: Elia-n *pitää* ensin tuleman? Quid ergo
what[ NOM] it[ NOM] is as scribe-nom.pl say-3pl Elia-gen must first come what thus

*dicunt* Phariseai et scribae quia Heliam oporteat venire primum?
say-3pl Pharisee-nom.pl and scribe-nom.pl because Elia-acc must-subj.3sg come first

‘And they asked him, "Why do the teachers of the law say that Elijah must come first?"

Luke 21:9

(37) *sillä nämä-t* *pitää* ensin tuleman waan ei cohta loppu ole
for this-nom.pl must first come but neg yet end[ NOM] be

*oporet primum hæc fieri sed non statim finis*

must first this-acc.pl be but not regularly end

‘These things must happen first, but the end will not come right away.’

Constructions with *oporet* are far more rare as source-constructions of *pitää*
than future-tense verbs or subjunctive verbs. However, *oporet* is the most fre-
quently occurring lexical verb in such constructions. Even if *pitää* is used most
often as the translation equivalent of a future-tense verb, an equivalence rela-
tion would, I believe, arise sooner between one lexical verb and another than
between a lexical verb and a morphological category; *pitää* with its infinitival
complement is isomorphic with *oporet* and its infinitival complement in a
way that is not true of a lexical verb in the future tense or the subjunctive
mood. Despite the relatively low frequency of *oporet*-constructions in the
source material (though still more frequent than any other lexicalized neces-
sive construction), I thus believe it is plausible that an equivalence relation
between *pitää* and *oporet* could have been established by a writer such as
Agricola.9 Such an equivalence relation could then have led to a transfer of

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9 At first sight, the notion that an equivalence relation was drawn between the Latin AcI and
the argument of *pitää*, with a subsequent extension of object-like marking, may seem rash,
as the Finnish accusative is very different from its Latin counterpart in terms of structure
(the Finnish accusative -*n* is homophonous with the genitive, while the unmarked object,
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a Latin-type case model to Finnish, distinguished an 'accusative' (involving both accusative
and partitive objects) (Häkkinen, 1994: 363–364) and the equivalence relation was further-
more mediated by the Finnish participial construction, which is similar in structure and
semantics to AcI constructions in other European languages.
case-marking patterns from the agent of the Latin AcI construction to the agent of *pitää* – which already saw an alternation between genitive *-n* and nominative zero. This transfer was facilitated by the fact that a construction semantically and in some respects morphologically similar to the AcI already existed in Old Finnish – this was the participial construction, with its accusative-marked agent undergoing piecemeal reanalysis as the agent of the infinitive.

4 Evaluation and Conclusions

In the following, I will deal with two questions raised by this hypothesis. The first question relates to multiple causation in linguistic change: is the object-like pattern primarily based on a bilingual extension from a Latin model (*oportet* and its AcI), or a monolingual one from an Old Finnish model (the argument of the participial construction)? The second relates to the long-term processes that involve agent arguments of non-finite constructions in Finnish: can we regard the shifts detailed above as steps in a grammaticization process?

4.1 Multiple Models and Multiple Causation

It is clear that the phenomenon described above resists analysis as either a syntactic borrowing - a transfer of the AcI pattern of Latin *oportet* to Old Finnish *pitää* - or as a case of ‘internal’ reanalysis and extension - a transfer of the AcI-like pattern of Old Finnish participial constructions to Old Finnish necessives. The first alternative would neglect the role played by model patterns within Old Finnish and, moreover, the fact that through a process of reanalysis and extension, a step was taken to a more general grammatical category of genitive agents of non-finite constructions. The second alternative would, of course, neglect that it was precisely the equivalence between *pitää* and *oportet* that made this reanalysis and extension possible. The phenomenon can only be described by taking both the internal and the external models into account, and furthermore, both the roles of internal and external models can be described in terms of reanalysis and extension.

Nonetheless, I believe there is reason to regard the Latin construction as the primary model. First, there are only very doubtful signs of the use of a participial complement with necessive *pitää*, such as (45) above, and these may well be due to misprints. An extension of the participial complement from the participial construction to the necessive construction with *pitää* could nonetheless have happened. The *-mA* infinitive has a highly marginal and lexicalized status in Finnish: in Old Finnish, it is almost (though not entirely) unique to *pitää* (Hääkkinen, 1994: 313), whereas all the other *-mA* infinitives have a
range of matrix verbs at their disposal. It would thus seem to be a good candidate for analogical leveling. Such leveling, however, did not take place. Secondly, and more importantly, the equivalence relation between the argument of *pitää* and that of the participial construction does not hold throughout Old Finnish. As already mentioned, later texts, such as Kollanius’ legal translations, *KLO* and the 1759 Swedish Law generally show genitive case-marking based on agentivity. However, the shift from accusative to genitive that occurred with the argument of the participial construction took place later. Though unambiguous genitive arguments start occurring early in the Old Finnish period, accusative-marking remains dominant throughout the seventeenth century (*VVKS* 39.7.2.3), and the shift to genitive marking was completed only in the nineteenth century (Forsman-Svensson, 1983: 255; Häkkinen, 1994: 403). Had there been a strong equivalence relation between the two constructions throughout the Old Finnish period, one would have expected the shift from an accusative to a genitive pattern to occur in tandem. Thirdly, the argument of the participial construction shows one feature of object marking that is notably absent with the object-like argument of *pitää*, namely partitive case-marking under negation (Forsman-Svensson, 1983: 190, 197). Latin, of course, does not have differential object-marking based on polarity. It thus provides a more plausible model for the extension of accusative-like case-marking without the extension of syntactic objecthood, which could be expected if the argument of the participial construction were the more likely model.

Multiple causation in linguistic change has been explored by Malkiel (1983a, 1983b) and by Aitchison (2001). Malkiel’s examples represent large-scale changes involving multiple linguistic forms, such as the hypercharacterization of gender in Romance languages (1983a: 265); in examples concerning singular lexical items, such as the etymological precursors of French *fermer* ‘to close, lock’ in Latin *firmare* ‘to strengthen, fasten’ and French *fer* ‘iron’, the causes can be hierarchized with the Latin verb as the primary source, *fer* as a secondary influence (Malkiel 1983b: 299). Taking into account all the above considerations, I believe a similar hierarchization can be proposed for the accusative-like pattern of the argument of Old Finnish *pitää*: it is primarily an extension from Latin, with the model provided by the Old Finnish participial constructions as a contributing factor.

4.2 Accusative-Like Marking and the Grammaticization of Non-Finite Agents

Before dealing with the question of whether the change detailed above can be regarded as a step in a grammaticization process, the relationship between the
constructions in written and spoken Finnish need to be clarified. As Laitinen (2004: 249–251) points out, taking the current situation of Standard Finnish as the end-point of a presumed grammaticization process may be misleading, as it does not take into account the way that language standardization in the 19th century both adopted and ignored features of Finnish dialects. Thus Standard Finnish bases the case-marking of necessive constructions and participial constructions on a distinction between existential and non-existential clauses, with no equivalence in dialectal Finnish. In dialectal Finnish, case-marking of both constructions varies according to agentivity. At the same time, it seems plausible that the unified case-marking of non-finite constructions in dialectal Finnish (Itkonen, 1974: 292–293) must have, like its counterpart in Standard Finnish, had its roots in a variety of constructions, each with its own argument case-marking pattern. With the participial construction, the system encountered in Old Finnish, where the agent of the participle is marked as the object of the matrix verb, seems plausible as a starting point for spoken varieties of Finnish as well, unless one wants to see the Old Finnish system as modelled on a foreign Acl construction. The necessive auxiliary pitää may have been, as Saukkonen (1965: 130) argues, associated with various case-marking patterns in various constructions, whereas other necessives, for example tulee, may have received their genitive-marked argument with a different semantic motivation. Yet dialectal Finnish, like standard Finnish, currently shows a unified case-marking pattern of non-finite arguments. This would suggest it underwent a change similar to that in Old Finnish: the development of a general, more abstract category of genitive-marked non-finite argument out of a set of originally more lexically specific, concrete constructions.

Grammaticization has been connected with context expansion and generalization by such writers as Bybee (2003: 605), Himmelmann (2004: 32–33) and Traugott (2010: 274–275). Grammaticization as context-expansion manifests itself according to Himmelmann (2004: 32) as host-class expansion, whereby a grammaticizing element co-occurs with a wider variety of contexts; syntactic content expansion, whereby the number of syntactic positions in which a grammaticizing element occurs increases; and semantic-pragmatic context expansion, whereby a grammaticizing element may carry a wider range of meanings and usage patterns. The latter is regarded by Himmelmann (2004: 33) as the most significant marker of an ongoing process of grammaticization. The merger of the various marked agents, with their respective constructions, into the genitive-marked agent of nonfinite verbs of Modern Finnish would accordingly exemplify a grammaticization process in terms of context expansion: where the argument of pitää or the object-like argument of the participial construction were previously strongly tied to their specific
constructions, they can now be characterized in a more general manner. Semantic-pragmatic context expansion is apparent in Standard Finnish (where, of course, Laitinen’s (2004) caveats apply): the genitive marker –n of the argument of pitää has lost much of its erstwhile meaning as the marker of a speech-act participant at which deontic pressure is directed; the same goes for the genitive-marked agent of necessive tulee – which in Old Finnish had connotations of a recipient or beneficiary (De Smit, 2006: 133–134). It therefore seems that the process detailed above can be regarded as a kind of grammaticization.

How does the extension of a Latin AcI to the argument case-marking of pitää contribute to this grammaticization process? By having the argument of pitää and that of the participial construction marked in largely the same way, the first step was taken towards the category of ‘marked agent of non-finite construction’. A step back, however, was taken in texts such as Klo where a reversal to the agentivity-based marking of dialectal Finnish took place. The generalization of genitive with participial constructions would take place only later in the history of Old Finnish, and here the argument of pitää may well have provided an analogical model instead (as suggested by Ikola, 1954: 234). The first step ahead was made possible, of course, by the equivalence relation between pitää and Swedish ska and the subsequent usage of pitää as a future auxiliary; this weakened the original semantic motivation of genitive case-marking to such an extent that a redistribution of case-markers along accusative lines became possible. In other words, the equivalence relation between pitää and Sw. ska, and the semantic extension of futurity, opened the way for the equivalence relation between pitää and oportet and the structural extension of the AcI pattern. The grammaticization process as a whole thus proceeds through individual equivalence relations (both ‘internal’ and with foreign models) and individual extensions (again from both internal and foreign models).

This raises two issues. The first is that of grammaticization as a mechanism of change. Whereas Haspelmath (1998) argues that grammaticization should be regarded as a distinct mechanism of change apart from other mechanisms such as reanalysis,10 Joseph (2004: 61) and Traugott (2008: 225) regard grammaticization as rather a large-scale process consisting of individual instances of reanalysis and extension. Similarly Herlin and Kotilainen (2004) detail a

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10 Though Haspelmath (2004: 26) stresses that grammaticization is dependent on more basic phenomena, such as desemanticization, phonological erosion, etc. Yet grammaticization is "a macro-phenomenon which cannot be reduced to the properties of the corresponding micro-phenomena."
complex interplay of internal and external models in the processes by which the Finnish temporal conjunction *kun* acquired causal meanings, and warn against holding these processes to exemplify a simple development of abstract meanings out of more concrete meanings (Herlin and Kotilainen, 2004: 264, 276). In the same way the process detailed above has proceeded by various steps of reanalysis and extension, including bilingual reanalysis and extension. If indeed one accepts the notion of contact-induced grammaticization advanced by Heine and Kuteva (2003) and at the same time the notion that contact-induced syntactic change proceeds through reanalysis and extension, one must hold grammaticization to be a macroprocess or even an epiphenomenon (Joseph 2004: 61; Fischer 2008: 338) rather than a primary mechanism of change.

The second is that the complex process sketched above is not irreversible. Indeed, the extension of the Acl pattern to *pitää* was a kind of ‘false start’: it did constitute a step towards a more general category of non-finite argument, but that step was undone in later Old Finnish texts such as *klo*, when agentivity-based case-marking for *pitää* was reintroduced while the argument of the participial construction remained, by and large, marked as an object. Only later was agentivity-based case-marking arrived at with participial constructions, this time possibly through the influence of the necessive construction instead. Similarly Laitinen (2004: 253–259) details how the grammaticization of the Finnish negative auxiliary to a negative particle was halted and reversed during the development of Standard Finnish in the late 19th century. Cases like these do not constitute exceptions to the unidirectionality of grammaticization, but are instances of what Haspelmath (2004: 33–35) dubs retraction: the replacement of a more grammatical form by a less grammatical form that pre-existed in the language. However, these cases do indicate that, in a situation of language contact in the broadest sense (that is, contact between varieties of a language such as standardized and non-standardized varieties, or competing attempts at standardization, as well as contact between different languages), complex macroprocesses that can be characterized as grammaticization are eminently reversible.

4.3 Syntactic Borrowing and Bilingual Extension

Olga Fischer (1992: 17) formulates the thorny problem of trying to demonstrate syntactic borrowing as follows:

It seems clear that syntactic borrowing is no easy matter to establish, and that in many, if not in most, cases, other factors are at least co-responsible for the introduction of a new construction. It is difficult not to agree with
Sorensen (...) that “it is usually impossible actually to prove that a syntactic loan has taken place, apart, of course, from cases where a word-by-word translation creates syntactical innovations in the translated version.

The problem of Old Finnish necessive *pitää* and its argument, with simultaneous foreign and internal models - and actually competing Latin and Swedish models operating at different levels - exemplifies this difficulty. Possibly facilitated by the equivalence relation between Finnish *pitää* and Swedish *ska* and a subsequent weakening of the original semantic and pragmatic motivations of genitive case-marking, the Acl pattern of Latin *opportet* was extended to the case-marking of the argument of *pitää*, facilitated through the model of the accusative argument in Old Finnish participial constructions. I would question whether syntactic borrowing is a useful designation for the phenomena described here.

The same criticism that Fischer (2008: 340) levels at grammaticization studies – that they tend to focus on linguistic changes as autonomous entities divorced from speakers as the ultimate agents of linguistic change – applies here as well: syntactic borrowing describes what happens between languages, but the label obscures the fundamental similarity between ‘external’ and ‘internal’ changes: both can be described in terms of reanalysis and extension, motivated by analogy, in the same way that analogy has a central role in grammaticization processes (Fischer, 2008: 369–370). Regarding the object-like pattern as a syntactic borrowing from Latin obscures the fact that in terms of basic mechanisms we are dealing with an analogically motivated extension - one between languages rather than within a linguistic system. I therefore suggest the reformulation of Harris and Campbell’s (1995) trichotomy of mechanisms of syntactic change as a dichotomy: syntactic change, contact-induced or not, proceeds through reanalysis and extension with analogy (operating between structures of different languages as well) a fundamental motivation behind both.

Notably, Harris and Campbell (1995: 51) state that language contact may be often a catalyst to reanalysis or extension. However, it is difficult to see how syntactic borrowing as defined by Harris and Campbell, namely “a change in which a foreign syntactic pattern (either a duplication of the foreign pattern or at least a formally quite similar pattern) is incorporated into the borrowing language through the influence of a donor pattern found in a contact language” (Harris and Campbell, 1995: 122) would differ from bilingual extension as described above, as it would seem to necessarily involve the replacement of one pattern by the other based on a prior equivalence relation: the identification of the two patterns as somehow ‘the same’. Regarding syntactic borrowing as bilingual extension allows us to better describe the actual mechanisms
of change involved. It also allows us to do better justice to contact-induced grammaticization processes, by regarding them as complex macroprocesses consisting of many individual steps of (bilingual) reanalyses and extensions. As mentioned, authors such as Laitinen (2004), Herlin and Kotilainen (2004) but also Joseph (2004: 54–55) and Fischer (2008: 358–359) warn that projecting back pathways of grammaticization from their apparent end-points may obscure the complexity of the linguistic changes in question. For example, Heine and Kuteva (2003: 539–540) introduce the term ‘replica grammaticalization’ for the contact-induced emergence of constructions such as the after-past tense in Hiberno-English, e.g. she’s after selling the boat, and state that here, it is the process of grammaticization itself that is transferred. However, it seems that the contact-induced change does not imply that a process of a location-scheme grammaticizing into a tense/aspect category took place in Hiberno-English. Rather, the end result of such a process in Irish has been extended to Hiberno-English. Analyzing contact-induced grammaticization processes as based on bilingual reanalyses and extensions may give us a firmer grasp on the actual linguistic changes that took place.

Finally, regarding syntactic borrowing as reanalysis and extension may allow us to align it with the teleological, as well as the mechanical aspects of analogical extension. The notion that analogical extension established iconicity between meaning and form in language has been stressed by particularly Anttila (1989: 355), and Kiparsky (2012) has similarly analyzed analogy and grammaticization as establishing grammar optimization. With bilingual reanalysis and extension, it is rather a second-order isomorphism between form-meaning pairs of different languages that is established. The extension of the Acl pattern to Old Finnish pitää lead it to be structurally more isomorphic with the Latin necessive oportet, the extension of future tense from Swedish ska to Old Finnish pitää lead to a greater isomorphism between the Swedish and Finnish constructions on a semantic plane. Both these tendencies are in conflict: Old Finnish pitää is used often as a translation equivalent for Latin future expressions which are morphologically very dissimilar to oportet and its Acl. As Itkonen (1978: 42) points out, the increase of iconicity brought about by analogical extension may well come at the cost of an actual decrease of iconicity elsewhere in the system, and the competing bilingual extensions that shaped the Old Finnish necessive construction are no exception here.

Our notions of language contact in structural domains have been often held captive to more general conceptions of language, or language history. Thus for example the attempts to fit contact-induced syntactic change into a borrowability hierarchy, which has proven a valuable tool for loanword research and linguistic reconstruction, but has not lead to any clear consensus on the
permeability of syntax to language contact. Reanalysis and extension have, on
the other hand, often been coupled to a generational view on linguistic change
in which far-reaching structural change was regarded as confined to the period
of language acquisition. As Nau (1995: 11–12) points out, this view has tended to
marginalize the study of structural contact-induced change. Grammaticization,
finally, provides for a powerful connection between grammatical change and
linguistic cognition, but, when taken as a basic mechanism rather than a mac-
roprocess, there is the danger that the complexity of linguistic change, particu-
larly contact-induced change (Joseph, 2004: 54; Herlin and Kotilainen, 2004:
268–269) is obscured. Placing analogy and extension at the basis of contact-
induced as well as ‘internal’ syntactic change may allow us to account for this
complexity.

Abbreviations

\begin{table}
\centering
\begin{tabular}{ll}
  ACC & Accusative \\
  GEN & Genitive \\
  FUT & Future \\
  INST & Instructive \\
  IPF & Imperfect \\
  NEG & Negative auxiliary \\
  NOM & Nominative \\
  PART & Partitive \\
  PASS & Passive \\
  PF & Perfect \\
  PL & Plural \\
  PTCP & Participle \\
  Q & Interrogative suffix \\
  SG & Singular \\
  SUBJ & Subjunctive \\
\end{tabular}
\end{table}

Corpus

\begin{itemize}
  \item B = \textit{Biblia: Se on: Coco Pyhä Ramattu Suomexi}, 1642. Digital Corpus. Helsinki: Kotimaisten
    kielten tutkimuskeskus. Last modified: 15.12.2006. Available at: http://kaino.kotus
    .fi/korpus/vks/meta/biblia/biblia_coll_rdf.xml.
  
  \item B28 = Uppsala university library codex B 28. In Setälä, Emil Nestor and Wiklund, Karl
    Bernhard (eds.), \textit{Suomen kielen muistomerkkejä I. Mikael Agricolan Käsikirja ja
**Marked Subjects In Old Finnish**


**Other references**


