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Nikolaos Lavidas

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The Greek Septuagint and language change at the syntax-semantics interface: from null to "pleonastic" object pronouns

Nikolaos Lavidas

Abstract

In this study, I test the hypothesis that the Greek Septuagint reflects an ongoing change at the syntax-semantics interface. The study focuses on "pleonastic" pronouns in contrast to referential null objects. These "pleonastic" object pronouns in the Septuagint have been analyzed in the literature as the result of contact between the Greek language and other languages, primarily Hebrew. The unavailability of referential null objects in later Greek (post-Koine) is also considered to have been affected by Hebrew. The data show an important increase in the frequency of 3rd-person, but not 1st- and 2nd-person, personal pronouns in the Septuagint, as well as in the New Testament. I argue for the lack of a direct relation between the characteristics of transfer from Hebrew in the Greek Septuagint and the relevant change—in contrast to the "traditional" view of the literature—and propose a different form of relation between the change in later Greek and the translation language under examination. I base my discussion of the proposed relation on principles of "typical" change at the syntax-semantics interface (Feature Economy Principle) but also on processes of language transfer observed in L2 acquisition or L1 attrition according to the Interpretability Hypothesis.

1. Introduction

The aim of the present study is to test the hypothesis that there is a relation between the transfer from Hebrew into Translation Greek in a situation of language contact and a case of language change at the syntax-semantics interface. This hypothesis will be examined using data concerning the presence of object pronouns, as opposed to referential null objects in the Greek Septuagint (or LXX or Old Testament).[1] "Pleonastic" object pronouns, instead of referential null objects in the Septuagint and the New Testament, have been analyzed in the relevant literature as the result of contact between Greek and other languages, mainly Hebrew. The unavailability of referential null objects in the post-Koine (post-Septuagint) period is also considered to have been affected by Hebrew, according to histories and grammars of the Greek language (for instance, Jannaris 1897: 347–348 and Moulton and Turner 1963: 37–41). Referential null objects are allowed in Classical Greek (1) but become restricted in Koine Greek (2a).[2] This restriction appears to conform to the

[1] In the text, I refer to the following periods, time spans, and chronology of texts: Homeric Greek 8th cent. BC, Classical Greek 5th cent. BC–3rd cent. BC, and Koine Greek: 3rd cent. BC–4th cent. AD, encompassing both the Greek Septuagint (mainly 300–200 BC) and the New Testament (50–150 AD).

[2] The generalizations in this study are also based on the following grammars of Greek: Goodwin ([1894] 1978), Kühner and Gerth ([1898/1904] 1963), Stahl (1907), Smyth (1956), Humbert (1945), Schwyzer and Debrunner (1950).

Biblical Hebrew characteristic of using pronominal suffixes instead of null objects (2b). Biblical Hebrew does not use enclitics. Instead, it attaches pronominal suffixes to verbs to express the direct object if there is no special emphasis (Janse 2002: 379) or, less often, other case relations such as dative complements (Khan 2013).

(1) *ho dè empimplàs hapántōn tḕn gnṓmēn* ***apépempe Ø***
he PTC satisfied.PTCP every-one.GEN the expectations.ACC dismissed.3SG Ø
'And after having satisfied the expectations of every one of them, he dismissed them.' (Xen. An. 1,7,8; Luraghi 2003: 169)

(2) a. *kaì anéstē Kain epì Abel tòn adelphòn autoû*
and rose-up.3SG Cain.NOM against Abel the brother his
kaì apékteinen ***autón***.
and killed.3SG he.ACC
'and Cain rose up against Abel, his brother, and killed him.' (Gen. 4,8)

b. *wa-yhî bi-hyôṯ-ām baś-śāḏeh way-yāqom*
and-it.happened in-being-their in.the-field and-he.rose.up
*qayin 'el-heḇel 'ā-**îw** way-yaharḡ-**ēhû***
Cain to-Abel brother-his and-he.killed-him
'And it happened in their being in the field and Cain rose up against Abel his brother and killed him.' (Gen. 4,8; from George 2010: 269. See below for a discussion of this example.)

I will examine the transfer affecting overt object pronouns testing the hypothesis that the influence in the Septuagint is not only the result of a translation strategy but also demonstrates a change in Greek (which is caused by language contact) as observed in the following stages of the language: referential null objects are available in Classical Greek (previous period) but become ungrammatical after Koine Greek. Hence, the main question of this study concerns the presence/absence of a relation between the transfer from Hebrew in the Septuagint as a text of Translation Greek in a situation of contact (does this transfer reflect an ongoing change in pronouns and null objects?) and a new characteristic that will become a rule for Greek in the later stages (overt referential objects). The specific Hebrew interference in the Septuagint—pleonastic instead of null pronouns—will become a characteristic of the grammar of later, post-Koine Greek, representing a significant change in the grammar of Greek, and does not show a transfer from Hebrew that only affects texts of this period; thus, the hypothesis of this study is plausible. Cf. the contrast between the null object in the New Testament (3a) and the obligatory overt object in Modern Greek (3b):

(3) a. *eîpen autêi [...] kaì ḗkouon Ø oi mathētaì autoû.*
said.3SG her and heard.3PL Ø the students.NOM his
'And he said to her (...) and his students were hearing him.' (Mk. 11,14)

b. *Ke tis ipe [...] ke i mathites tu *(ton) akughan.*
and her said.3SG and the students.NOM his he.ACC listen.3PL
'And he said to her (...) and his students were hearing him.'

The following section (2.1) describes the typology of null objects and their development in Greek. Section 2.2 presents the sociolinguistic status and syntactic characteristics of the text of the Septuagint and its significance for the study of Greek. Section 2.3 discusses the Interpretability Hypothesis that has accounted for the transfer in L2 and L1 attrition grammars and how it can be implemented for the analysis of a translation language in the case of strong contact. Section 3 presents data from the Septuagint, showing the "pleonastic" use of overt pronouns—in contrast to the model of Classical Greek—as well as a large set of characteristics of the pronominal system that may constitute influence from Hebrew. I argue in favor of an analysis of Translation Greek of the period as represented in the Septuagint data, which takes into consideration the principles of characteristics of L2 and L1 attrition grammars (for instance, grammars of heritage speakers). In Section 4, I demonstrate why the characteristics of the Greek Septuagint cannot be described as reflecting the process of an ongoing change, considering relevant principles of language change. Section 5 summarizes the primary conclusions.

2. Background on null objects and the Greek Septuagint

2.1 Null objects

Two main types of null objects are distinguished cross-linguistically: indefinite/generic (4a) and referential/definite/latent null objects (4b). (See Cummins and Roberge 2005, for a detailed presentation of the literature on null objects and relevant examples).

(4) a. *The soldiers burnt and destroyed Ø.*
b. *They have the ability to impress and delight Ø.*

According to Cummins and Roberge (2005), who follow Larjavaara (2000) and García Velasco and Portero Muñoz (2002), several structural contexts favor a non-overt object, for instance,

(i) sequences of verbs
They will steal Ø, rob Ø, and murder Ø.
(ii) imperatives
Push Ø hard.
(iii) contrastive uses
She theorizes about language, but they just describe Ø.
(iv) infinitives
This is a lovely guitar, with an uncanny ability to impress Ø and delight Ø.
(v) generic present tense
There are those who annihilate Ø with violence, who devour Ø.

(Cummins and Roberge 2005: 124).

For Modern Greek, Giannakidou and Merchant (1997) and Tsimpli and Papadopoulou (2009) have distinguished indefinite or non-referential null objects that are available in Modern Greek from referential null objects that are unavailable in Modern Greek (5). Indefinite null objects appear in Modern Greek with NP-ellipsis and the presence or absence of an indefinite antecedent in the discourse (Tsimpli and Papadopoulou 2009: 1599):

(5) A: *Efere* *o* *Andreas* *merika* *vivlia?*
brought.3SG the Andreas.NOM some books.ACC
B: *Ne,* *(*ta)* *efere.*
yes (*they.ACC) brought.3SG
'A: Has Andreas brought any books? B: Yes, he did.'
(from Tsimpli and Papadopoulou 2009: 1599)

The change from Classical Greek to post-Koine Greek concerns the referential null objects and the use of object pronouns and not the indefinite or generic null objects. Luraghi (2003, 2004) has shown that specific (syntactic and discourse) environments trigger the object drop and that there are communicative differences between null objects and clitics in similar contexts in Classical Greek. Null objects that are conditioned by discourse in Classical Greek present highly topical and non-focal information whereas, according to Luraghi, syntactically conditioned null objects only occur in a set of constructions. Luraghi (2004) argued that these conditions for object drop are similar to the conditions for referential subject drop: coordinated clauses, participles, and yes/no questions. For instance, the object is omitted in the second clause in the case of coordinated verbs that have the same object (6a). Or, the object of a conjunct/ adverbial participle of a transitive verb is omitted if it is the same as the object of the governing verb (6b).

(6) a. *kaí* *min* *Athēnaîoi* *dēmosíēi* *te* *éthapsan* *autoû*
and he.ACC Athenians.NOM public-expense.DAT and buried.3PL there
têi *per* *épese* *kaì* *Ø* *etímēsan* *megálōs.*
where exactly fell.3SG and Ø honored.3PL greatly
'And the Athenians buried him at public expense on the place where he had fallen, and honored [him] greatly.' (Hdt. 1,30,4; from Luraghi 2004: 240, ex. 8)

b. *toùs* *mèn* *paîdas* *diasṓsas*
the PTC children.ACC rescue.PTCP.NOM
toîs *goneûsin* *apédōken* *Ø*
the parents.DAT restored.3SG Ø
'And having rescued the children, he restored [them] to their parents.' (Isoc. Hel. 29,1; from Luraghi 2004: 241, ex. 11)

Post-Koine Greek—in contrast to Classical Greek, in which both null objects and overt pronouns are possible in cases of referential objects—does not allow referential null objects, only utilizing object pronouns. By the beginning of the post-classical period, the weak form of a pronoun appears either in the second position within the clause or the phonological phrase (p-phrase) or, with an enclitic status, at a post-head (post-V) position (Janse 1993; Taylor 1996, 2002; Pappas 2004; Revithiadou and Spyropoulos 2006). Revithiadou and Spyropoulos (2006) have argued that in some cases (for instance, constructions with a conjunction and a verb), the weak form of the pronoun may appear before the verb (7a) or after the verb (7b) (see also below, section 3, for more data).

(7) a. ean soi doksēi
if you.DAT seems-good
'if it seems good to you...' (Select Papyri[3] 115,8)

b. ean doksēi soi
if seems-good you.DAT
'if it seems to you...' (Select Papyri 110,8) (Taylor 1996: 498)

For Revithiadou and Spyropoulos, this variation in post-Classical Greek shows the existence of two grammars in competition: pronominals appear in the second position within the clause or the phonological phrase ("old" grammar); pronominals have an enclitic status and appear after the verb ("new" grammar). In the following section, and before analyzing the contrast between pronouns and null objects in the Greek Septuagint, I discuss the status of the Greek Septuagint, which reflects the variety of Koine that is the focus of this study.

2.2 The Greek Septuagint

Because there are obvious sociolinguistic—as well as chronological—differences in the stages of Koine, we must refer to the Greek Septuagint in this study, distinguishing the variety represented in this text from the other varieties of this period.[4] Moreover, we must notice that the phenomenon we are examining is not just stylistic of the Septuagint because it remained in the language in later stages. The Septuagint is considered significant for the analysis of syntactic changes in Greek because it is the most substantial corpus of post-Classical Greek, extending from the Ptolemaic period to the period of the Roman conquest. It constitutes a collection of Greek texts, mainly translations or paraphrases (or with Greek as the original language), from the first half of the third century BC to the first century AD (Thackeray 1909, Drettas 2007). According to the traditional view on the text of the

[3] Hunt, A. S. and C. E. Campbell (ed.). 1932. *Select Papyri*. London: William Heinemann.

[4] See below for more details and Janse (2002: 389):

> "If the language of the LXX [Septuagint] can indeed be qualified as 'good *koinḗ* Greek' (Thackeray 1909: 13) because of its drawing from the lexical and grammatical resources of the Egyptian *koinḗ*, especially in the case of the Pentateuch (Swete 1914: 20), this is not tantamount to saying that it can be considered representative of the spoken or even written language of its time in every respect."

Septuagint –that is, the information included in the letter of Aristeas to Philocrates ("Aristeas' story"), it was Ptolemy II Philadelphus (circa 200 BC) who commissioned a translation of the Hebrew Old Testament. Ptolemy II Philadelphus charged a committee of 70 or 72 Jewish scholars with preparing a Greek translation of the first five books of the Old Testament. The target of this translation was the Greek-speaking Hebrew community who had started to forget Hebrew (cf., among many others, Janse 2002, Wasserstein & Wasserstein 2006, Karrer & Kraus 2008).[5]

Many characteristics of the language of the Septuagint have been attributed to the process of translation as well as to the bilingual status of the specific translators and their community (see also below regarding the possible scenarios about the translators). Examples of the transfer from Hebrew include, for instance, a preference in the Septuagint for paratactic structures or the tendency for many verbs to take PPs instead of DPs in the accusative (for example, *phobéomai* + *apó-Genitive*) (see among others, George 2010). For Wistrand (2005) as well, the Septuagint is undeniably full of translation Hebraisms. On the other hand, Wistrand claims that the similarities between the Septuagint and the New Testament are likely the result of conscious or unconscious imitation of the features of what was, during the entire Koine and early Imperial periods, the authoritative version of the Old Testament. The New Testament has taken these features indirectly via the Septuagint; however, these features may also have been intentionally selected to imitate a certain style (Wifstrand 2005: 29).

There are three possible scenarios with regard to the translators of the Septuagint. First, the translators were L1 speakers of Hebrew who learned Greek as L2 and transferred Hebrew features into their L2: this is "Aristeas' story"; however, its historical accuracy is disputed. For instance, Janse (2002: 383) argues that the translators may be native speakers of the Egyptian Koine but not of Hebrew or Aramaic because they were able to follow rules such as Wackernagel's Law. Second, translators were bilingual probably because a large portion of their community was bilingual. On the other hand, Hebrew interference in the Septuagint is limited to lexical and syntactic extension (Janse 2002: 388–389), also showing a translation technique that is frequent in sacred translations. This remark leads us to the third scenario, that the translators must, of course, have had some level of proficiency in both languages; however, the translators were L1 speakers of Greek who learned Hebrew as L2—or as heritage speakers—and consciously calqued Hebrew (mainly lexical and stylistic) features into their L1 (translation effect). I believe, however, that the transfer of core grammatical characteristics—overt instead of null objects, for

[5] I refer to Janse's (2002) detailed discussion of the historical and sociolinguistic aspects of the development of post-Classical Greek and of the translation effects in the Septuagint. In fact, the starting point for the use of the Septuagint in the present study as a representative text of a community in strong language contact is Janse's (2002) study:

> "[...] since Deissmann's *Bibelstudien* (1895–97) the language of the Greek Scriptures is generally considered to be representative of the koinḗ, i.e. of the Egyptian koinḗ in the case of the LXX [Septuagint], specifically the Pentateuch (Swete 1914: 20), and of the Syro-Palestinian koinḗ in the case of the New Testament." (Janse 2002: 342).

instance—is related to general linguistic mechanisms that are applied in grammars with L1 attrition[6] or L2 grammars (see Section 2.3).

On the other hand, we should note that Bible translations demonstrate faithfulness in translating sacred texts because the status of the model may force the translators to override the features of the target language (Gianollo 2011: 75; see also Taylor 2008, and Drinka 2011). Moreover, the Septuagint is a special case between translations of sacred texts because of two additional characteristics: its various revisions (discussed in Koester 1995 and in Rahlfs' [1935] 1979 introduction to his edition of the text, for example) and the tension between the ideal of literal translation and the wish to write good Greek (either Koine Greek or Atticistic).

The specific phenomenon under examination, however, the extended use of pleonastic pronouns, has a parallel in contemporary and later native (non-Translation Greek) documents, most likely representing an ongoing change from a language that does not allow referential null objects into a language that uses clitics instead of null objects.

2.3 Transfer in L2 grammars

Changes in the development of a language resulting from internal factors have been considered related to the process of (L1) language acquisition (for instance, how features are reanalyzed by the next generation of speakers). Principles of this "typical" change may apply to changes through contact as well. I will claim that changes in cases that involve L2 learners—and perhaps are represented in translation languages—may also follow principles of language transfer in foreign language grammars; hence, I will argue that additional principles should be considered for external change but not for internal change.[7] I will expand the approach followed in the analysis of the grammar of L2 learners and the grammar of speakers with L1 attrition (Interpretability Hypothesis; Tsimpli 2003 and Tsimpli and Mastropavlou 2007) to processes (or techniques) that characterize the grammar of translation languages, especially in cases of contact and L1 attrition (for heritage speakers). Accordingly, I will implement the principles of these areas in the phenomenon under examination: pleonastic pronouns in the Septuagint and their relation to the relevant changes in the history of Greek.

According to the Interpretability Hypothesis, the problems of L2 learners (and L1 attrition [heritage] speakers) concern the use of uninterpretable features that are absent in the learners' native language or that are present but with a different specification. Tsimpli (2003) and Tsimpli and Mastropavlou (2007) have shown that

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[6] Cf. Schmid (2013: 119): "The situation of linguistic drift (...), where a migrant achieves a high level of proficiency in the language of his or her new environment, uses this language on a daily basis, and consequently experiences an increase in variability in the manner some lexical, grammatical or phonetic properties of the [first] language are applied, has been termed language attrition."

[7] See Section 4 for details. This approach attempts to connect L2 acquisition processes to language change in cases of language contact. In this manner, it is close to Kroch's analysis (for instance, 1989) of "internalized diglossia" and "competing grammars" in situations of language contact and change. The emphasis, however, of the present study is on the transfer of features and differences from (internal) change through L1 acquisition.

features that are visible at the LF-interface because of their semantic content—that is, LF-interpretable features—are easier and more accessible to the L2/L1 attrition speakers in contrast with uninterpretable features whose role is restricted to narrow syntax and/or have PF-realization but are not visible at the LF-interface. According to this approach, uninterpretable features are not accessible to L2 learners because they are subject to the critical period constraint—in other words, L1 values associated with these features are difficult to reset. L2 learners have access to LF-interpretable features even if these differ from their L1 (for instance, animacy in Modern Greek and English). L2 learners access interpretable features because these features have a dual status; they are present both in the language system and in the LF-interface. Conversely, LF-uninterpretable features are problematic in L2 acquisition. This is, for example, the reason that L1 Modern Greek learners of L2 English have problems with not using the resumptive strategy; the Interpretability Hypothesis predicts that the developing L2 grammar will utilize interpretable features that are always available independently.

Tsimpli and Dimitrakopoulou (2007) have investigated the use of subject and object resumptive pronouns in L2 English wh-interrogatives with L1 Greek learners. Modern English (similar to Classical Greek) does not allow resumptive pronouns with subject and object wh-questions, in contrast to Modern Greek. In this respect, Tsimpli and Dimitrakopoulou have examined the role of the interpretable features of animacy and D-linking[8] with resumptive pronouns in L2 wh-questions. Interpretable features such as the animacy feature can constrain the transfer of resumptive pronouns from L1 Modern Greek to L2 English. The animacy feature is a semantic feature grammaticalized on Modern English pronouns but not in Modern Greek, in which grammatical gender distinctions override the animacy specification. Wherever interpretable features such as animacy are involved, improvement of the use of L2 pronouns is observed. On the other hand, uninterpretable features—for instance, resumptive uses of agreement on the pronouns in L1 Modern Greek—cause learnability problems because they are transferred to the L2 grammar.

A similar role of interpretable/ uninterpretable features has been attributed to the problems in SLI grammars. The incomplete representation of the functional elements causes inaccessibility of uninterpretable features in SLI and problems in the analysis of the input. That is, in SLI, the analysis of the input in terms of identification of formal, uninterpretable features is incomplete. Hence, it appears that the cause may be different in L2/L1 attrition and SLI grammars but the uninterpretable formal features are the locus of the problem in all cases.

In the next section, I will analyze Translation Greek of the Septuagint in the aspect of overt referential objects, a significant change for later Greek, from the viewpoint of the Interpretability Hypothesis.

[8] In D(iscourse)-linking, "a wh-question asks for answers in which the individuals that replace the wh-phrases are drawn from a set that is presumed to be salient both to speaker and hearer" (Pesetsky 2000: 16).

3. The data: "pleonastic" pronouns in the Septuagint

The Septuagint presents clear evidence of influence from Hebrew to Greek of a characteristic that is different in the previous period (Classical Greek) and changes during the Koine period (post-Koine Greek). In accordance with the relevant literature, I will show that influence from Hebrew is clearly evidenced in the case of the Septuagint. The Interpretability Hypothesis can correctly predict the following for Translation Greek of the Septuagint: constructions that involve uninterpretable features are potentially influenced by Hebrew characteristics whereas constructions that involve interpretable features constrain the degree of transfer from Hebrew to Greek. The case of the Septuagint is significant from this perspective because the use of "modern" resumptive pronouns is attested for the first time.

The increased use of personal pronouns (direct objects, possessives, and resumptive pronouns) in the Septuagint has been mentioned in many monographs, grammars, and articles as an important example of the Semitic influence on Greek, see (8)-(10). According to Moulton and Turner (1963: 3), for instance, in the Septuagint, "personal pronouns are inserted where they would be unnecessary in classical Greek," whereas in non-Biblical [non-Septuagint and non-New Testament] Koine, "pleonastic" personal pronouns do not occur as often as in the Septuagint. Swete (1914: 307) also describes these "pleonastic" personal pronouns as a Semitic influence: "wearisome iteration of the oblique cases of personal pronouns answering to the Hebrew suffixes." Furthermore, George (2010: 269) observes the presence of the 3rd-person pronoun *autón* three times in a sentence as the subject of an infinitive, a possessive pronoun, and an object pronoun (10a). This example follows the model of Hebrew. In Hebrew, pronominal suffixes are repeated on consecutive verbs or nouns (10b) (Thackeray 1909: 30; Wifstrand 1949–50: 44–45; Moulton and Turner 1963: 85).

(8) *auxanô* ***se*** *kaì* *plēthunô* ***se***
increase.1SG you.ACC and multiply.1SG you.ACC
kaì *poiḗsō* ***se*** *eis* *sunagōgàs* *ethnôn.*
and make.1SG you.ACC into multitudes nations
'I will increase you, and multiply you and will make of you multitudes of nations.'[9] (Gen. 48,4)

(9) *egéneto* *dè* *en* *tôi* *sklērôs* ***autề̀n*** *tíktein*
was PTC in the hard she.ACC give-birth.INF
eîpen *autêi* *hē* *maîa*
said.3SG she.DAT the midwife.NOM
'And as she was having great difficulty in childbirth, the midwife said to her.' (Gen. 35,17)

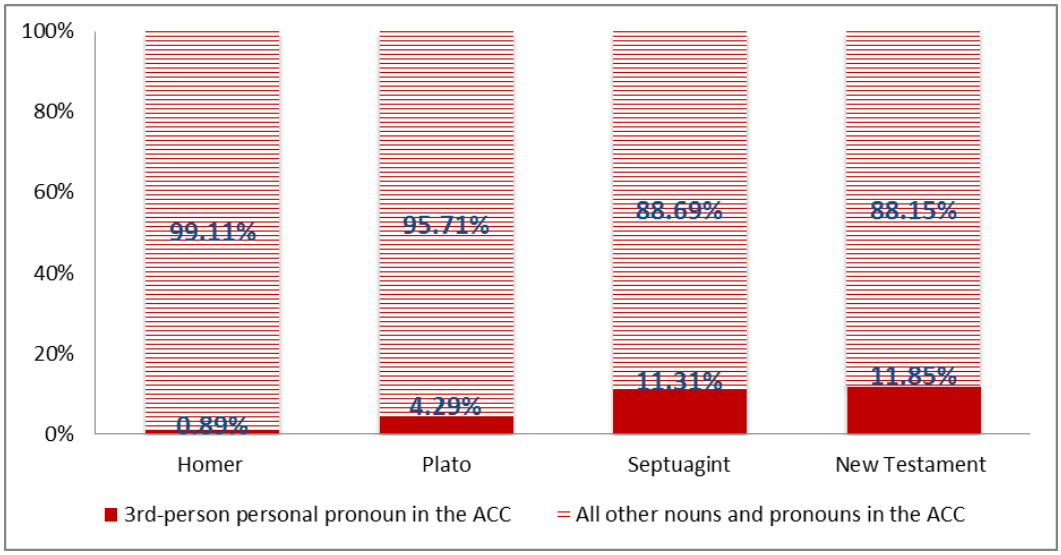
[9] The majority of the nonliteral translations given are based on *The English Standard Version Bible: Containing the Old and New Testaments with Apocrypha* (2009).

(10) a. *kaì egéneto en tôi eînai* ***autoùs*** *en tôi pedíōi kaì anéstē*
and happened in the be.INF they.ACC in the field and rose-up.3SG
Kain epì Abel tòn adelphòn ***autoû*** *kaì apékteinen* ***autón***
Cain.NOM against Abel the brother his and killed.3SG he.ACC

b. *wa-yhî bi-hyôṯ-**ām** baś-śāḏeh way-yāqom*
and-it.happened in-being-their in.the-field and-he.rose.up
*qayin 'el-heḇel 'ā-**îw** way-yaharḡ-**ēhû***
Cain to-Abel brother-his and-he.killed-him
'And it happened in their being in the field and Cain rose up against Abel his brother and killed him.' (Gen. 4,8)

In Figures 1–3, I present the results of a corpus study of the presence of object personal pronouns in Homer, Plato (and Herodotus), the New Testament, and the Septuagint (based on electronic corpora: BibleWorks, PROIEL, Perseus under PhiloLogic, TLG online).[10] I conducted a corpus search for the relative frequency of 3rd-person personal pronouns in the accusative (as direct objects) compared with the frequency of overt nouns and other (nonpersonal) pronouns in the accusative (as direct objects). I use relative frequencies to minimize the effect of the different word counts. The decision to search for changes in the frequency of personal pronouns in the accusative (in contrast to other overt DPs) was the result of the fact that there is no coding for null elements in texts from different periods or in the Septuagint in the available corpora of Greek (except for the New Testament). There appears to be a statistically significant increase in the frequency of object pronouns but no difference between their frequency in the Septuagint and the New Testament. A Pearson chi-square test was performed to assess the relation between the periods and the development of the third person personal pronouns (data in Figure 1). The results were statistically significant for the comparison between Classical Greek (Plato) and the Septuagint (χ^2=3.426, p=.044), with an effect size of φ=.13, which is a small size effect, and Classical Greek and the New Testament (χ^2=3.852 p=.04), with an effect size of φ=.14, which is a small size effect. No statically significant difference was observed between the Septuagint and the New Testament (χ^2=.014, p=.905).

[10] For BibleWorks, see: http://www.bibleworks.com/; for PROIEL: http://foni.uio.no:3000/; for Perseus under Philologic: http://perseus.uchicago.edu/; and for TLG online: http://www.tlg.uci.edu/.



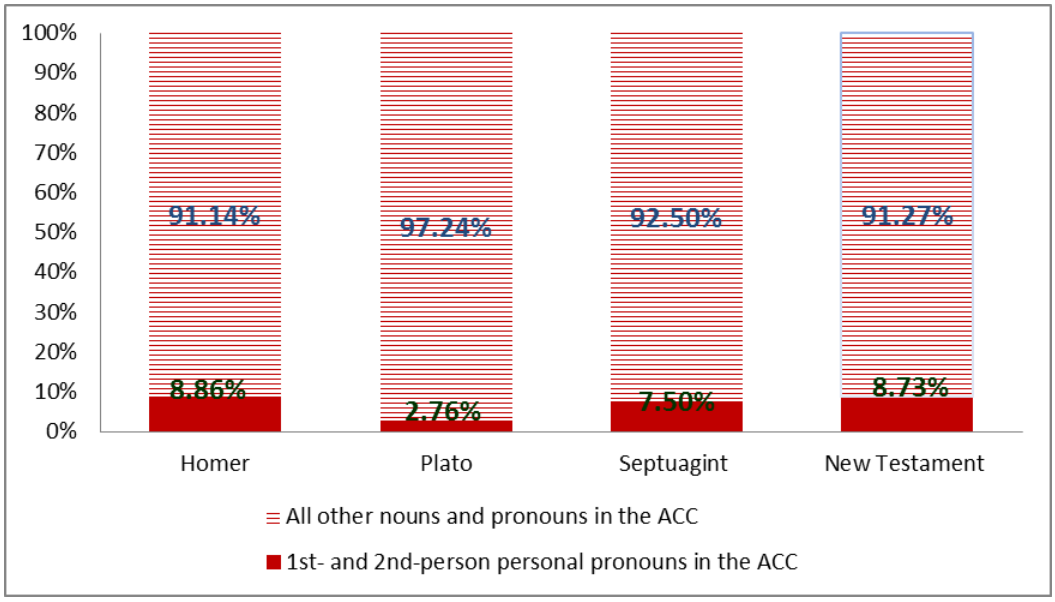
	3rd-person personal pronoun in the ACC	*All other nouns and pronouns in the ACC*
Homer	0.89% (209 / 23481)	99.11% (23272 / 23481)
Plato[11]	4.29% (3307 / 77053)	95.71% (73746 / 77053)
Septuagint	11.31% (7476 / 66075)	88.69% (58599 / 66075)
New Testament	11.85% (1603 / 13531)	88.15% (11928 / 13531)

Figure 1. Frequency of 3rd-person personal pronouns in the accusative in Homer, Plato, the Septuagint, and the New Testament

I also conducted a corpus search for differences between the frequency of 3rd-person personal pronouns and the frequency of 1st- and 2nd-person personal pronouns because 3rd-person personal pronouns differ from other forms involving (un)interpretable features. In Tsimpli and Stavrakaki (1999) and Tsimpli and Mastropavlou (2007), 1st- and 2nd-person clitics and 3rd-person object clitics are distinguished in that 3rd-person clitics encode values of uninterpretable features only, whereas 1st- and 2nd-person clitics carry an interpretable feature of person (Manzini and Savoia 1998). Furthermore, 3rd-person clitics in the genitive, which belong to the nominal phrase, also differ from 3rd-person clitics in the accusative, which belong to the verbal phrase (Tsimpli and Stavrakaki 1999). 3rd-person clitics in the genitive bear a person feature and a feature of referentiality because they are theta-marked; this does not hold for 3rd-person clitics in the accusative (cf. Cardinaletti and Starke 1999). According to Tsimpli and Mastropavlou (2007), errors in the use of 3rd-person pronouns in the accusative in advanced adult L2 learners are caused by the assignment of the interpretable feature of referentiality/definiteness on these problematic elements in the grammar of the foreign speaker. I test whether the differences in the features of these pronouns play a role in their frequency and the changes between different periods. Figure 2 shows that no change is manifested for the 1st- and 2nd-person personal pronouns although there was a change in the frequency of 3rd-person personal pronouns (see Figure 1). A Pearson chi-square test was performed to assess the relation between the periods and the development of the

[11] The data from Herodotus are similar both for 1st- and 2nd-person personal pronouns in the accusative and the 3rd-person personal pronouns in the accusative.

1st- and 2nd-person personal pronouns. The results show a difference between Plato and all other texts; however, the differences were not statistically significant (Plato compared with the Septuagint: χ^2=2.308, p=.129).

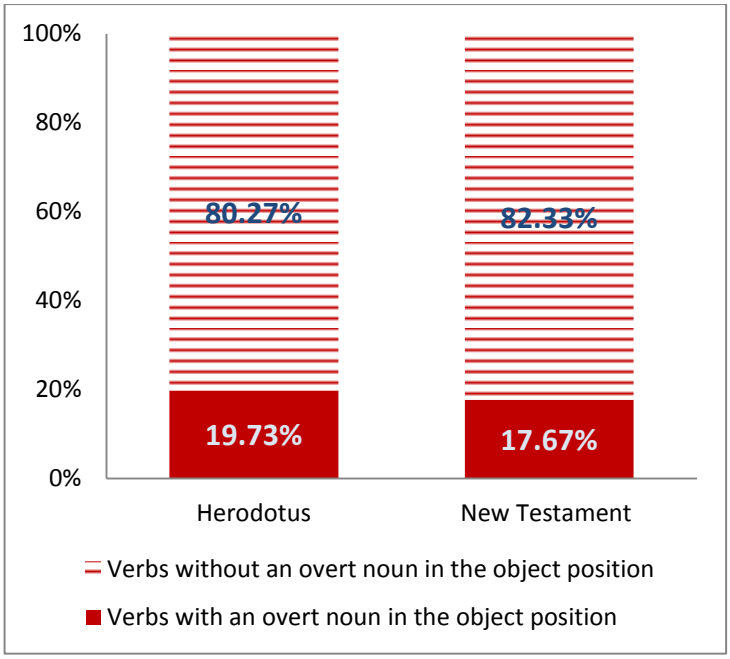


	1st- and 2nd-person personal pronouns in the ACC	*All other nouns and pronouns in the ACC*
Homer	8.86% (2081 / 23481)	91.14% (21400 / 23481)
Plato	2.76% (2123 / 77053)	97.24% (74930 / 77053)
Septuagint	7.50% (4954 / 66075)	92.50% (61121 / 66075)
New Testament	8.73% (1182 / 13531)	91.27% (12349 / 13531)

Figure 2. Frequency of 1st- and 2nd-person personal pronouns in the accusative in Homer, Plato, the Septuagint, and the New Testament

Moreover, Figure 3 presents a corpus search in PROIEL that shows no significant change between Herodotus and the New Testament in this respect.[12] A Pearson chi-square test was performed to assess the relation between the periods and the development of overt nouns in the object position. The results were not statistically significant for the comparison between Herodotus and the New Testament (χ^2=.140, p=.709).

[12] PROIEL includes syntactic annotation for Herodotus and the New Testament—but not for the Septuagint for overt nouns in the object position—and coding for null objects only for the New Testament but not for Herodotus.



	Verbs with an overt noun in the object position	*Verbs without an overt noun in the object position*
Herodotus	19.73% (3373 / 17100)	80.27% (13727 / 17100)
New Testament	17.67% (4502 / 25472)	82.33% (20970 / 25472)

Figure 3. Frequency of overt (common and proper) nouns in the object position in Herodotus and the New Testament

Null objects remain available in the New Testament, following the model of the grammar of Classical Greek. 341 examples of null objects were identified in a search of the New Testament in the PROIEL corpus (see 11a-e).

(11) a. *lúsate* *autòn* *kaì* *phérete* ***Ø***
unbind.IMP.2PL he.ACC and bring.IMP.2PL Ø
'Unbind it (the horse) and bring (it) here.'[13] (Mk. 11,2)

b. … *kaì* *éthēken* ***Ø*** *epì* *toû* *stauroû*
and put.3SG Ø on the cross
'[And Pilate wrote a title also] and put (it) on the cross.' (Jn. 19,19)

c. ... *ouk* *êlthon* *katalûsai* ***Ø*** *allà* *plērôsai* ***Ø***
and not came.INF Ø but fulfil.INF Ø
'[Think not that I came to destroy the law or the prophets.] I came not to destroy but to fulfill (the law and the prophets).' (Mt. 5,17)

d. … *kaì* *éphagon* ***Ø*** *pántes* *kaì* *ekhortásthēsan.*
and ate.3PL Ø all.NOM and were-filled.3PL
'[and the two fishes divided he to all] and they all ate (from them) and were filled.' (Mk. 6,42)

[13] The majority of the nonliteral translations given are based on *The English Standard Version Bible: Containing the Old and New Testaments with Apocrypha* (2009).

e. … *kaì* *ésthion* ***Ø*** *psṓkhontes* ***Ø*** *taîs* *khersín.*
and ate.3PL Ø rub.PTCP.NOM Ø the hands.DAT
'[he was going through the grainfields; and his disciples plucked the ears] and did eat, rubbing (them) in (their) hands' (Lk. 6,1)

With regard to the Septuagint, the Psalter is the book in which one can observe the most frequent uses of personal pronouns (Wifstrand 1949–50; Sollamo 2001). For example, Wifstrand identifies 2270 occurrences of personal pronouns in the Psalter, 850 in Genesis, 840 in Isaiah, and 450 in Sirach.

In addition to the object pronouns, the following cases of overt pronouns in the Septuagint differ from what is attested in Classical Greek; pronouns or even nouns with interpretable or semantic features are preferred and transferred from Hebrew to be used instead of elements with uninterpretable features (Conybeare and Stock 1905: 24–25, 52–55):

(i) A "pleonastic" personal pronoun is present after the relative pronoun (resumptive pronoun). This construction is completely new (unattested in Classical Greek) and remains an important characteristic of the system of pronouns in later Greek (until Modern Greek). Hebrew relative pronouns are indeclinable, and a personal pronoun is always added to determine the relative pronoun. The personal pronoun appears resumptive for Greek because the relative pronoun is marked for gender, case, and number (12a compared with 12b). Swete (1914: 307) considers resumptive pronouns with relative clauses to be a result of Semitic influence: "To the circumstance that the Hebrew relative is indeclinable we owe the 'pleonastic' use of the pronoun after the Greek relative." Bakker (1974: 9) names these resumptive pronouns *pronomen abundans*.

(12) a. *hē* *gê* *ep'* *hês* *sù* *katheúdeis* *ep'* *autês*
the land.NOM.F on which.GEN.F you.NOM lie.2SG on she.GEN.F
soì *dṓsō* ***autḕn***...
you.DAT give.1SG she.ACC
b. *hā·* *'ā·reṣ* *'ă·šer'* *at·tāh* *šō·k̲êḇ* *'ā·le·hā* *lə·k̲ā* *'et·tə·nen-nāh*
the land which you lie above you will-give-it
'The land on which you are lying I will give (it) to you.' (Gen. 28,13)

For Bakker, the use of the "pleonastic" pronoun is not a Semitism per se (1974: 33). Bakker argues that the presence of a "pleonastic" pronoun is related to the type of relative clause (restrictive or nonrestrictive): in non-Biblical [non-Septuagint and non-New Testament] Greek, the "pleonastic" pronoun occurs exclusively in nonrestrictive relative clauses (13a and b).

(13) a. *hoîs* *eîpen* ***autoîs***
who.DAT.M said.3SG they.DAT.M
'To whom the Lord said.' (Ex. 6,26)

b. *hôn* *oukhì* *akoúontai* *hai* *phōnaì* ***autôn***.
which.GEN not hear.MID.3PL the voices.NOM they.GEN
'Of which the voices are not heard.' (Ps. 19,3)

The pleonastic pronoun can appear as the object of a preposition as well (14).

(14) *gên* *ep' hề̀n* *ouk* *ekopiásate* ***ep'*** ***autês***
land.ACC.F on which.ACC.F not labored.2PL on she.GEN
'I gave you a land on which you had not labored.' (Josh. 24,13)

In the New Testament, resumptive object pronouns with relative clauses (15) and weak resumptive pronouns with nominative topics are attested. Moulton and Turner (1963: 325) observe that "non-Biblical Greek reveals the same phenomenon" (cf. also Horrocks 2010: 147–152; Maloney 1981; Blass, Debrunner and Rehkopf 1984: 228–252; Bubenik 1989: 65–67 for a detailed discussion).

(15) *eis* ***hề̀n*** *d'* *àn* *pólin* *è* *kṓmēn* *eisélthēte,*
in which.F PTC PTC city.NOM.F or village.NOM.F enter.2PL
exetásate *tís* *en* ***autêi*** *áxiós* *estin.*
examine.2PL who.NOM in she.dat worthy be.3SG
'Into whatever city or village you enter, find out who is worthy in it.' (Matt. 10,11)

It is obvious that, even though a translation such as the Septuagint presents more frequent instances of influence of the source/foreign language, other texts of the same community—including texts that are not translations and that do not represent Translation Greek of the period—cannot exist without evidence of the influence.

(ii) The 3rd-person pronoun *autós* in the nominative is used in cases in which Classical Greek would use a null subject (*autós éphē* 'he said' instead of the Classical Greek *éphē* 'said'; see also 16).[14] It is less common in the New Testament; however, there are some instances of use of the 3rd-person unemphatic subject (cf. Conybeare and Stock, 1905: 52–55). This use of the unemphatic subject pronoun is not observed in later (post-Koine) Greek.

(16) ***autós*** *sou* *tērḗsei* *kephalḗn...*
he.NOM you.GEN bruise.3SG head.ACC
'he shall bruise your head...' (Gen. 3,15)

(iii) A possessive pronoun in the genitive can be added to express possession (17a and b). This construction is not attested in Classical Greek. The construction remains available in later Greek (but with a clitic); however, the use of multiple possessives in a series of coordinate nouns becomes ungrammatical.

[14] Subject pronouns are attested in Classical Greek only in cases of emphasis or antithesis.

(17) a. *kaì taûta tà onómata* ***autôn*** *en tais skēnaîs* ***autôn*** *kaì*
and these the names.NOM their in the villages their and
en taîs epaúlesin ***autôn***
in the encampments their
'And these are their names, by their villages and by their encampments.'
(Gen. 25,16)

b. *kaì têide ên díduma en têi gastrì* ***autês.***
and she.DAT were.3PL twins.NOM in the womb her
'And behold twins were in her womb.' (Gen. 38,27)

Similar constructions with possessive pronouns can be observed in the New Testament as well (18).

(18) *autòs anḗnenken en tôi sṓmati* ***autoû***.
he.NOM bore.3SG in the body his
'He himself bore our sins in his body.' (1 Pet. 2,24)

Sollamo (1995) has shown that the repetition of pronominal possessives in a series of coordinate nouns did not correspond to the non-Biblical Koine: in Classical Greek, possessive pronouns are not common whereas in non-Biblical Koine, their frequency is much lower than in the Septuagint. On the other hand, Hebrew, when possession refers to two or more coordinate nouns, shows a suffix on each noun. Sollamo's results are important: in the Pentateuch, possessive pronouns are repeated in the majority of relevant cases (160/244); possessive pronouns are repeated less frequently in Genesis and Exodus (51% and 40%, respectively) than in Leviticus, Numbers, and Deuteronomy (75%, 86%, and 76%, respectively).

(iv) Furthermore, *idios* can be used as a possessive pronoun in the Septuagint, see (19) (cf. Conybeare and Stock 1905: 24–25). Again, this construction is not attested in later Greek. The Septuagint also shows a duplication of pronouns in the case of the use of the personal pronoun with the reflexive ('me myself'), see (20); this construction is not attested in later Greek either.

(19) *oud' ou mḕ epistrépsēi éti eis tòn* ***ídion*** *oîkon*
PTC NEG NEG return.3SG still to the own house
'He returns no more to his house.' (Job 7,10)

(20) *poiḗsēte* ***humîn heautoîs*** *gluptòn homoíōma*
make.2PL you.DAT yourselves.DAT carved image.ACC
'[and] make a carved image for yourselves.' (Deut. 4,16)

(v) The noun *adelphós* is used as a reciprocal pronoun, showing an influence from Hebrew (21), and the noun *anḗr* is used as an indefinite pronoun, again purely demonstrating an influence from Hebrew (22). These constructions do not constitute characteristics of the grammar of later (post-Koine) Greek.

(21) *kaì ouk eîden oudeìs tòn* ***adelphòn*** *autoû*
and NEG saw.3SG nobody.NOM the.ACC brother.ACC his
'They did not see one another.' (Exod. 10,23)

(22) *píetai* ***anèr*** *tèn ámpelon autoû kaì* ***anèr***
drink.3SG each.NOM the vine.ACC his and each.NOM
tèn sukên autoû phágetai.
the fig-tree.ACC his eat.3SG
'Then, each one of you will eat of his own vine, and each one of his own fig tree.' (2 Kings 18,31)

(vi) A demonstrative adverb (*ekei, ekeithen*) is used after a relative adverb or a similar phrase to repeat the previously mentioned DP (23a and b). Again, this appears to be a clear example of influence from Hebrew and is not used in texts later than the Septuagint.

(23) a. *epì tôn oikiôn en haîs humeîs este* ***ekeî***
on the house.GEN.F in which.DAT.F you.2PL are.2PL there
'[The blood shall be a sign for you] on the houses where you are.' (Exod. 12,13)

b. *en toîs éthnesin eis hoùs eisáxei*
in the nations.DAT.N to which.ACC.M[15] drive.3SG
kúrios humâs ***ekeî***
Lord.NOM you.ACC there
'... among the nations where the Lord will drive you.' (Deut. 4,27)

In the New Testament, only the Revelation shows some examples of this construction (24).

(24) *hópou tréphetai ekeî*
where nourish.MID.3SG there
'...where she is to be nourished.' (Rev. 12,14)

To summarize, a tendency toward "pleonastic" pronouns—and a completely different system of pronouns in which elements with interpretable features are transferred from Hebrew and preferred to elements with uninterpretable features—is evident in the data of the Septuagint. In several cases, an influence from Hebrew is obvious. This transfer concerns only the Septuagint in the majority of the examples with pronouns. However, some cases (resumptive pronouns and overt object pronouns instead of referential null objects) appear for the first time in the Septuagint—and in the New Testament, although less frequently—representing also a later change in the

[15] We should note that the relative pronoun in this example does not agree with the antecedent (*éthnesin* 'nations') with respect to the grammatical gender; it appears in the masculine gender (most likely referring to word *ánthrōpoi* 'humans', which is masculine in Greek) and not in the neuter gender.

history of Greek in the sense that overt object pronouns will remain a basic characteristic of later Greek. Of course, we cannot arrive at the general conclusion that a variety of (Egyptian) Koine (see Section 2.2) influenced by Hebrew affected the development of post-Classical Greek; nevertheless, we must distinguish this specific characteristic of pronouns in Translation Greek as represented in the Septuagint (that remain and constitute a significant change in Greek) from all other characteristics and influences of Hebrew or other languages in the Greek Septuagint. However, I do not claim that there is a direct connection between the Septuagint and the relevant change; the characteristics of the Septuagint do not represent an ongoing change. In section 4, I will show that the differences in the principles applied in each case (Translation Greek of the Septuagint: Interpretability Hypothesis; language change: Feature Economy Principle) can account for the lack of a direct relation between the transfer from Hebrew in Translation Greek of the Septuagint and the relevant language change.

4. Mechanisms of language change vs. mechanisms of L2/ L1 attrition grammars as evidenced in the Septuagint

Van Gelderen (2008, 2009, 2011) has shown that language change, in a similar manner to L1 language acquisition, involves reanalysis of semantic features as interpretable and then as uninterpretable features:[16]

(25) semantic > [iF] > [uF]

For van Gelderen, a functional element can lose its semantic and interpretable features and become a probe that searches for an element to value its features. Accordingly, for instance, the semantic feature of time of a PP inside a VP (for instance, English *after*) can be reanalyzed as grammatical time (see 26).

(26)

P >	P >	C
[u-phi]	[u-phi]	[u-phi]
[ACC]	[ACC]	[i-time]/[u-time]
[time]	[i-time]	

(van Gelderen 2008: 299)

This approach is interpreted as a Feature Economy Principle for language change (27). According to van Gelderen, this principle drives children to reanalyze their input while acquiring first language:[17]

[16] Semantic features are different from interpretable features in van Gelderen's approach (2008: 290, 296):

> "From Chomsky (1995) on, features are divided in interpretable (relevant at LF) and uninterpretable (not relevant to the interpretation)" and "assuming a lexicalist hypothesis in which a lexical entry 'contains three collections of features: phonological ... semantic ..., and formal' (Chomsky 1995: 230), a lexical item such as the light verb *go* might have semantic features of [motion, future, location]...".

(27) *Feature Economy Principle*
Minimize the semantic and interpretable features in the derivation.
(van Gelderen 2008: 297).

Hence, as observed, interpretable features help learners acquire the relevant phenomena in situations of foreign language grammars/ L1 attrition and contact between languages, whereas, again, interpretable features should be candidates for change, according to the Feature Economy Principle. The clear differences between the Feature Economy Principle of language change and the Interpretability Hypothesis for the characteristics of foreign language/L1 attrition speakers and translation languages in cases of intense contact such as the Greek Septuagint can explain the lack of a direct relation between the status of null objects in the Septuagint and the change in the null objects as evidenced in later Greek. On the other hand, the interaction between the principles that determine language change and the principles that determine the grammar of translation languages in the case of contact can explain some aspects of the direction of change in post-Koine Greek. In other words, that we do not observe a change from interpretable to uninterpretable features in the phenomenon under examination leads us to the discussion of a potential role played in the development by characteristics that are also evidenced in the translation language.

The important issue here is that later Greek does not follow rules of "typical" change through L1 acquisition in this case (overt pronouns), and Translation Greek of the Septuagint can provide evidence of a mechanism that may work in situations of contact. Of course, I do not claim that the specific text plays a role in the development; in the absence of other direct evidence of contact in antiquity, the grammar of this text—and, more specifically, the mechanisms and strategies involved in the grammar of this text—can help us understand the complex case of ongoing change in situations of contact. Change in cases of language contact is a "special"/complex situation (not a "typical" situation of language change) in that change must follow the principles of "typical" change whereas the transfer of characteristics of a foreign language, according to the Interpretability Hypothesis, also plays a role in the process of the change. Both mechanisms are in action in cases of language contact because, of course, L1 continues; however, less obviously, intrusion of elements of foreign languages may have played a role in learning L1; the learner is subject to a mixed primary input for L1 in the community because of the speakers of another language or because of intense contact with oral and written texts of another language.

Therefore, speakers may transfer elements related to uninterpretable features—such as resumptive pronouns that appear in the Greek Septuagint—from a foreign language but also try to minimize the semantic features of the derivation when they acquire their language (see Figure 4, below): this can be evidenced in the

[17] Cf. van Gelderen (2008: 287): "Data from language acquisition and language change show that a principle in the internalized grammar of the child (possibly a more general cognitive principle) biases the child toward analyzing certain features as uninterpretable, and also what consequence that has in turn."

preference for 3rd-person personal pronouns compared with an avoidance of 1st- and 2nd-person personal pronouns in the Greek Septuagint, for example. According to Tsimpli's (2003) analysis, the referentiality linked to the object pronoun is attributed to a syntactic feature matching the relation with an antecedent. Furthermore, 3rd-person object pronouns are distinguished from 1st- and 2nd-person object pronouns in terms of (un)interpretability: case and phi-features of 3rd-person object pronouns are uninterpretable whereas the person feature of 1st and 2nd person object pronouns is interpretable. Figure 2 in Section 3 has shown that the translators of the Septuagint did not face problems with 1st- and 2nd-person object pronouns that involve interpretable features; it appears there was no influence in the case of 1st- and 2nd-person object pronouns—their frequency remains stable, as in Homeric and Classical Greek. The situation is different with 3rd-person object pronouns that involve uninterpretable features, which are not accessible either to L2/L1 attrition speakers or to the translators of the Septuagint and which are possible candidates for transfer from the foreign (source of the translation) language.

However, the direction of the change remains similar to the direction attested for the "typical" change. This can mean that the opposite direction (change from uninterpretable to interpretable features) is not attested even in this case and that an actual contrast exists between the influence of foreign language in Translation Greek of the Septuagint and change starting with and after Koine, with respect to features and the relevant mechanisms. Hence, the change described is a change that concerns the uninterpretable case and phi- features of 3rd-person pronouns (referential 3rd-person object pronouns become obligatory) that remain uninterpretable; however, there is a spell-out requirement for them, meaning that null objects are ungrammatical because this cluster of features should be expressed by overt pronouns and not, for example, by characteristics—aspectual or other—of the verb. The uninterpretable features of 3rd-person object pronouns do not acquire a semantic or interpretable content, but undergo a different type of change: they must be spelled-out as overt pronouns; i.e., there is a change from uninterpretable features that are not spelled-out to uninterpretable features that are spelled-out by overt pronouns. A violation of the general principles of language change (Feature Economy, for instance) is not evidenced even in this case, in which other principles determine the influence of foreign languages such as those observed in Translation Greek of this period.

For translation languages in situations of contact, the mechanisms described by the Interpretability Hypothesis function; however, the change (if one occurs) cannot be the direct result of the processes in the grammar of the translation language. No direct relation is therefore evident between the change and the transfer from Hebrew as represented in the translation language (or any language influenced by foreign elements). This is because the change is not the result of the influence of a foreign language, but rather emerges through the transfer of grammar from one generation to the next. This intermediate process—the change through L1 acquisition by children—follows the same principles that L1 acquisition and language change follow in cases without foreign language influence.

Figure 4 shows how complex the situation of change in conditions of language contact should be: change is not directly related to the transfer from the foreign language in the grammar of the translation language. The transition from Grammar 1 to Grammar 2 results in reanalysis of some aspects of the grammar of the previous generation (Grammar 1). This reanalysis follows the general principles of "typical" change—that is, semantic and interpretable features are candidates to be reanalyzed as uninterpretable (van Gelderen 2008, 2010, 2011). Grammar 2 is the grammar of the generation of the translators of the Septuagint. The Greek Septuagint represents a translation language that contains characteristics from foreign languages (mainly Hebrew). The influence on Translation Greek follows the principles of typical L2 acquisition/L1 attrition: uninterpretable features are vulnerable and susceptible to transfer from the foreign language to Translation Greek. During the period of language contact, L1 acquisition continues, and the "new" grammar (Grammar 2), which is affected by characteristics of the translation language, is acquired by the next generation of speakers. Any change during this stage will follow the principle of the "typical" changes (interpretable features becoming uninterpretable) again.

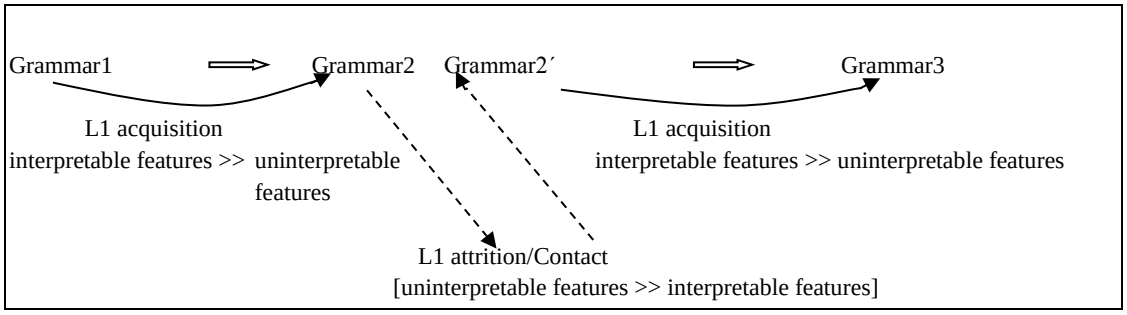


Figure 4. The position of the translation language in the case of change through contact [Grammars 1, 2, 2´, 3 refer to the grammars of the different generations of speakers].

5. Conclusions

We have investigated the hypothesis of a relation between characteristics of transfer from Hebrew in Translation Greek of the Septuagint and language change at the syntax-semantics interface using data for the presence of "pleonastic" pronouns (compared with referential null objects) in the Greek Septuagint. These "pleonastic" object pronouns in the Septuagint have been analyzed in the relevant literature as the result of contact between the Greek language and other languages, primarily Hebrew. The unavailability of referential null objects in post-Koine (post-Septuagint period) is also considered in the relevant literature to have been influenced by Hebrew. The data have shown that there is an important increase in the frequency of 3rd-person (but not 1st- and 2nd-person) personal pronouns both in the Septuagint and the New Testament. However, the relevant change appears to follow the principles of "typical" change. Speakers may transfer uninterpretable features such as resumptive pronouns in the Greek Septuagint from the foreign/source language in the case of a translation language but try to minimize the semantic features of the derivation when they

acquire their language (preference for 3rd-person personal pronouns compared with avoidance of 1st- and 2nd-person personal pronouns in the Greek Septuagint).

References

Bakker, W. F. 1974. *Pronomen abundans and pronomen coniunctum: A contribution to the history of the resumptive pronoun within the relative clause in Greek*. Amsterdam: North-Holland.

Blass, F., A. Debrunner & F. Rehkopf. 1984. *Grammatik des neutestamentlichen Griechisch*. 16. Aufl. Göttingen: Vandenhoeck & Ruprecht.

Bubenik, V. 1989. *Hellenistic and Roman Greece as a sociolinguistic area*. Amsterdam & Philadelphia: John Benjamins.

Cardinaletti, A. & M. Starke. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In H. van Riemsdijk (ed.), *Clitics in the languages of Europe*, 145–233. Berlin & New York: Mouton de Gruyter.

Chomsky, N. 1995. *The minimalist program*. Cambridge, MA: MIT Press.

Conybeare, F.C. & G. Stock. 1905. *Grammar of Septuagint Greek*. Boston, MA: Ginn & Co.

Cummins, S. & Y. Roberge. 2005. A modular account of null objects in French. *Syntax* 8(1). 44–64.

Deissmann, G. A. 1895. *Bibelstudien*. Marburg: Elwert.

Deissmann, G. A. 1897. *Neue Bibelstudien*. Marburg: Elwert.

Drettas, G. 2007. The translation (Targum) of the Septuagint. In A.-F. Christidis (ed.), *A history of Ancient Greek: from the beginnings to late antiquity*, 887–897. Cambridge: Cambridge University Press.

Drinka, B. 2011. The sacral stamp of Greek: Periphrastic constructions in New Testament translations of Latin, Gothic, and Old Church Slavonic. In E. Welo (ed.), *Indo-European syntax and pragmatics: Contrastive approaches*, 41–73. Oslo: University of Oslo.

García Velasco, D. & C. Portero Muñoz. 2002. Understood objects in Functional Grammar. *Working Papers in Functional Grammar* 76. Amsterdam: University of Amsterdam.

van Gelderen, E. 2008. Where did Late Merge go? Grammaticalization as feature economy. *Studia Linguistica* 62(3). 287–300.

van Gelderen, E. 2009. Feature economy in the linguistic cycle. In P. Crisma & P. Longobardi (eds.), *Historical syntax and linguistic theory*, 93–109. Oxford: Oxford University Press.

van Gelderen, E. 2010. Features in reanalysis and grammaticalization. In: E. Traugott & G. Trousdale (eds.), *Gradience, gradualness, and grammaticalization*, 129–147. Amsterdam & New York: John Benjamins.

van Gelderen, E. 2011. *The linguistic cycle: Language change and the language faculty*. Oxford: Oxford University Press.

George, C. H. 2010. Jewish and Christian Greek. In E. J. Bakker (ed.), *A companion to the Ancient Greek language*, 267–280. Oxford: Blackwell.

Giannakidou, A. & J. Merchant. 1997. On the interpretation of null indefinite objects in Greek. *Studies in Greek Linguistics* 17. 141–155.

Gianollo, C. 2011. Native syntax and translation effects: Adnominal arguments in the Greek and Latin New Testament. In E. Welo (ed.), *Proceedings of the International Workshop on Indo-European Syntax and Pragmatics*, 75–101. Oslo: Oslo Studies in Language.

Goodwin, W. W. 1978 [1894]. *A Greek Grammar*. Reprint. London: St. Martin's Press.

Horrocks, G. 2010. *Greek: A history of the language and its speakers*. 2nd edn. Chichester & Malden, MA: Wiley-Blackwell.

Humbert, J. 1945. *Syntaxe Grecque.* Paris: Librairie Klincksieck.

Jannaris, A. N. 1897. *An Historical Greek Grammar*. London: Macmillan.

Janse, M. 1993. La position des pronoms personnels enclitiques en grec néotestamentaire à la lumière des dialects néo-helléniques. In C. Brixhe (ed.), *La koiné grecque antique I. Une langue introuvable?*, 83–121. Nancy: Presses Universitaires de Nancy.

Janse, M. 2002. Aspects of bilingualism in the history of the Greek language. In J. N. Adams, M. Janse & S. Swain (eds.), *Bilingualism in ancient society: Language contact and the written word*, 332–390. Oxford: Oxford University Press.

Karrer, M. & W. Kraus. (eds.) 2008. *Die Septuaginta: Texte, Kontexte, Lebenswelten*. Tübingen: Mohr Siebeck.

Khan, G. 2013 Pronominal Suffixes. In G. Khan (ed.), *Encyclopedia of Hebrew Language and Linguistics*, vol. III, 267–272. Leiden: Brill.

Koester, H. 1995. *Introduction to the New Testament, vol. 1: History, culture, and religion of the Hellenistic Age*. Berlin & New York: de Gruyter.

Kroch, A. 1989. Reflexes of Grammar in patterns of language change. *Language Variation and Change*. 1(3). 199–244.

Kühner, R. & B. Gerth 1963 [1898/1904]. *Ausführliche Grammatik der Griechischen Sprache. Zweiter Teil: Satzlehre.* Unveränd. Nachdr. der 3. Aufl., 2 Bdn. Hannover: Hahn.

Larjavaara, M. 2000. *Présence ou absence de l'objet. Limites du possible en français contemporain*. Helsinki: Academia Scientiarum Fennica.

Luraghi, S. 2003. Definite referential null objects in Ancient Greek. *Indogermanische Forschungen* 108. 169–196.

Luraghi, S. 2004. Null objects in Latin and Greek and the relevance of linguistic typology for language reconstruction. In K. Jones-Bley et al. (eds.), *Proceedings of the 15th Annual UCLA Indo-European Conference, Los Angeles, November 7–8, 2003* (JIES Monograph Series 49), 234–256. Washington, DC: Institute for the Study of Man.

Maloney, E. C. 1981. *Semitic interference in Marcan Syntax*. Atlanta, GA: Scholars Press.

Manzini, M. R. & L. M. Savoia. 1998. Clitics and auxiliary choice in Italian dialects: Their relevance for the person ergativity split. *Recherches linguistiques de Vincennes* 27. 115–138.

Moulton, J. H. & N. Turner. 1963. *A Grammar of New Testament Greek*, vol. III: *Syntax*. Edinburgh: T. & T. Clark.

Panagiotidis, P. 2003. Empty nouns. *Natural Language and Linguistic Theory* 21. 381–432.

Pappas, P. 2004. Medieval Greek weak object pronouns and analogical change: A response to Condoravdi and Kiparsky (2001). *Journal of Greek Linguistics* 5. 127–158.

Pesetsky, D. 2000. *Phrasal movement and its kin*. Boston, MA: MIT Press.

Rahlfs, A. (ed.). 1979 [1935]. *Septuaginta*. Reprint. Stuttgart: Deutsche Bibelgesellschaft.

Revithiadou, A. & V. Spyropoulos. 2006. A typology of Greek clitics with special reference to their diachronic development. Ms., University of the Aegean. http://ling.auf.net/lingbuzz/000496/current.pdf (accessed 13 November 2013).

Schmid, M. S. First language attrition. *Wiley Interdisciplinary Reviews: Cognitive Science* 4(2). 117–123.

Schwyzer, E. & A. Debrunner. 1950. *Griechische Grammatik. Zweiter Band: Syntax und syntaktische Stilistik* (Handbuch der Altertumswissenschaft, 2. Abt., 1. Teil, 2. Bd.). München: C.H. Beck..

Smyth, H. W. 1956. *Greek Grammar.* Cambridge, MA: Harvard University Press.

Sollamo, R. 1995. *Repetition of the possessive pronouns in the Septuagint* (SBL Septuagint and Cognate Studies 39). Atlanta, GA: Scholars Press.

Sollamo, R. 2001. The Letter of Aristeas and the Origin of the Septuagint. In B. A. Taylor (ed.), *X Congress of the International Organization for Septuagint and Cognate Studies*, 329–342. Atlanta GA: Society of Biblical Literature.

Stahl, J. M. 1907. *Kritisch-historische Syntax des griechischen Verbums der klassischen Zeit*. Heidelberg: Winter.

Swete, H. 1914. *An Introduction to the Old Testament in Greek* (2nd revision by R. R. Ottley). Cambridge: Cambridge University Press.

Taylor, A. 1996. A prosodic account of clitic position in Ancient Greek. In A. Halpern & A. Zwicky (eds.), *Approaching second: Second position clitics and related phenomena*. Stanford, CA: CSLI Publications.

Taylor, A. 2002. The distribution of object clitics in Koine Greek. In M. R. V. Southern (ed.), *Indo-European perspectives*, 285–316.Washington, DC: Institute for the Study of Man.

Taylor, A. 2008. Contact effects of translation: Distinguishing two kinds of influence in Old English. *Language Variation and Change* 20(2). 341–365.

Thackeray, H. St. J. 1909. *A Grammar of the Old Testament in Greek*, vol. I: *Introduction, orthography and accidence*. Cambridge: Cambridge University Press.

The English Standard Version Bible: Containing the Old and New Testaments with Apocrypha. 2009. Oxford: Oxford University Press.

Tsimpli, I. M. 2003. Clitics and determiners in L2 Greek. In J. M. Liceras, H. Zobl & H. Goodluck (eds.), *Proceedings of the 6th Generative Approaches to Second Language Acquisition Conference* (GASLA 2002), 331–339. Somerville, MA: Cascadilla Press.

Tsimpli, I. M. & M. Dimitrakopoulou. 2007. The interpretability hypothesis: Evidence from wh-interrogatives in second language acquisition. *Second Language Research* 23(2). 215–242.

Tsimpli, I. M. & M. Mastropavlou. 2007. Feature interpretability in L2 acquisition and SLI: Greek clitics and determiners. In J. M. Liceras, H. Zobl & H. Goodluck (eds.), *The role of formal features in second language acquisition*, 143–183. Mahwah, NJ: Lawrence Erlbaum.

Tsimpli, I. M. & D. Papadopoulou. 2009. Aspect and argument realization: A study on antecedentless null objects in Greek. *Lingua* 116(10). 1595–1615.

Tsimpli, I. M. & S. Stavrakaki. 1999. The effects of a morphosyntactic deficit in the determiner system: The case of a Greek SLI child. *Lingua* 108(1). 31-85.

Wasserstein, A. & D. J. Wasserstein. 2006. *The legend of the Septuagint: from classical antiquity to today*. Cambridge: Cambridge University Press.

Wifstand, A. 1949–50. Die Stellung der enklitischen Personalpronomina bei der Septuaginta. *K. Humanistiska Vetenskapssamfundets i Lund Årsberättelse (Bulletin dé la Société Royal des Lettres de Lund)* 1949–50, II. 44–70.

Wifstrand A. 2005. Luke and the Septuagint. In A. Wifstrand, *Epochs and styles. Selected writings on the New Testament, Greek language and Greek culture in the post-classical era,* ed. By L. Rydbeck & S. E. Porter, transl. By D. Searby, 28–45. Tübingen: Mohr Siebeck. [English translation of Wifstrand, A. 1940. Lukas och Septuaginta. *Svensk Teologisk Kvartalskrift* 16, 243–262].