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POSTCLASSICAL GREEK

CONTEMPORARY APPROACHES TO PHILOLOGY
AND LINGUISTICS

*Edited by Dariya Rafiyenko,
Ilja A. Seržant*

TRENDS IN LINGUISTICS

Dariya Rafiyenko, Ilja A. Seržant (Eds.)
Postclassical Greek

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Dariya Rafiyenko, Ilja A. Seržant
Postclassical Greek. An Overview

Abstract: This paper summarizes the major linguistic properties of Postclassical Greek that are distinct from Classical Greek. It discusses innovations in phonetics, morphology and syntax and gives an overview over diatopic and diastratic variation observed across different periods of Postclassical Greek.

Keywords: Grammar of Postclassical Greek, variation, language change

1 Postclassical Greek

Greek is one of the few languages in the world with a continuous written (including literary) tradition spanning more than three millennia: virtually all periods of this language are well-documented by large numbers of texts. While the Archaic and Classical periods have received most of the scholarly attention for centuries (for a synoptic overview see Giannakis, ed., 2014; Bakker, ed., 2010), much less attention has been paid to the Greek of later periods, that is to Postclassical Greek (cf., *inter alia*, Browning 1983; Horrocks 2010; Palmer 1980: 174–200). We refer to the entire set of spoken and written varieties of the period from 323 BC up to 1453 AD as *Postclassical Greek*.¹

This period starts with the rise of the Koiné during the spread of Hellenism in the period of Macedonian imperialism and subsumes the later Roman and Byzantine periods. Unfortunately, we do not have a well-defined set of linguistic criteria for chronological periodization (e.g. Browning 1983: 12) and there are no commonly accepted periodization metrics. Periodization that relies on extra-linguistic criteria such as historically significant events is not unproblematic, but it is the solution standardly used so far. Nevertheless, we adopt it here. Table 1 contrasts the three periodizations that are most widely adopted in the literature, and that differ from each other only in minor ways.

During the Hellenistic period, the Koiné (*hē koinḗ diálektos* ‘the common speech’) developed on the basis of the spoken and written variety of Attic Greek of that time and became the *lingua franca* – this is sometimes referred to as “international Attic” (Eideneier 1999: 53–5) or “expanded Attic” – especially in the

¹ Other divisions are possible, cf. Bentein (2016: 6) who distinguishes between the Post-Classical and the Byzantine periods.

Table 1: Periodization of Postclassical Greek: an overview.

	Browning 1983	Horrocks 2010	Holton & Manolessou 2010
<i>323 BC – 31 BC</i>	Hellenistic and	Hellenistic period	
<i>31 BC – 330 AD</i>	Roman period (4th	Roman period	–
<i>330 AD – 527 AD</i>	c. BC – 6th c. AD)		
<i>527 AD – 1100 AD</i>	Early Middle Ages (6th c. – 1100)	Byzantium (Early, Middle and Late Byzantine periods)	Early Medieval Greek (500–1100)
<i>1100 AD – 1453 AD</i>	Later Middle Ages (1100–1453)		Late Medieval Greek (1100–1500)

western parts of the large territory of Alexander the Great’s conquests (Browning 1983: 21; cf. García Ramón, this volume).

This new common language, the Koiné, started developing different registers, most prominently its official variant at the Hellenistic chancelleries. Moreover, the literary Koiné started emerging during the late Hellenistic and Roman periods as an “artistically ‘developed’ version of the Koiné employed by the Hellenistic/Roman bureaucracies” (Horrocks 2010: 97). From the end of the 1st c. BC, authors were increasingly influenced by the “ideals” of Classical Attic, which they sought to imitate by reviving a number of grammatical and lexical properties of the classical language – a movement often referred to as Atticism (Schmid 1887–1897, Swain 1996, Schmitz 1997). At the same time, lower registers of Koiné have been considered as a “product of ignorance, debasement and vulgarity” (Browning 1983: 44). The systematic penetration of properties of the classical language into the Koiné (at least in its higher registers) was facilitated by a number of lexica and grammatical works and the norms described there, such as in the works by Apollonius Dyscolus (2nd ct. AD), Aelius Herodianus (2nd ct. AD) or Theodosius of Alexandria (≈4th ct. AD) (cf. Browning 1983: 45; Benedetti, this volume). This leads to the phenomenon of *imperfect learning*. For example, a number of allegedly Attic phenomena are introduced hypercorrectly: middle voice, the old perfect forms, the subjunctive and optative forms are often used in a way that violates the original Attic patterns (Browning 1983: 47; Benedetti, this volume), etc. Generally, the form itself has become more representative of the high register than the grammatically correct usage thereof.

The Atticist movement was so pervasive that it exercised an impact not only on the literary language of prose writers but also on colloquial registers. Some Atticistic features penetrated into the language of less educated

speakers. Traces of Atticism are even found in the language of New Testament which – despite some internal diastratic variation – represents an excellent example of contemporary Koiné (*inter alia*, Tronci, this volume; Rafiyenko & Seržant 2020+). For example, Tronci (this volume) finds traces of Atticism in the use of the future tense forms. Finally, Byzantine Greek still preserves a number of properties (re-)introduced into the literary language by Atticism (cf. Lavidas & Haug, this volume) because the Greek elite continued to use Atticised Greek to indicate their class membership and only sometimes wrote in less elevated registers for practical purposes. It is also during this period that we observe the spread of vernacular literature (cf. Horrocks 2010: 325–369).

Thus, despite being the common language, the Koiné underwent considerable diastratic differentiation very early on. Moreover, in addition to the diastratic variation, diatopic variation reveals itself as another important dimension of diversification. The diatopic variation was caused by two distinct types of substrata: the ancient Greek dialects in the Greek homeland and Asia Minor as well as by genealogically unrelated substrata. While the ancient dialects disappeared from the written record with the rise of the Attic-based Koiné, the latter becomes again subject to dialectal diversification, where some features of the ancient dialects survive (Browning 1983: 51; García Ramón, this volume).

Above we discussed the variation motivated by internal factors such as diversification into dialects or language change that affects different registers to different degrees and leads to hypercorrect forms in the language of the conservative elite. In addition, as a result of the immense expansion of Greek-speaking territory by Alexander the Great, Postclassical Greek was subjected to many more external influences. Certainly, the Greek-Coptic language contact is the best attested instance of language contact in antiquity (Grossman et al., eds., 2017). While Coptic not only borrowed lexical elements including verbs and adjectives but also grammatical items from Greek (see various papers in Grossman et al., eds., 2017), there is also evidence for the reverse direction: the emergence of Egyptian or Papyri Greek as a local variety with its own characteristics originally due to imperfect learning. As Dahlgren & Leiwo (this volume) show, the so-called misspellings in the Greek papyri and ostraca from Egypt represent a language that is less influenced by the literary tradition and thus more straightforwardly mirrors the colloquial language of the area. A number of spellings that deviate from the literary norm appear systematically and some of them are never found outside Egypt. These, as the authors argue, are due to different degrees of imperfect learning of Greek by the local scribes who were native speakers of Egyptian. Among the typical later Coptic features they list vowel reduction in unstressed syllables and, subsequently, the failure to differentiate between the different phonemes /a/, /e/, /o/ in these positions or the confusion

of the dentals and velars with regard to voicedness. These misspellings are primarily motivated by the phonological system as well as by the orthography of the native language.

A very different instance of an external influence on Postclassical Greek is Semitic, foremost in the language of Septuagint but also the New Testament, where Aramaic must have played a role. The language of the Septuagint closely matches the Hebrew Bible (George 2010). For example, the use of clause-introducing *kai* ‘and’ renders the *wə-* ‘and’ Hebrew in most cases (Horrocks 2010: 107; George 2010: 268–269). The impact of Semitic in general and Hebrew in particular becomes obvious in the non-integrational strategy of adopting Hebrew proper names in Greek as Crellin (this volume) illustrates. The rule of thumb here, he claims, is that full integration (*Hellenization*) is found predominantly in texts of a colloquial style, suggesting that this strategy was typical of day-to-day practice, while non-adaptation (*transliteration* only) is found in the more literary writings of Jewish authors who tried to locate themselves in a special non-Greek, Semitic, cultural world. That said, Flavius Josephus represents an exception in adhering to the full-integration strategy. The reason for this – as Crellin suggests – was his wish to be part of the Greek world.

Even from this very coarse survey of Postclassical Greek it is clear that the language of the texts we have is by no means dialectally, chronologically or sociolinguistically homogeneous (cf. Bruno, this volume). Different chronological stages of Greek are interwoven in complex ways due to the continuous and uninterrupted literary tradition available to native and non-native speakers of Greek and the coexistence of old and new in living speech and in literary production.²

2 Grammar of Postclassical Greek

In this section, we provide a brief overview of the major changes that occurred in Postclassical Greek of the Hellenistic, Roman and Early Byzantine periods as compared to classical Attic.

² To capture various layers of linguistic variation in Postclassical Greek as attested in different sorts of documents one may adopt the terminology in Cysouw & Good (2013: 347). On this terminology, Postclassical Greek would be a *langoid*, referring “to an entity used to designate any (possibly hierarchical) grouping of *doculects*, in principle running from a set of idiolects to a high-level language family”. In turn, a *doculect* (i.e. a documented *lect*) represents “a linguistic variety as it is documented in a given resource” (term coined by M. Haspelmath *apud* Cysouw & Good 2013: 342).

2.1 Phonetic and Phonological Changes

We begin our overview with phonetics. As is well known, the process of vowel raising that made the sounds [y], [i], [e:], [oi] turn into [i] by Byzantine times (around 330 AD) started already during the Hellenistic period (cf. Horrocks 2010: 167; Dahlgren & Leiwo, this volume). A non-Attic feature of the Koiné is the replacement of *-tt-* cluster by the panhellenic *-ss-*, Attic *-rr-* by the older *-rs-*, cf. *glôssa* ‘tongue’ (cf. Attic *glôtta*) or *t^hársos* ‘courage’ (Browning 1983: 24).

While short vowels did not undergo any changes, long vowels disappeared or merged: *ē* and *ī* started to converge by the 3rd ct. AD, *ō* turned into *u*. Diphthongs were monophthongized: *ai* > *e*: > *e*, *ei* > *e*: (possibly already during the Classical period) > *ī* > *i*, *oi* > *ü*: > *ī* > *i*, while *au*, *eu* became *av*, *ev*, etc. (Browning 1983: 25). Aspirated voiceless consonants and voiced consonants became the corresponding voiceless and voiced fricatives.

2.2 Restructuring of Morphological Patterns

When it comes to morphology, a number of restructurings took place that led towards greater regularization of inflectional patterns. For example, the Attic forms *neós* ‘temple’, *leós* ‘people’ were replaced by *naós* and *laós*, respectively, which were more common elsewhere (e.g. in the tragedy). Irregular comparative and superlative adjectival forms were replaced by the productive suffixes *-ter-os* (comparative) and *-tat-os* (superlative). The unproductive class of athematic verbs lost a number of verbs in favour of the productive, thematic class, cf. Attic *deíkny-mi* ‘show-1SG.ATHEM’ turned into Koiné *dekný-ō* ‘show-1SG.THEM’; the inflection of the weak aorist gradually expanded into the morphologically untransparent strong-aorist forms (Browning 1983: 28–29, 31). Many of these phenomena are typical for the Ionic dialect of the Classical period and were transmitted into Koiné by the speakers of the Ionic dialect through the incorporation of their territories into the Athenian empire. Productive derivational suffixes yielded a number of new words (cf. the list in Browning 1983: 39).

While productivity and transparency were important factors shaping the morphological development of grammatical categories, functional convergence was another one. Thus, the aorist and perfect – originally distinct tense-aspect categories – came increasingly to be used interchangeably. The process started already in the Classical period and later Koiné Greek can thus be said to have one perfective past category with largely stylistically conditioned allomorphy. Notably, the functional merger of these two categories is found in most other ancient Indo-European languages too, for example in Latin.

Other processes take place at the morphology-syntax interface. Thus, the distinction between the middle and the passive voices – which never succeeded in being fully grammaticalized in Ancient Greek (a number of forms never distinguished between the two) – is gradually abandoned in Postclassical Greek altogether (Browning 1983: 30). Another example is the loss of the subjunctive (Browning 1983: 31), which was important in different kinds of subordination structures. Loss of some phonological distinctions between the long and short vowels must have been an important trigger for the development of new syntactic patterns. Thus, the phonetically driven merger of the subjunctive and indicative verb forms that might have facilitated the rise of new subordinating patterns. The partial phonetic conflation of the dative and accusative forms is another example (see below).

2.3 Grammaticalization of New Categories

New, periphrastically formed categories emerge. For example, the progressive present and past was created on the basis of the verb *eimí* ‘to be’ and the present active participle, occasionally the aorist active participle, of the lexical verb (Browning 1983: 32–33; see Bentein 2016: 205–292 for a thorough study). A new perfect construction emerges. It is again formed on the same verb *eimí* ‘to be’ or, more rarely, the verb *ék^hō* ‘to have’ with the perfect or aorist active participle (Browning 1983: 33; Horrocks 2010: 131; Bentein 2014, 2016). The latter two distinguished between the resultative proper (as defined in the typological literature, cf. Nedjalkov & Jaxontov 1988, Nedjalkov 2001) and the perfect in the narrow sense (as defined in MacCoard 1978, Lindstedt 2000, Dahl & Hedin 2000, often referred to as “anterior perfect”) (Bentein 2016: 202).

A plethora of periphrases for encoding future reference emerge in the Postclassical language. By the time of the chronographer Malalas (6 c. AD), the old suffixal future forms have gone out of use and a number of competing strategies that rely on modal verbs – both those encoding necessity (*op^heílō* ‘have to’) and wish or intention (*méllō* ‘to be going to, to be ready to’) – are used here in addition to the pure *praesens pro futuro* strategy. Kölligan (this volume) shows that the old suffixal future forms found in Malalas are largely due to the tradition: they are copied from oracles (e.g. from Herodotus) or from the New Testament. Moreover, according to this author, there is an aspectual split as regards *praesens pro futuro*: only telic verbs are used in this way, while atelic verbs can only have present time reference.

Typically for less grammaticalized future patterns, the former modal or even lexical verbs may still retain to some extent their original meaning

(cf. *op^heīlō* ‘have to’). In turn, *t^hélō* (< *et^helō* ‘to want, to wish’) – which in reduced form will become the dedicated future-tense marker of Modern Greek – is only sporadically found (primarily in papyri) in the function of a future marker without the modal meaning in the Early Byzantine period (5th–10th c.) (Browning 1983: 34; Joseph 1990; Joseph & Pappas 2002; Markopoulos 2009: 105; Lee 2010). It is more frequent than other periphrases in the Old Testament (Evans 2001: 227–229). Analogically, *boúlomai* ‘to want’ and *méllō* ‘to be going to, to be ready to’ seem to largely retain the modal component in Malalas (cf. Kölligan, this volume) and in the language of the Old and the New Testaments (Tronci, this volume). Analogously, the periphrasis based on *ék^hō* ‘to have, to possess’ with the aorist, most often present, infinitive of the lexical verb do not attest to an unequivocal future meaning in Malalas while only necessity meanings are found (Kölligan, this volume), although this periphrasis has been claimed to be the dominant future-tense construction (cf. Browning 1983: 33; Markopoulos 2009: 94). Finally, *ésomai* ‘be.FUT.1SG.MID’ may sometimes also pattern as a future auxiliary with the present participle of the lexical verb (Browning 1983: 33).

The process of loss of the synthetic future was not abrupt, as is pointed out in Tronci (this volume). While new periphrastic forms emerge, the old synthetic forms are still widely used in the more colloquial register of the New Testament and even in papyri. Tronci (this volume) describes the relative chronology of how different morphological classes of the old synthetic future – such as the so-called Attic future, the sigmatic future, the *media-tantum* future, etc. – are consolidated to increase morphological transparency in derivation and form-function mapping in Postclassical Greek. Frequency of particular lexical verbs plays an important role here in the retention of the earlier patterns.

The ancient perfect no longer attested its original ‘perfect’ functions but rather changed into a past tense – a development frequently observed cross-linguistically (*inter alia*, Breu 1987; 1998:90–1; Kuryłowicz 1964:141ff; Serebrennikov 1974:234–6). This aspectual change makes the old perfect a category that denotes events and no longer states or after-effects from past events. Consequently, transitive verbs retain now their transitivity in the perfect – something that is already found in the classical language – and can therefore become subject to voice alternations in the same way as the aorist (Benedetti, this volume). By the Early Byzantine period, the perfect is no longer used in everyday language except for a few perfect forms which were reinterpreted as aorists because the inherited aorist forms were anomalous in some way. It remains a feature of the literary style in writing. For the purpose of the literary style, new forms for perfect for the active and perfect passive voice are artificially created on the analogy to some ancient forms (Benedetti, this volume).

2.4 Cases and Prepositions

The phonetically driven loss of length distinctions made the dative case ending *-o* very similar and sometimes even indistinguishable from the accusative *-o(n)* or genitive *-u* in one of the most frequent declensions (cf. Humbert 1930; Horrocks 2010: 116; Cooper & Georgala 2012). This phonetic merger might be one of the triggering factors – along with the functional overlap – for the dative case to gradually disappear from various domains: argument marking and form marking of non-arguments (such as *free datives*, datives encoding location, etc.).

The dative case is recessive. The non-prepositional dative case becomes increasingly replaced by prepositional phrases (PP). The marking of recipients and addressees is taken over by prepositions such as *pròs* ‘to, at’ or *eis* ‘into’, instrumentals by means of *dià* ‘through’, *en* ‘in’ or later *metà* ‘with’ and its locative meaning by prepositions like *en* ‘in’ (Luraghi 2005, 2010; Stolk 2017a, 2017b; cf. also George 2010: 271 on possible Semitic influence in the choice of the preposition). The evidence from papyri shows that *eis* originally was used only with animate recipients with a very specific meaning of “on account of whom a payment is made” as opposed to semantically less restricted *pròs* (Stolk 2017b: 235). The latter is more frequently used with full NPs (cf. Horrocks 2010: 284–285), while the old dative – sometimes replaced by the accusative – is reserved for pronouns when it comes to verbs of communication, while it is used with animate recipients only with transfer verbs (Danove 2015: 211–221; Stolk 2017b: 228). The replacement of the dative by accusative is found primarily with personal pronouns where there were phonetic preconditions for merging these two cases into one (cf. Browning 1983: 37; Stolk 2017b).

Interestingly, the frequencies of non-prepositional cases align with the tendencies found in prepositional phrases. Here too the dative gradually decreases in terms of type frequency in the prepositional government. Thus, the dative case becomes infrequent with alternating prepositions that originally selected for several cases including the dative (cf. recently Seržant & Rafiyenko 2020+). Moreover, the choice of cases that can be used with a particular preposition, highlighting distinct meaning facets, decreases. A number of prepositions cease to assign the dative case already by the Hellenistic period (cf. Browning 1983; Humbert 1930; Bortone 2010; Gignac 2013: 416–417; Stolk 2017a, 2017b; Seržant & Rafiyenko 2020+).

This said, the dative case is still widely used to mark (mainly indirect) objects of a verb. Thus, Lavidas & Haug (this volume) show that the relative frequency of dative objects in New Testament is the same as in the Classical language instantiated by Herodotus. The decrease of dative objects becomes

clearly visible in writing only in the later Byzantine period. Thus, Sphrantzes (15c.) uses only half as many dative objects as are found in the New Testament (Lavidas & Haug, this volume).

By contrast, we observe an increase in the type frequency of the non-prepositional genitive case. When it comes to non-arguments such as the ‘ficiary’ (comprising both beneficiary and maleficiary), the dative is often replaced by the genitive stemming from the free genitive. The latter is a typologically infrequent development of Postclassical Greek (cf. Seržant 2016): *free genitives* came to replace the old *free datives* originally to denote participants of an event that are not part of the semantic and syntactic valence of the verb. This development is observed primarily in the New Testament and in papyri (Horrocks 1990: 48; Gianollo 2010, this volume; Stolk 2015). The genitive develops further from ficiary arguments during the Ptolemaic period to recipients and addresses in the Roman and Byzantine periods (Stolk 2015). At the same time, Stolk (2015: 102) observes that the word order gradually becomes fixed to Verb-Possessor-genitives in 97% of all instances of possessor genitives.

At the same time, the genitive case gradually expands its original possessive meaning with pronouns. Pronominal possessive adjectives such as *emós* ‘1SG.NOM.SG.M’, standard in Classical Greek, become obsolete in the Greek of New Testament, while the genitive forms such as *emoû/mou* ‘1SG.GEN’ (cf. Blass-Debrunner 1961: 146; Gianollo 2010: 105, this volume; García Ramón, this volume) or the semantically synonymous prepositional phrase reinforced by *parà* ‘at’ as, for example, in *pâr’ emoû* ‘[lit.] at me’ are used attributively instead (Horrocks 2010: 92).

When it comes to the prepositional genitive case, the picture is not so clear. Luraghi (2003: 330) finds that the prepositional genitive is generalized with most of the prepositions that allowed for alternations in earlier periods except for *pròs* ‘to, at’. Similarly, REGARD (1918) shows that the Genitive becomes the most frequent case in New Testament. A recent corpus-based study concludes that the trend is much more variational than this, with different prepositions developing along different trends. Table 2 illustrates the trends on the basis of the token frequency with each particular preposition that allowed for case alternations in the classical language (Seržant & Rafiyenko 2020+):

To conclude, despite some local expansion of the genitive case mentioned above, the overall token and type frequency of non-prepositional cases diminishes, in both argumental and non-argumental positions.

Furthermore, as in many languages, Koiné Greek no longer distinguishes between the illative and inessive meanings both coded by the same preposition *eis* ‘to’, the presence or absence of directionality being sufficiently disambiguated by the verb.

Table 2: The number of prepositions that either prefer accusative or genitive in the Classical period compared to the New Testament (only 60% or more counts as a preference; from Seržant & Rafiyenko 2020+).³

	Classical period	New Testament
Preferring Accusative	5	5+1 ⁴
Preferring Genitive	3	4
Accusative & Genitive equally frequent (<i>pará</i> and <i>perí</i>)	2	–

2.5 Other Phenomena

Already by the Classical period we observe the presence of negative concord, cf. Xen. Anab. 4.4.8 (cf., *inter alia*, Schwyzer & Debrunner 1966: 597–8; Smyth 1984: 622–629; Horrocks 2014), cf. (1). Negative concord gives rise in Koiné Greek to double negation of the type *ouk* ... *oudén* and *mē* ... *mēdén* (Horrocks 2014: 60–1; Chatzopolou 2012):

- (1) *οὐδενὶ* *οὐδέν* *εἶπαν·*
oudenì *oudèn* *eìpan*
 NEG.INDEF.DAT.SG NEG.INDEF.ACC.SG say.AOR.3PL
 ‘They didn’t say anything to anyone.’ (NT, Mark 16.8.3; Chatzopolou 2012: 219)

A very clear diachronic trend in Postclassical Greek rooted already in the classical language is the shift from non-finite subordination with no or rare conjunctions towards finite subordination in combination with conjunctions. First of all, the infinitive becomes increasingly replaced by the finite verb and a conjunction; consequently infinitives as a morphological category steadily disappear from the

³ Seržant & Rafiyenko (2020+) analyze the following prepositions here: *hypò*, *pròs*, *perì*, *parà*, *metà*, *epì*, *amphì*, *hypèr*, *katà*, *dià*. Note that *amp^hi* is only marginally attested in Postclassical Greek.

⁴ Since *amp^hi* is only marginally attested in the Byzantine period and, expectedly, not attested in the New Testament at all, Seržant & Rafiyenko (2020+) compare its usage in the classical language with the Roman period more generally. The general trend of one preposition taking predominantly just one case is confirmed also for this preposition even though it is borrowed from the classical language.

language (cf. Burguière 1960; Joseph 1983, this volume). This is a gradual process that lasts over centuries. Certain grammatical contexts are more prone to retain infinitives than others. For example, different lexical verb classes lose the ability to take an infinitival complement clause in different periods (Blass 1961: 199ff; Joseph, this volume). It does not come as a surprise that those verbs that generally tend to develop into auxiliaries, i.e. undergo a closely tied syntactic and semantic coalescence with the dependent lexical verb – for example, modal verbs such as *dýnamai* ‘to be able to’, or phasal verbs such as *ark^házō* ‘to begin’ –, retain the infinitival complementation longest (Joseph, this volume).

While non-finite subordinate clauses headed by a non-finite verb (such as accusative-with-infinitive or genitive-absolute) or control infinitives gradually decrease in favor of subordinated clauses introduced by conjunctions with finite predications such as *^hōs* for temporal, causal as well as purpose relations (alongside the old *^hōste*) but also for marking indirect speech, *^hina* and *^hópōs* marking future-referring complement or purpose clauses or *^hóti* marking declarative complement clauses (*inter alia*, di Bartolo, this volume). An exception to this might be the strategy to nominalize the infinitival clauses by means of the definite article that became typical for the official Koiné in the Hellenistic period (Horrocks 2010: 94). Having said this, it remains to be explored whether this particular construction made it into more colloquial registers of Koiné. It is found primarily only in official documents such as business papyri (G. Horrocks, p.c.).

We observe a number of other changes in syntax such as a gradual trend in the major properties of word order, which nonetheless remains subject to information-structural considerations as in the classical language. Thus, the basic, most frequent word order changes from predominantly object-verb (OV, i.e. head-final) in the Classical period to VO in the Koiné (Horrocks 1990) as well as from both Genitive-Noun and Noun-Genitive orders to predominantly Noun-Genitive order.

Thus, Gianollo (this volume) presents comparative counts for the order of head nouns and the genitive nouns modifying them in the Egyptian papyri (cf. also Stolk 2015: 101): noun-genitive (NGen) is found in 65% of all adnominal genitives in the Hellenistic period and 77% in the Roman period; 44% in the Classical period (Plato) and 90%–95% in the New Testament (Gianollo, this volume). Analogously, already the earliest layers of Ancient Greek were on the way to develop from a language with inflectional case (i.e. head-final) to a language in which many semantic relations, both between nouns and between nouns and verbs, are coded by prepositions (i.e. head-initial) (cf. Seržant & Rafiyenko 2020+).

3 Concluding Remarks

In place of a conventional conclusion, we would like to emphasize here our conviction that ‘pure’ linguistic research will not be as fruitful as it should be if significant variational factors – such as translational and substrate effects (cf. Gianollo 2011), or the impact of standardization, typically leading to skewing effects from Atticism and the classical literary tradition or from the “official” Koiné of the chancelleries (García Ramón, this volume) – are not taken into account. Thus, the separation of Historical Linguistics from the so-called philological approach has been repeatedly called into question in recent years (*inter alia*, Dollinger 2016; Adamson & Ayres-Bennett 2011). The *rephilologization* of historical linguistics in its various forms has been found beneficial in various respects (Adamson & Ayres-Bennett 2011; Morpurgo Davies 2011). With this volume we endorse this important trend.

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Section I: Grammatical Categories

Giuseppina di Bartolo

Purpose and Result Clauses: ἵνα-hína and ὥστε-hóste in the Greek Documentary Papyri of the Roman Period

Abstract: Documentary papyri are among the most important and copious sources for the study of the ancient everyday Greek language. They are very useful for reconstructing the development of different phenomena of Postclassical Greek. They show a number of deviations from Classical Greek, including the disappearance of categories known from the literary language. In the present paper, purpose and result clauses are analyzed, focusing on the syntax of the conjunctions ἵνα-hína and ὥστε-hóste in the Greek documentary papyri of the Roman period (1st – 4th cent. AD). This topic is significant not only for investigating linguistic variation provided by documents written in a colloquial register, but also for gaining an improved understanding of language change. In order to stress the importance of the data provided by the papyri, some selected examples from the Roman and the Byzantine periods will be presented, collected from the examination of the Oxyrhynchus Papyri and with the help of various papyrological databases. The constructions found in the documentary texts will be compared with the same constructions found in other earlier, contemporary and later texts (such as New Testament, literary authors of the Koine), in order to distinguish between a common Greek development and a development that is found in the documentary papyri only. Furthermore, the evidence from the later stages of Greek will be aduced.

Keywords: morphosyntax, syntactic variations, purpose clauses, result clauses, documentary papyri, Romand period (1st – 4th cent. AD)

1 Introduction

The present investigation of purpose and result clauses will be limited to the syntax of the conjunctions ἵνα-hína and ὥστε-hóste. The subject is part of a broader research program dealing with the syntax of subordination in Postclassical Greek.

The aims of this paper are: (a) to show the most common uses of the two final and consecutive conjunctions, ἵνα-hína and ὥστε-hóste respectively; (b) to present and analyze syntactic variations found in comparison with the literary

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sources; (c) to analyze the meaning of these two conjunctions and their overlap on the basis of examples from everyday contexts.

The paper is structured as follows: section 1 deals with the description of the analyzed sources and their periodization (1.1) and introduces the Greek Modal system, in which the two conjunctions are involved (1.2); section 2 treats conjunctions of purpose (2.1) and result clauses (2.2) in relation to the documentary texts and the semantics of the two conjunctions ἵνα-ἵνα and ὥστε-ἵστε (2.3); in section 3 some constructions which deviate from their correlates in the literary sources are shown, ἵνα-ἵνα with the indicative (3.1) and ὥστε-ἵστε with the subjunctive (3.2); in section 4 two aspects of ὥστε-ἵστε in the documentary papyri are discussed: the disappearance of the grammatical distinction between the use of the indicative and the infinitive with this conjunction (4.1) and ὥστε-ἵστε in contracts of lease of land (4.2). Finally, section 5 provides conclusions.

1.1 The Documentary Papyri and Their Periodization

The documentary papyri, on which this study is principally based, mainly come from Egypt and deal for the most part with the justification of material rights or responsibilities between private persons or between the state and the individual, such as official correspondence, contracts and military reports (Palme 2009: 372–386). During this period most people were not able to write and were helped in redacting a text by scribes in the village (Palme 2009: 359). Ordinary communication remained mainly oral, and the private correspondence comes essentially from people who belonged to the upper class and wrote letters in their own hand or dictated them to a professional scribe (Palme 2009: 361–363). On the one hand, they are documents, which follow a pre-determined form, such as contracts; on the other hand, they are characterized by the use of common words and colloquial expressions, as in the case of private letters (Rupprecht 1994: 1–3; Dickey 2009: 149–150). In either case, since they contain several constructions that differ from those of the literary language, they provide some essential parameters for distinguishing between standardized texts and texts with a stronger penetration of colloquial elements.

Despite the presence of other languages (see, *inter alia*, Dahlgren & Leiwo, this volume), Koine Greek was the most common language in the eastern Mediterranean area from the 4th cent. BC (Horrocks 2007: 618–620). In the official and the literary registers there are many classicizing features and the tendency to conceal regional varieties of Greek, which sometimes appear in non-stylized texts. Different kinds of texts are categorized under Koine, such as the New Testament, whose language is close to that of the documentary papyri (Palme 1980: 194), or

Polybius' Histories and later authors of the Roman period, but they all differ by having regional features (Horrocks 2010: 110–111).

The Egyptian Koine of the documentary papyri shares certain features with many other varieties but it also has some significant differences, mostly on the phonological level (Horrocks 2010: 111–113; Dahlgren & Leiwo, this volume). In any case, the documentary texts reflect a number of deviations from Classical Greek in phonology, morphology and syntax (Browning 1983: 19–52). They provide information on the development of Greek for a period of more than a millennium (4th cent. BC – 8th cent. AD).

This investigation focuses in particular on the Roman period, from the second half of the 1st cent. BC, that is from the Roman conquest of Egypt in 31 BC, until the beginning of the 4th cent. AD (Montevecchi 1988: 117). This timespan is especially significant for studying the history of Greek because the papyri in this period show a huge number of changes and display a clear evolution with respect to Classical Greek.

We still lack a study of syntax of this variety. The grammar of Mayser (1926: II 1; 1934: II 2; 1934: II 3) gives a full treatment of phonology, morphology and syntax but deals only with the Ptolemaic period (4th cent. BC – 1st cent. BC), while the grammar of Gignac (Phonology: 1976; Morphology: 1981) does not contain a volume on syntax.

The evidence from the papyri has been collected through an examination of edited documentary texts beginning with 40 volumes of the Oxyrhynchus Papyri. Further data comes from a collation using various papyrological databases (e.g. the search mask of Papyri.info).

Data from other contemporary or later sources, together with the data from the documentary papyri, namely sources of the Hellenistic and Roman Koine, will also be taken into account in order to better define the continuity or the disruption not only in a diachronic but also in a diastratic sense. First of all, the picture emerging from these sources will be compared with the data from pre-Roman papyri, gathered by Mayser in his comprehensive grammar (1926, 1934). Then the data from the New Testament, which provide us with several examples of the colloquial register, will be utilized (Blass, Debrunner and Funk 1961). For the literary variety of the Koine, Polybius' Histories will be compared. Although Polybius preserves many Classical features of the literary style, his works also reflects the everyday speech of his time more than what is observed in other authors (Horrocks 2010: 97). For a comparison with literary authors, which are contemporary or later to the analyzed papyri, the data presented by Wahlgren (1995) and Hult (1990) will be employed.

For the Medieval period I rely on the analyses in Jannaris (1968) and Horrocks (2010). Certain parallels from Modern Greek will also be added.

1.2 Greek Modal System in Flux

To understand the use and development of ἵνα-*hína* and ὥστε-*hóste* clauses, a few general features of the Greek modal system and its development over time need to be explained. In particular, the reduction of the modal system, which involved the gradual disappearance of the optative and subjunctive moods and of the infinitive, led to reorganization in the way purpose and result clauses were expressed.

In Classical Greek the optative has the function of expressing a wish. It is mostly used in conditional clauses, in purpose clauses, which concern past context, and in subordinate constructions with an iterative meaning or for expressing past-time indirect statements (Kühner & Gerth 1898: 225–231). From the Postclassical period onward the optative was not employed any more in the spoken language (Horrocks 2007: 625–626; optative in the documentary papyri is discussed in Horn 1926). Its functions are replaced mostly by the imperfect indicative and by the subjunctive, while some sporadic uses are to be interpreted as Atticist tendencies and are essentially confined to literary texts or legal documents (Palme 1980: 187).

The progressive decrease in the use of infinitival constructions, which has already started in the early Postclassical Greek (2nd cent. BC), leads to an increasing use of finite complementation. The infinitive, which had numerous functions in Classical Greek, was gradually replaced by finite verbal forms introduced by a subordinating conjunction. For instance, one finds finite clauses constructed with ὅτι (*hóti*) plus indicative or ἵνα (*hína*) or ὅπως (*hópōs*) plus subjunctive, in place of the infinitive, to express completive clauses in dependence of control verbs such as verbs of wanting, expecting or thought (Joseph 1983: 38–39; Horrocks 2007: 623; Bentein 2017: 7–20). From the late Middle Ages onwards *να* (*na*) with subjunctive definitively replaces the infinitive (Horrocks 2010: 297).

In the Postclassical period, one can also observe remarkable phonological changes (Palme 1980: 176–179). The loss of vowel-length distinction causes the endings of the subjunctive to be identical to those of the indicative. However, in the Middle Ages the subjunctive does not disappear as a category. Instead, it takes the endings of the indicative and is marked by the particle *να* (*na*).

The papyri show not only the tendency to use finite instead of non-finite complementation¹ but also several mixed constructions, which characterized this transitional period between Classical and Byzantine Greek, when the modification of the verbal system began.

1 On this topic see di Bartolo (forthcoming: Chapter 1).

Another consequence of the reduction in the mood system is the increasing use of the bare indicative in subordinate clauses, for which Latin shows a parallel development (cf. Cabrillana 2011: 38–41; Haverling 2012: 159–160).

The analysis of the conjunctions ἵνα-*hína* and ὥστε-*hóste* involves another general trend in the syntactic domain: the reduction of the number of conjunctions. These two conjunctions, used for introducing purpose and result clauses respectively, become predominant, from the Roman period onwards, with respect to a number of competing conjunctions used in the Classical period (e.g. ὅπως-*hópōs* or ὡς-*hōs*), and the data from the papyri clearly show this tendency.

Below (sections 2.1 and 2.2), I provide examples for purpose and result conjunctions from Modern Greek. While I have not examined Medieval Greek data, it is worth mentioning that the two conjunctions survive in Modern Greek and they still used to express purpose and result respectively.

2 Prevalent Use of ἵνα-*hína* and ὥστε-*hóste*

The papyri prevalently use ἵνα-*hína* and ὥστε-*hóste* to express purpose and result respectively and do not deviate here from other contemporary sources.

2.1 Purpose Clauses Introduced by ἵνα-*hína*

In Classical Greek, purpose clauses (traditionally “final clauses”) are introduced by ἵνα-*hína*, ὅπως-*hópōs* or ὡς-*hōs*; the main verb occurs in the subjunctive or in the optative when governed by historical tenses (Kühner and Gerth 1904: II 377). ἵνα-*hína* clauses are most often used to express purpose (1) in the papyri as well. By contrast, ὅπως-*hópōs*² is almost exclusively used in formal bureaucratic documents or in documents written in a high register (2).³ Finally, ὡς-*hōs* is very rarely used to express purpose in the papyri.

² Among ca. 600 attestations of ὅπως-*hópōs* in documents of the Roman period, only 100 among them are found in private letters.

³ For a definition of register cf. James (2008: 35); for some criteria, which can be employed to delineate the register in the documentary papyri cf. Bentein (2017: 21–32).

- (1) BGU III 827 (Letter, 2nd–3th cent. AD)

καίγῳ (καὶ ἐγῷ)⁴ προσδέχομαι τὰ ἐματῆς (ἐμαυτῆς) λαβεῖν κ[αί] ἐξελεῖν
(ἐξελεῖν) καὶ τὰ μετέ<ω>ρα Γεμέλου, ἵνα ἀπαιτίσω (ἀπαιτήσω).

kaigō prosdék^homai tā ematēs labeîn

and.1SG wait.PRS-IND.MED.1SG DEF.N.PL myself.GEN.F.SG receive.AOR-INF

kai exel^hîn kai tà metēōra

and set.out.AOR-INF and DEF.N.PL unsettled.business.N.PL

Gemēlou hina apaitisō

Gemellos.GEN in.order.that.CONJ collect.AOR-SBJV.1SG

‘I am waiting to receive my own and to set out – and the unsettled business of Gemellos, so that I may collect (them).’

(Translation from Bagnall – Crihiore 2006: 305)

- (2) P. Oxy. XL 2900 (Application, 270–271 AD)

Ὅθεν ἐπιδίδωμι ταύτην τὴν ἀξίωσιν ὅπως κελεύσητε τῷ φυλάρχῃ τοῦ
δηλουμένου ἀμφοδου κτλ.

hot^hen epididōmi taútēn axiōsin

REL.ADV submit.PRS-IND.1SG this.ACC.F petition.ACC.F

hōpōs keleūsēte tōi p^hulárkē

in.order.that.CONJ order.AOR-SBJV.2PL DEF.DAT.M.SG phylarch.DAT.M

toú dēlouménou amp^hódou

DEF.GEN.N.SG be.clear.PRS-PTCP.GEN.SG quarter.GEN.N

‘For this reason I submit this petition so that you may give orders to the phylarch of the specific quarter etc.’

The same picture obtains in the Byzantine period (Jannaris 1968: 416) and in later Greek, where the conjunctions ὅπως-*hōpōs* and ὡς-*hōs* are no longer used to express purpose. In Modern Greek για να or να (see 3), which historically goes back to ἵνα-*hina*, is used both for introducing purpose and for finite complementation instead of the accusative with infinitive or of a participial construction; it is also the subjunctive-marking particle (Browning 1983: 43).

- (3) Η Λουίζα ἔφυγε νωρίς για να τον προλάβει

í Luíza éfije norís já na

DEF.SG.F Luisa.PN left.AOR-IND.3SG early in.order.that.CONJ

ton prolávi

him.ACC catch.AOR-SBJV.3SG

⁴ In the Greek text I indicate in round brackets the correspondent attic/classical forms following the papyrological editorial conventions.

‘Louisa left early in order to catch him.’
(Holton, Mackridge and Philippaki-Warburton 2012: 561)

Furthermore, this tendency to prefer ἵνα-ἥινα is supported by the data from other sources. According to Mayser (1934: 247, 258) in the Egyptian Koine of the Ptolemaic period the conjunctions ἵνα-ἥινα and ὅπως-ὁπρὸς are used with the same meaning and have almost the same range of use. But ὅπως-ὁπρὸς occurs mostly in official documents, whereas ἵνα-ἥινα is found more often in private sources; ὡς-ὡς rarely occurs. In Polybius, whose work provides several significant parallels for the literary Koine, ἵνα-ἥινα is the only conjunction attested for introducing purpose clauses (Jannaris 1968: 417). According to Jannaris (1968: 416), in the New Testament ἵνα-hina occurs 493 times, ὅπως-ὁπρὸς 52 times, whereas the use of ὡς-ὡς in final meaning is not attested. Even in other literary sources of the Roman period, ἵνα-ἥινα is the most common conjunction to express purpose (Wahlgren 1995: 153).

2.2 Result Clauses Introduced by ὥστε-ὥστε

In the papyri ὥστε-ὥστε is much more frequently used than ὡς-ὡς to introduce result clauses (traditionally “consecutive clauses”), both with the infinitive and with a finite mood (for an example of ὥστε-ὥστε from the papyri see 12). Koine literary sources and the New Testament confirm the evidence collected from the papyri: ὡς-ὡς occurs rarely in Polybius and not at all in the New Testament (Jannaris 1968: 414). In this case the data from other authors of the Roman period, such as Dionysius of Halicarnassus, Nicolaus and Strabo, confirm the same tendency to use mostly the conjunction ὥστε-ὥστε to introduce a result clause (Wahlgren 1995: 181–182). The use of ὥστε-ὥστε persists in the Byzantine and Medieval period (Jannaris 1968: 414) and the conjunction is still used in Modern Greek to express result. In the example (4), one can observe the use of ὥστε-ὥστε with the subjunctive, i.e. ὥστε...να (Holton, Mackridge and Philippaki-Warburton 2012: 561):

- (4) Ἐκανε ἔτσι ὥστε ἡ Μαρία νὰ μπορεῖ νὰ αποφασίσει μόνη τῆς
Ékane étsi Óste ē María
 act.AOR-IND.3SG ADV so.that.CONJ DEF.NOM.F.SG Maria.PN.NOM
na mporeí na apofasísei mónē tēs
 be.able.PRS-SBJV.3SG decide.AOR-SBJV.3SG alone.NOM.F her.GEN
 ‘He acted in such a way that Mary would be able to decide on her own.’

2.3 Semantics of the ἵνα-ἡίνα and ὥστε-ἡόστε Clauses

Before proceeding to some syntactic usages of ἵνα-ἡίνα and ὥστε-ἡόστε, it is necessary to discuss the semantic content of the two conjunctions. Sometimes it is not straightforward to distinguish between purpose and result in subordinate clauses. They frequently overlap in texts from everyday contexts such as the papyri.

This phenomenon of interchange of conjunctions is connected with two factors: first, the gradual increase in the use of ἵνα-ἡίνα over time; and secondly, its encroachment on the semantic content of ἵνα-ἡίνα and ὥστε-ἡόστε. Its frequency increases over time, and it is also attested in different types of sources from later periods (Hult 1990: 85, 145).

Formally, the semantic distinction between purpose and result clauses is connected to the choice of mood: purpose clauses contain the subjunctive form of the verb whereas consecutive clauses show the indicative form of the verb. Thus, the subjunctive is used to express an intention while the indicative is used for referential events.

From an interpretive point of view, purpose and result clauses are distinguished in terms of intentionality and prospectivity (Cabrillana 2011: 41–46).

Concerning intentionality, result clauses express an outcome that was not dependent on the will of the subject, whereas purpose clauses require intention on the part of the subject. With respect to prospectivity, the difference in the meaning of the clause is shown by the temporal relationship between the main clause and the subordinate clause: the content of the subordinate clause is posterior to the content of the main clause in purpose clauses. This requirement is not obligatory in the clauses expressing a result (cf. for instance example 13 later on).

Despite these morphosyntactic and semantic distinctions, one can find ὥστε-ἡόστε to express purpose, as in the following private letter of the 2nd cent. AD:⁵

- (5) P. Oxy. LXXVI 5100 (private letter from Hymenaeus to Dionysius, 136 AD)
τὸ ἐπιστόλιον ἄυτῷ ὃ διεπεμψάμην σοι ἔσπερας διὰ τοῦ Αἰθιοπός σου ὥστε Θέωνι τῷ στρ(ατηγῷ) τοῦ Προσωπίτου δοῦναι καλῶς ποιήσεις δούς Κέρδωνι.

<i>Tò</i>	<i>epistólion</i>	<i>autò</i>	<i>hò</i>	<i>diepempspámēn</i>
DEF.ACC.N	letter.ACC.N	itself.N	REL.N.SG	send.AOR-IND.MED.1SG
<i>soi</i>	<i>hespéras</i>	<i>dià</i>	<i>toû</i>	<i>Ait^híopós</i>
you.DAT.SG	evening.GEN.F	through	DEF.GEN.M.SG	Ethiopian.GEN

⁵ As stated in Section 2.2, ὥστε-ἡόστε is constructed in Greek with the indicative and with the infinitive.

sou *hōste* *T^héōni* *tōi* *stratēgōi*
 your.GEN.SG so.that.CONJ Theon.PN.DAT DEF.DAT.M.SG strategos.DAT.M
toû *Prosōpítou* *Dûnai* *kalôs*
 DEF.GEN.M.SG Prosopite.GEN give.AOR-INF. well.ADV
poiēseis *doûs* *Kérdōni*
 do.FUT-IND.2SG give.AOR-PTCP.NOM.SG Kerdon.PN.DAT
 ‘The letter, the one that I sent you in the evening with your Ethiopian
 (a slave), to give to Theon the strategos of the Prosopite, you will do well
 to give to Kerdon.’

Analyzing the content of the clause ‘to give to Theon the strategos of the Prosopite’ with respect to intentionality and prospectivity, we can conclude that the *ὥστε-hōste* clause expresses a purpose. Thus, in this case, the conjunction *ὥστε-hōste* with the infinitive is employed instead of a canonical construction for expressing purpose (e.g. *ἵνα-hína* with the subjunctive). Generally, *ὥστε-hōste* clauses with infinitive, are notoriously difficult to disambiguate between purpose and result and can, therefore, be defined in more vague terms as expressing a possible fact (Calboli 1995: 60–62).

The New Testament also provides an ambiguous use of *ὥστε-hōste*, referred to by Muraoka (1973: 212) as “consecutive-final” *ὥστε-hōste*. In this case, which is different from the above, both the result meaning as well as the purpose meaning may be seen:

(6) Ro. VII 6

Nunì *dè* *katērgēthēmen* *ápò* *toû* *nóμου*, *ápοθανόντες* *én* *ᾧ* *κατειχόμεθα*,
ὥστε *δουλεύειν* *ἡμᾶς* *én* *καινότητι* *πνεύματος* *καὶ* *οὐ* *παλαιότητι* *γράμματος*.
nunì *dè* *katērgēt^hēmen* *apò* *toû*
 now.ADV but be.set.free.AOR-IND.PASS.1PL from DEF.GEN.M.SG
nóμου *apot^hanóntes* *en* *hōi* *kateik^hómetha*
 law.GEN.M die.AOR-PTCP.NOM.PL in which.REL.DAT.SG held.IMP.F.MED.1PL
hōste *Douleúein* *hēmās* *en* *keinótēti*
 so.that.CONJ serve.PRS-INF we.ACC.PL in newness.DAT
pneúματος *kaì* *hou* *palaiótēti* *grámmatos*
 spirit.GEN.N and not.NEG oldness.DAT.F letter.GEN.N
 ‘But now we have been discharged from the law, having died to that in
 which we were held; so that/in order that we serve in newness of the
 spirit, and not in oldness of the letter.’
 (Muraoka 1973: 212)

The ambiguity between the meaning of purpose and result is not a feature of the Greek language; it can also be found in other languages. For example, in Latin, the conjunction *ut* with the subjunctive introduces both purpose as well as result clauses (Cabrillana 2011: 37–38).

3 Two Unusual Constructions

The papyri attest constructions that deviate from their correlates in the literary sources and from other papyri of the Roman and Byzantine periods written in a higher register.

3.1 ἵνα-hina with Indicative

One of the deviating constructions is the use of the conjunction ἵνα-hína with the present indicative instead of the subjunctive, as found in the following private letter of the 3rd cent. AD:

- (7) P. Oxy. LIX 3995 (private letter, early 3rd cent. AD)

εὖ ποιή(ε)ις, ἀδελφε, χρῆσον τὸ ὄναρ⁶ίν σου, αἰπιδῆ (ἐπειδῆ) ἀναφέρουσίν
μοι ἡμιαρτάβιον (ἡμιαρτάβιον) ψωμίων, ἵνα⁶ φθάνουσι ἀποκαταστήσαι
αὐτὸ σήμερον.

<i>eû</i>	<i>poësis</i>	<i>ádelph^he</i>	<i>c^hrêson</i>	<i>tò</i>
well.ADV	do.FUT-IND.2SG	brother.VOC	lend.AOR-IMP.2SG	DEF.ACC.N.SG
<i>onârin</i>	<i>sou</i>	<i>aipidê</i>	<i>anafêrousîn</i>	
donkey.ACC.N	you.GEN.SG	because.CONJ	bring.PR-IND.3PL	
<i>moi</i>	<i>himiartábion</i>	<i>psômíon</i>	<i>hína</i>	
me.DAT	half.an.artaba.ACC	morsel.GEN.N.PL	in.order.that.CONJ	
<i>p^ht^hánousi</i>	<i>apokatastêsai</i>	<i>autò</i>	<i>sêmeron</i>	
shall.PRS-IND.3PL	deliver.AOR-INF	it.ACC.N	today.ADV	

‘Do me a favour, brother, lend me your donkey, because they are bringing half an artaba of loaves of bread up to me, in order that they may get it delivered today.’

⁶ ἵνα-hi'na', according to the convention of the papyrology this symbol 'na' indicates that the letters in between are written over the line.

The writer asks his brother to give him the donkey with the purpose of obtaining the bread today and not later. This passage may be interpreted as containing a purpose clause given the intention on the part of the subject. However, we find the indicative instead of the subjunctive here. According to Mayser (1934: II 3 80–82), this construction is not attested in the papyri of the Ptolemaic period. The few examples in the New Testament are interpreted by Blass and Debrunner as a corruption of the text (Blass, Debrunner and Funk 1961: 187). However, this combination of ἵνα-*hína* with indicative can also be found in other sources: in earlier texts, such as the Septuagint and rather more frequently in later Byzantine authors, as in (8):

(8) Theophanes Confessor, *Chronographia* 283 21–22

Ἄγιέ μου, ἄγιε φοβερὲ καὶ δυνατέ, δὸς αὐτῷ κατὰ κρανίου, ἵνα μὴ ὑπεραίρεται·

hágié mou Hágié p^hoberè kai dunaté

lord.VOC my.GEN lord.VOC terrible.VOC and powerful.VOC

dòs autōi katà kraníou hína

strike.AOR-IMP.2SG him.DAT on skull.GEN.N in.order.that.CONJ

mē hyperáiretai

not.NEG exceed.PRS-SBJV.MED.3SG

‘Oh my Lord, terrible and powerful, strike him on the skull to make him less arrogant.’

(Translation from Mango and Scott 1997: 408)

The use of ἵνα-*hína* with the indicative does not have to be explained as a syntactical phenomenon but rather as a phonological and morphological one and it has to be correlated with some morphological evidence, observed by Gignac (1981: 359). Phonologically the indicative and the subjunctive endings became identical in spite of their graphic divergence (-εις/-ης -eis/ēs, -ει/-η -ei/-ēi, -ομεν/-ωμεν -omen/-ōmen). This caused a confusion between the forms of the indicative and those of the subjunctive until the time when the subjunctive in Greek as an independent inflectional category was completely lost, since it will consist in the indicative’s form with the particle να (*na*). Hatzidakis (1892: 216–218) reports several examples from the Septuagint, the New Testament and some Byzantine authors which display this tendency of using the indicative instead of the subjunctive, among which there are a number of examples with ἵνα-*hína*. I have found in my corpus four attestations of ἵνα-*hína* with the present indicative, but this variation increases through the centuries.

It is significant, that in this period, when the morphological distinction between indicative and subjunctive was no longer clear, one can also find in

private documents the other final conjunction ὅπως-*hórōs*, combined with an indicative form (e.g. SB XXII 15517 ὅπως ἀμεριμνοῦμεν – *hórōs amerimnumen*).

We can conclude that the papyri reflect a transitional stage, in which a phonological development causes a morphosyntactic change: the final particle ἵνα-*hína*, in the form of να (*na*), with the verbal form of the indicative assumes the function of grammatical marker of the subjunctive. For this reason, the use of the indicative with ἵνα-*hína* can be interpreted in the context of the documentary papyri not as a scribal error but rather as syntactical variation, which can be observed in other sources as well, and which foreshadows later development, including Modern Greek, cf. να γράφει – *na gráfei* (i.e. SBJV.PRS.3SG) ‘he should write’ (Holton, Mackridge and Philippaki-Warburton 2012: 264).

3.2 ὥστε-*hóste* with the Subjunctive

Conversely, one can find in the documentary texts, though rarely, some attestations of ὥστε-*hóste* with the subjunctive with purpose semantics. In this case, it is not the confusion of the indicative with the subjunctive but rather the ὥστε-*hóste* introduced clause acquiring a new function.

(9) BGU III 874 (Letter, 4th–7th cent. AD)

Καὶ ἄλλοτε γεγράφηκα ὑμῖν ὥστε πέμψηται (πέμψητε) εἰς Ναρμούθιν καὶ δέξηται (*δέξητε, *legendum* δέξεσθε) τὰ δύο χρύσινα παρὰ τοῦ διάκονος.

kaì állote gegráfēka humín hóste
and.CORD at.another.time.ADV write.PRF-IND.1SG you.DAT.PL so.that.CONJ

pémpsetai eis Narmút^hin kaì déxētai
send.AOR-SBJV.2PL to Narmunt^his:ACC and take.AOR-SBJV. 2PL

tà dúo k^hrúsina parà tou
DEF.N.PL two.ACC gold.coins.ACC.N from DEF.GEN.M.SG

diákonos

deacon.GEN.M

‘And at another time I wrote you in order to send him to Narmuthis and to take two gold-coins from the deacon.’

This use of ὥστε-*hóste* with the subjunctive is not attested in the New Testament (Radermacher 1925: 197), but it is widely found in later sources of the Byzantine period (Jannaris 1968: 417). It actually reflects not only the conflation of ἵνα-*hína* and ὥστε-*hóste* over time but also the difficulty on the part of the scribe to distinguish between purpose and result.

(10) Theophanes Confessor *Chronographia* 270 21–23

Τούτω τῷ ἔτει ὁ αὐτοκράτωρ Μαυρίκιος τὸν Πρίσκον σὺν πάσαις ταῖς Ῥωμαϊκαῖς δυνάμεσιν ἐπὶ τὸν Ἰστρον ποταμὸν ἐπεμψεν, ὥστε τὰ Σκλαυινῶν ἔθνη διαπερᾶσαι κωλύσει.

τούτῳ τῷ ἔτει ὁ αυτοκράτωρ
this.DAT DEF.DAT.N.SG year.DAT.N DEF.NOM.M.SG emperor.NOM.M

Mauríkios τὸν Πρίσκον σὺν πάσαις
Maurice.NOM.PN DEF.ACC.M.SG Priscus.ACC.PN with all.DAT.PL

ταῖς Ἡρῳαῖκαῖς δυνάμεσιν ἐπὶ τὸν
DEF.DAT.F.PL Roman.DAT.F.PL armies.DAT.F.PL to DEF.ACC.M.SG

Ἰστρον ποταμὸν ἐπεμψεν ὥστε τὰ
Danube.ACC.M river.ACC.M send.AOR-IND.3SG so.that.CONJ DEF.NOM.N.PL

Σκλαυινῶν ἐθῆνῃ διαπερᾶσαι κωλύσει
Sklavini.GEN.PL tribes.NOM.N cross.AOR-INF prevent.AOR-SUBV.3SG

‘In this year the emperor Maurice sent Priscus with all the Roman armies to the river Danube to prevent the tribes of the Sklavini from crossing.’

(Translation from Mango and Scott 1997: 394)

I summarize the results of my corpus study in the following two tables comparing purpose and result clauses in Classical Greek and in the Greek of the documentary papyri of the Roman and Byzantine period.

Table 1: purpose clauses, Classical Greek vs. documentary Papyri (1st – 4th c. AD).

Adverbial Purpose Clause in Classical Greek	Adverbial Purpose Clause in doc. papyri (1st – 4th c. AD)
– ἵνα-ḥína+ subjunctive	– ἵνα-ḥína + subjunctive
– ἵνα-ḥína + optative (depending on past tense)	-----
-----	– ἵνα-ḥína + indicative
– ὅπως-ḥópōs + subjunctive	– ὅπως-ḥópōs + subjunctive (almost only in official documents, high register)
– ὅπως-ḥópōs + optative (depending on past tense)	-----
– ὅπως-ḥópōs + indicative future (depending on <i>verba curandi</i>)	– ὅπως-ḥópōs + indicative future (depending on <i>verba curandi</i>)
– ὥς-ḥōs + subjunctive	
– ὥς-ḥōs + optative (depending on past tense)	
– ὥς-ḥōs + indicative future (rarely)	
	– ὥστε-ḥōste + subjunctive
	– ὥστε-ḥōste + infinitive (ambiguous between purpose and subjective result)

Table 2: result clauses, Classical Greek vs. documentary Papyri (1st – 4th c. AD).

Adverbial Result Clause in Classical Greek	Adverbial Result Clause in doc. papyri (1st – 4th c. AD)
– ὥστε- <i>hóste</i> + indicative (objective result)	– ὥστε- <i>hóste</i> + indicative (objective result)
– ὥστε- <i>hóste</i> + infinitive (subjective result)	– ὥστε- <i>hóste</i> + infinitive (subjective and objective result)
– ὡς- <i>hōs</i> + infinitive	

4 Two Aspects of ὥστε-*hóste* in the Documentary Papyri

In this section, two aspects of ὥστε-*hóste* clauses in the documentary papyri will be illustrated: the conflation of ὥστε-*hóste* with the indicative and ὥστε-*hóste* with the infinitive, and the correlation of ὥστε-*hóste* with the infinitive in a particular sort of texts, contracts of land leases. This kind of contracts are significant because they provide us with a fixed expression from the everyday communication, which widely occurs in the documentary texts from the Roman period onwards.

4.1 Disappearance of a Grammatical Distinction: ὥστε-*hóste* with the Indicative vs. ὥστε-*hóste* with the Infinitive

From the Classical period (i.e. from the 5th cent. BC), the conjunction ὥστε-*hóste* could be combined with the infinitive or with the finite, indicative form of the main verb. The difference between the two constructions was the expression of two different types of results: an objective result (i.e. a real consequence) expressed by ὥστε-*hóste* with the indicative and a potential result encoded by ὥστε-*hóste* with the infinitive (Kühner and Gerth 1904: II 499–501).

In the documentary papyri, whether colloquial or in a high register, this distinction is almost never observed. Here ὥστε-*hóste* with the infinitive exclusively expresses an actual result. This phenomenon is also found in the Septuagint and in the New Testament:

(11) Phil. I 12–13

Γινώσκειν δὲ ὑμᾶς βούλομαι, ἀδελφοί, ὅτι τὰ κατ'ἐμὲ μᾶλλον εἰς
προκοπὴν τοῦ εὐαγγελίου ἐλήλυθεν, ὥστε τοὺς δεσμούς μου φανεροὺς ἐν
Χριστῷ γενέσθαι ἐν ὄλῳ τῷ πραιτωρίῳ καὶ τοῖς λοιποῖς πᾶσιν.

ginōskein δὲ *Hymās* *boulomai* *adelph^hoi*
know.PRS-INF but you.ACC.PL desire:PRS-IND.1SG brothers.VOC
hōti τὰ *kat' emē* *mállon* *eis* *prokopēn*
that.CONJ DEF.NOM.N.PL to me.ACC rather.ADV to progress.ACC.F
toū *euangelíou* *elēlut^hen* *hōste*
DEF.GEN.N.SG gospel.GEN.N turn out.PRF-IND.3SG so.that.CONJ
toūs *desmōús* *mou* *faneroús* *en* *C^hristōi*
DEF.ACC.M.PL bonds.ACC.M me.GEN evident.ACC.PL in Christ.DAT
genést^hai *en* *hólōi* *tōi* *praitōriōi*
become.AOR-INF in whole.DAT DEF.DAT.M.SG pretorian.guard.DAT.M
kaì *toīs* *loipoīs* *pâsin*
and DEF.DAT.N.PL rest.DAT.PL all.DAT.PL

‘Now I desire to have you know, brothers, that the things which happened to me have turned out rather to the progress of the gospel so that it became evident to the whole praetorian guard, and to all the rest, that my bonds are in Christ.’

(Muraoka 1973: 209)

Already in Hellenistic prose (Hult 1990: 123–125) and even more so in the Roman period, the semantic distinction between the two strategies was disappearing, cf. Dionysius of Halicarnassus (Wahlgren 1995: 175):

(12) Dionysius Halicarnassus, *Antiquitates Romanae*, I, 45, 3, 7

Οἰκίζουσι τοὺς τόπους περιλαβόντες τείχεσι τὸ Παλλάντιον, ὥστε λαβεῖν
πόλεως σχῆμα τότε πρῶτον.

oikízousi *toūs* *tópous* *perolabóntes*
settle.PRS-IND.3PL DEF.ACC.M.PL place.ACC.M.PL surround.PTCP.AOR.N.PL
teik^hesi τὸ *Pallántion* *hōste* *labeîn*
wall.DAT.N DEF.N.SG Pallantium.ACC. so.that.SBJN receive.AOR-INF
póleōs *sk^hēma* *tóte* *prōton*
city.GEN.F form.ACC.N then.ADV first.ACC.N

‘They settled these places and surrounded Pallantium with a wall, so that it then first received the form of a city.’

Evidence from the papyri is shown in (13):

- (13) P. Oxy. L 3561 (Petition to a Strategos, 165 CE) l. 10–12
 Πολλαῖς με πληγαῖς ἠκίσαντο ὥστε τῷ ζῆν κινδυνεῦσαι
pollaís me plēgaís ēikísanto hōste
 numerous.DAT me.ACC blows.DAT.F assault.AOR-IND.MED.3PL so.as.CONJ
tōi zēn kinduneūsai
 DEF.DAT.M.SG live.PRS-INF endanger.AOR-INF
 ‘They assaulted me with numerous blows so as to endanger my life.’

As one can observe in this passage, ὥστε-*hōste* with the infinitive is used to express an actual result, and in both cases mentioned the subordinate clause elaborates what was explicated in the main clause.⁷ Similar developments are found in Latin (Cabrillana 2011: 37).

4.2 ὥστε-*hōste* with Infinitive in Contracts of Land Leases

The previous example demonstrates a peculiarity that is encountered regularly in contracts of land leases: namely, ὥστε-*hōste* plus infinitive with ambiguity between purpose and result. Although the phenomenon does not survive into later Greek, it is an interesting case where a syntactic peculiarity is closely correlated with a specific genre of text, and where the language of the papyri differs from Classical Greek.

These ancient contracts, named μισθώσεις-*misthōseis*, had a fixed structure and they were characterized by a stylized use of language, so that the scribe only had to fill out a form (Rupprecht 1994: 122). The expression in question always recurs as follows: the consecutive conjunction ὥστε-*hōste* plus the two infinitives σπεῖραι καὶ ξυλαμῆσαι – *speírai kai xulamêσαι* (i.e. to sow and to plant).

- (14) P. Oxy. L 3591 (Lease of land, 219 AD)
 ἐμίσθωσεν Αὐρήλιος Διοσκουρίδης [. . .] Αὐρηλίῳ Σαραπίωνι [. . .] ἀρούρας
 δέκα ὥστε κατ’ ἔτος σπεῖραι καὶ ξυλαμῆσαι πυρῷ χλωροῖς

⁷ The combination ὥστε-*hōste* with the infinitive in this specific case, i.e. ὥστε τῷ ζῆν κινδυνεῦσαι (*hōste tōi zēn kinduneūsai*), “so as to endanger my life”, is an expression which often occurs in the documentary texts for describing a situation which implies the risk of death as its result. Not only petitions of the Roman period but also those dated to the Ptolemaic period give us testimony of this formula (P.Tebt.III 2 960 ll.3–5) employed for expressing a factual consequence.

emístōsen *Aurēlios* *Dioskuridēs* *Aurēliōi*
 lease.AOR-IND.3SG Aurelius.NOM.PN Dioscurides.NOM.PN Aurelius.DAT.PN
Sarapīōni *Arouras* *dēka* *hōste* *kat'*
 Sarapion.DAT.PN aruras.ACC.PL ten.ACC so.as.CONJ by
étos *speīrai* *kai* *xulamēsai* *purōi* *K^hlōroīs*
 year.ACC sow.AOR-INF and plant.AOR-INF wheat.DAT green.GEN.SG
 ‘Aurelius Dioscurides has leased to Aurelius Sarapion ten aruras to sow
 and plant year by year with wheat and with green crops.’

Regarding the semantic content of the subordinate clause, it is not always an easy task to establish whether the meaning of the ὥστε-*hōste* clause is final or consecutive. In principle, the subordinate clause could have two interpretations in relation to the different points of view: (1) in relation to the landowner’s point of view, the clause has a consecutive meaning: the landowner (Aurelius Dioscurides) leases some land with the result that it will be cultivated; (2) in relation to the lessee’s point of view, the contract is stipulated with the purpose of cultivating the land.

However, since the document is a contract, the ὥστε-*hōste* sentence has to be interpreted with the meaning of ‘on condition that’ and ὥστε-*hōste* with the infinitive is here used, instead of the construction to express the condition which in Classical texts was usually ἐφ’ὧι-*ef’hōi* with infinitive.

ὥστε-*hōste* with the infinitive to express a condition is also found in the literary sources, although in these sources the construction ἐφ’ὧι-*ef’hōi* with future indicative or with infinitive is preferred (Kühner and Gerth 1904: II 505). Moreover, the papyri widely attest this use of ὥστε-*hōste* from the Ptolomaic period onwards, not always in the same type of contracts but nevertheless in similar contexts, as in this petition reported by Mayser (1926: II 1, 299):

(15) P. Tebt. I 42 (Petition to the Strategos, 114 BC)

Ἄρμιύσιος [...] ἔθετο μίσθωσιν πυροῦ (ἀρταβῶν) λ και ἀπὸ τούτων ὥστ’
 ἔχειν με ἐν προδόματι (ἀρτάβας) ς
Harmiúsios *ét^heto* *míst^hōsin* *purōū*
 Harmiysis.NOM.PN make.AOR-IND.3SG lease.ACC.F wheat.GEN.M
artabōn *l* *kai* *apò* *toutōn* *hōst*
 artabas.GEN.PL thirty and from these.GEN.PL so.that.CONJ
éc^hein *me* *en* *prodómati* *artabás* *s*
 receive.PRS-INF. me.ACC in advance.DAT artabas.ACC.PL six
 ‘Harmiysis [...] made a lease for 30 artabas of wheat, on the grounds that
 from the whole amount I receive 6 artabas in advance.’

Also this case deals with a μίσθωσις-*místhōsis* (i.e. with a lease) which was made on the basis of a condition, expressed by ὥστε-*hóste* with the infinitive (i.e. ὥστ' ἔχειν-*hóst' éch^hein*).

This combination of ὥστε-*hóste* with the infinitive for expressing a condition starts in the Ptolomaic period and becomes standard in the Roman and Byzantine periods. In the specific case of contracts of land lease, the combination of ὥστε (*hóste*) plus the two infinitives σπεῖραι καὶ ζυλαμῆσαι (*speîrai kai xulamêσαι*) become a fixed expression.

5 Conclusion

Greek documentary texts provide – more often than other sources – evidence for the interchange between the purpose and the result conjunctions and they show us the tendency in everyday contexts for expression of the meaning of purpose and result to overlap – a phenomenon that is paralleled in Latin.

The examples provided by the papyri allow us to establish some tendencies of the spoken language that will become standard many centuries later, such as the disappearance of the semantic distinctions induced by different moods and the reduction of the number of conjunctions employed to introduce purpose and result clauses. Furthermore, the documentary texts allow us to reconstruct daily expressions in specific types of documents such as petitions and contracts, and they give us specific information about the use of the conjunctions ἵνα (*hína*) and ὥστε (*hóste*) in everyday contexts.

The papyrological evidence points to a general linguistic tendency in Greek, namely the reduction of the modal system. Combined with the evidence provided by the other sources, the papyri clearly show that some phenomena that were to become standard at a much later stage already appear with remarkable frequency and in a systematic way in Roman times.

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Abbreviations

The abbreviations in the glosses follow the Leipzig Glossing Rules.⁸ Additionally, the following glosses have been adopted:

AOR	aorist
CONJ	conjunction
IMPF	imperfect
MED	medium

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Chiara Gianollo

Syntactic Factors in the Greek Genitive-Dative Syncretism: The Contribution of New Testament Greek

Abstract: The Greek of the New Testament very clearly shows an innovative syntax for adnominal genitives, which become almost exclusively postnominal. In this context, the conditions emerge for the reanalysis of residual prenominal genitive forms as non-core arguments of the verb at the clausal level, i.e. for the rise of a new External Possession Construction. This syntactic reanalysis can, in turn, be argued to be a trigger for the syncretism between genitive and dative case characterizing later stages of Greek. In this contribution I compare the situation found in the New Testament with documents of Classical and Postclassical Greek, aiming to assess to what extent similar conditions held already at previous stages and in sociolinguistically comparable witnesses. I conclude that the External Possession Construction as such was already current at earlier stages of the language, but that the general syntactic conditions conspiring to favor its reanalysis first appear in Biblical Greek.

Keywords: genitive case, dative case, case syncretism, New Testament Greek, external possession construction

1 Introduction

Postclassical Greek texts can represent a valuable source for exploring long-range phenomena in the history of the Greek language. The evidence, however, is not always easy to analyze, and sometimes even to find, due to a number of sociolinguistic factors, such as the conservativeness of the literary style, the scarcity of non-literary documents, and poorly reconstructable scenarios of language contact, which obscure phenomena of progressing change in the language's natural evolution. In this chapter, I present a case study that illustrates such problems, while at the same time demonstrating the potential of an innovative linguistic approach to Postclassical Greek. In my study I try to trace back to Postclassical Greek, and more precisely to New Testament Greek, the seeds of a crucial grammatical change with long-lasting effects on the language: the syncretism between genitive and dative case in nominal declensions, with the genitive forms prevailing over the dative ones. In Gianollo (2010), I argued that syntactic

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factors play a determining role in this syncretism, namely the switch to a generalized Noun-Genitive order in the nominal phrase and, in connection to this, the spread of a new external possession construction, exemplified in (1).

(1) (Act.Ap. 16.20)

οὗτοι	οἱ	ἄνθρωποι	ἐκταράσσουσιν	ἡμῶν	τὴν	πόλιν
<i>hoûtoi</i>	<i>hoi</i>	<i>ánthrōpoi</i>	<i>ektarássousin</i>	<i>hēmōn</i>	<i>tēn</i>	<i>polin</i>
these.NOM	DEF.NOM	men.NOM.PL	disturb.IND.3PL	1PL.GEN	DEF.ACC	city.ACC
‘these men are disturbing our city’						

According to my hypothesis, in constructions like (1), the prenominal possessor, marked genitive, ends up being reanalyzed as a non-core affected argument of the verb. As such, it encroaches upon a domain covered by the dative in Classical Greek. In turn, the syntactic reanalysis triggers the morphological reanalysis of the genitive ending as an exponent of dative case as well. In the present contribution, I review this hypothesis in light of further data from other chronological stages and other text types, in order to evaluate in a broader perspective the significance of the construction seen in (1) and, thus, the plausibility of a reconstruction that attributes to it the role of triggering a fundamental process in the history of Greek. The aim is to assess in which respects the grammar of genitives observed in the New Testament is representative of a real change in progress. The discussion will proceed as follows: in section 2, I provide a more precise formulation and support for the hypothesis at stake; I present the picture emerging from the New Testament (1st cent. AD), adding the data from the Acts of the Apostles to the data from the Gospels discussed in Gianollo (2010, 2011). In section 3 I compare the data coming from the New Testament with other Classical and Postclassical texts. For Classical Greek, I discuss the status of the class of pre-determiner (‘extraposed’) genitives in Plato (5th–4th cent. BC). For Postclassical Greek, I compare the situation of the New Testament with the results of Stolk’s (2015) study of papyrological evidence. I furthermore provide data from an earlier biblical text, the Septuagint (3rd cent. BC). Section 4 is dedicated to the evaluation of the Greek evidence with respect to the current discussion on the status of the external possession construction in a comparative perspective. Section 5 summarizes the main results and conclusions.¹

¹ The texts are cited according to the edition used in the TLG digital library. Translations reproduce, when possible, those contained in the PhiloLogic Perseus library and, for the Bible, the New International Version. Queries on the TLG have been performed as simple text search for the exact form (word index). I will use the label Ancient Greek to refer to Homeric and Classical Greek alike when there is no need to distinguish between them for the purpose of the

2 A Syntactic Account of the Greek Genitive-Dative Syncretism

In the course of its history, Greek shows a reduction of its case system, which is still ongoing and whose effects vary in the different dialects. Nominal declension classes of Standard Modern Greek show a three-case system, with forms continuing the ancient nominative, genitive and accusative cases (the singular of most declension classes also has an additional vocative form). The Ancient Greek dative forms have disappeared everywhere, and dative functions with full nominals are expressed by prepositional phrases (with an original goal semantics). The Standard Modern Greek situation reflects the historical developments of the southern dialectal varieties. Northern dialects show a more advanced development, consisting in the loss of genitive plural forms and in a general decrease of the use of genitive also in the singular (cf. Mertyris 2014).

As for personal pronouns, their declension pattern is even more reduced: the singular features a nominative, an accusative, and a syncretic genitive-dative form, i.e. a form that is used for both genitive and dative syntactic functions; the plural features a two-case declension, where a general oblique form, continuing the ancient accusative, is opposed to a nominative. The development of the genitive-accusative syncretism yielding the two-case declension in the plural of personal pronouns is described and analyzed in Mertyris (2014: 108–118; 123–126), who dates it to the 10th ct. AD for the 1st and 2nd person. All dialects still preserve the singular genitive weak forms, but most Northern dialects substitute the accusative form in the indirect object function; singular strong forms show an accusative-genitive syncretism in most dialects (Dionysis Mertyris p.c.; Mertyris 2014: 118–123).

The table in (2) shows the declension pattern of personal pronouns (for simplicity, only weak forms are shown when available).

- (2) Syncretism patterns: the personal pronouns in Standard Modern Greek (weak forms)

	1 st person		2 nd person		3 rd person	
	sg.	pl.	sg.	pl.	sg.	pl.
Nominative	εγώ	εμείς	εσύ	εσείς	αυτός	αυτοί
	<i>egó</i>	<i>emís</i>	<i>esí</i>	<i>esís</i>	<i>aftós</i>	<i>aftí</i>

discussion. I will use the label Postclassical Greek to refer to quite heterogeneous texts examined in this paper dating from the Hellenistic age on.

Genitive-Dative	μου	μας	σου	σας	του / της	τους
	<i>mu</i>	<i>mas</i>	<i>su</i>	<i>sas</i>	<i>tu / tis</i>	<i>tus</i>
Accusative	με	μας	σε	σας	τον / την	τους / τις
	<i>me</i>	<i>mas</i>	<i>se</i>	<i>sas</i>	<i>ton / tin</i>	<i>tus / tis</i>

The singular genitive-dative ending continues the Ancient Greek genitive forms. The interest of this syncretism pattern lies in the fact that it can be argued to be syntactically, and not phonologically, triggered, i.e., it does not primarily arise from phonologically conditioned merger of inflectional endings.

We observe at least four different phenomena contributing to the demise of the dative forms in the history of Greek (cf. Humbert 1930; Browning 1983: 36–37; Horrocks 2010: 116, 183–187, 284–285; Cooper & Georgala 2012; Michelioudakis 2015; Stolk 2015):

- (3) (i) the replacement of verb-dependent dative nominal phrases (both in argument and in modifier function) and noun-dependent dative nominal phrases by means of prepositional phrases;
- (ii) a change in the case-government properties of prepositions, whereby dative dependent on prepositions is replaced by other cases;
- (iii) the replacement of verb-dependent argumental datives by means of the accusative case;
- (iv) the replacement of affected external possessors in the dative case by means of the genitive case.

While (i) especially targets full nominal phrases and (ii) targets full nominal phrases and pronouns alike, (iii) and (iv) are, in the initial stages, specific to pronouns, more precisely to enclitic forms of personal pronouns and of the deictic-anaphoric pronoun *autós* (used in place of the 3rd person pronoun in the oblique cases since Classical Greek, cf. Kühner & Gerth 1966: § 468). The mentioned phenomena are interconnected, but they are arguably triggered by different local causes.² Moreover, the way they actually condition each other and lead to the ultimate result of dative loss is difficult to reconstruct from the textual evidence. In this paper, I focus on the process in (iv), which is the only one with the potential to explain why the genitive forms prevail over the dative ones in the declension.

² For an analysis of the mechanism leading to the extension of accusative marking into the dative domain, see Cooper & Georgala (2012).

As is well known, syncretism between genitive and dative is amply attested in the Balkan area (for pronominal clitics cf. in particular Pancheva 2004). As discussed by Catasso (2011), various patterns are found: (a) the dative case extends to cover genitive functions (Romanian, Albanian); (b) the genitive case extends to cover dative functions (Greek); (c) the non-inflectional formal means used to express dative functions extend to cover genitive functions (Bulgarian, where the expression of genitive-dative is prepositional). Despite the morpho-syntactic differences, (a) and (c) show the same direction: the dative form prevails over the genitive form. Greek is therefore special in the Balkan area for preferring the genitive form, which makes the proposed connection with possessive constructions all the more relevant.

The replacement of affected external possessors in the dative case by means of the genitive case, as I will argue, appears quite early in the texts, already in New Testament Greek, and can be argued to be syntactically triggered, since at that stage the case endings have not undergone any morpho-phonological merger yet.³ In New Testament Greek (henceforth NTG), the use of the dative is vigorous: it is still found with the same functions it had in Classical Greek, although it is often substituted for by various types of prepositional phrases (cf. Blass & Debrunner 1961: 100–109). Dative forms of personal pronouns are also common and appear in the usual contexts. In NTG the dative-by-genitive replacement is restricted to a specific class of cases individuated by clearly detectable factors at the syntax-semantics interface: it obtains through competition between two patterns for the expression of clausal affected arguments, a pattern with a dative pronominal clitic, and an alternative one with a genitive pronominal clitic raised from within the internal argument (object or derived subject) of the matrix predicate. The reanalysis involved with the genitive pattern will be the object of section 2.1.

As for the reasons motivating the actuation of the change in the specific linguistic and historical setting of NTG, my proposal is that the trigger to the reanalysis is provided by the fact that pronominal genitives stand out in the NTG system, given the new grammar for adnominal genitives, in which the postnominal position predominates. Furthermore, the reanalysis is favored by a number of co-occurring changes at the clausal level, namely the co-occurring reorganization of the clausal structure and the development of a system of argumental clitics. In 2.2, I will describe the new grammar for adnominal genitives emerging in NTG; in 2.3, I will show more in detail the behavior of extraposed genitives; in 2.4, I will shortly discuss the conspiring changes in the clause.

³ For the second declension, the endings of the genitive and dative singular start to be phonologically confused around the 2nd ct. AD, cf. Horrocks (2010: 116), Cooper & Georgala (2012: 284).

2.1 The Reanalysis

As long noted (cf. Havers 1911, Merlier 1931), Postclassical Greek witnesses the expansion of the genitive at the expenses of the dative in the function of the *dativus sympatheticus*, i.e. in what more recent work has analyzed as an external possession construction (König & Haspelmath 1998, Gianollo 2010). In external possession constructions (henceforth EPCs) the possessor is realized in a syntactic position external to the nominal constituent (Determiner Phrase, henceforth DP) denoting the possessed entity, and entertains a semantic relation both with the head of the DP (a relation of possession) and with the main predicate (a relation of affectedness, resembling a benefactive or malefactive argument). Examples from Romance and Germanic are provided in (4) (cf. Guéron 2006, Lee-Schoenfeld 2006, Vennemann 2012, Lamiroy 2003):

- (4) a. *La palla gli ha colpito la mano* (Italian)
 DEF ball 3SG.DAT AUX.3SG hit.PTCP.PRF DEF hand
 ‘The ball hit his hand’
- b. *Martin hat dem Kind die Haare gewaschen* (German)
 Martin AUX.3SG DEF.DAT child DEF hair wash.PTCP
 ‘Martin washed the child’s hair’

Cross-linguistically, thus, EPCs involve an item that is interpreted as the possessor argument of a noun, but is realized as the direct syntactic dependent of a verb. In European languages, the most widespread EPC constructions are those where the possessor is realized in the clausal position typically occupied by indirect objects and non-core datives and assumes dative marking (König & Haspelmath 1998: 550–559).⁴ This EPC type is characterized by a set of interpretive properties: it typically entails a high degree of affectedness of the possessor and tends to occur in the expression of inalienable possession, especially with natural part-whole (e.g. with body parts) and kinship relations.

In Ancient Greek as well, like in the languages seen in (4), the external possessor receives dative marking, cf. (5):

⁴ For other non-dative EPC types in the languages of Europe cf. König & Haspelmath (1998: 559–566), Lødrup (2009), Seržant (2016: 133–138).

(5) (Hdt. 4.165.3)

διὰ τὸν μηδισμόν ὁ παῖς οἱ τέθνηκε
dià tòn mēdismōn ho paîs hoi tēt^hnēke
 because DEF.ACC Medism.ACC DEF.NOM child.NOM 3SG.DAT die.IND.3SG
 ‘because of his alliance with the Medes her son had been killed’

According to the hypothesis put forward in Gianollo (2010) on the basis of previous observations by Horrocks (2007, 2010) and Haspelmath & König (1998), in NTG a new EPC appears in which the possessor is marked by genitive case instead of dative. The new construction originates from the reanalysis of an originally internal, albeit syntactically peripheral, adnominal genitive, which precedes the determiner (typically, the definite article). This genitive occurs in the “extraposed” configuration, one of the four possible linear orders of adnominal genitives in Ancient Greek (cf. section 2.2). Extraposed genitives in NTG, although syntactically derived by DP-internal movement, become functionally specialized in the expression of affected possessors. As an effect of this semantic characterization, they become syntactically ambiguous between a DP-internal genitive at the edge of the nominal phrase and a clausal, DP-external element. Thus, a reanalysis as clausal elements in an EPC becomes possible. The structural difference between the two configurations is schematically represented in (6):

(6) (Ev.Luc. 7.44)

a. αὕτη δὲ τοῖς δάκρυσιν [VP ἔβρεξέν [DP μου τοὺς πόδας]]
haútē dē toîs dákrusin [VP ébreksén [DP mou toûs pódas]]
 b. αὕτη δὲ τοῖς δάκρυσιν [VP ἔβρεξέν μου [DP τοὺς
haútē dē toîs dákrusin [VP ébreksén mou [DP toûs
 3SG.NOM PRT DEF.DAT tears.DAT wet.IND.3SG 1SG.GEN DEF.ACC
πόδας]]
pódas]]
 feet.ACC
 ‘but she has wet my feet with her tears’

The structural analysis of EPCs is hotly debated, and the twofold relation with the nominal phrase and the predicate has received different treatments, cf. Deal (2013) for an overview. On the basis of Gianollo (2014), I assume that in NTG the structure in (6.b) results from a movement operation targeting the DP-internal genitive argument and moving it to a verbal projection (an Applicative Phrase in current generative theorizing, cf. Pyllkkänen 2002), cf. (7). Genitive case-marking is evidence for a dependency with the noun, whereas the affectedness component is derived as an effect of the DP-external positioning in the Applicative Phrase.

- (7) $[_{VP} \text{ἔβρεξέν} [_{AppIP} \text{μου}_i [_{DP} \text{τοὺς πόδας } t_i]]]$
 $[_{VP} \text{ébreksén} [_{AppIP} \text{mou}_i [_{DP} \text{toùs pódas } t_i]]]$

From the first dative-like use seen in EPCs, genitive marking can extend to other, core sentential dative uses (which are not derived through movement from a DP projection): when this happens, the case morpheme has been morphologically reanalyzed as a dative case assigned by the predicate. Semantic factors lead to the expansion of the genitive form to other unselected datives that share a core semantic component (affectedness) with external possessors, most notably bene-/malefactive. From there, it starts expanding to selected datives expressing goals (Humbert 1910, Stolk 2015).

A necessary prerequisite for the plausibility of the reconstruction presented above is the presence of local conditions in the grammar triggering the structural reanalysis. In NTG the appropriate conditions are provided by the innovative grammar for adnominal genitives, as we will see in the next section.

2.2 A New Grammar for Adnominal Genitives

The fundamental change in the syntax of genitives in NTG consists in the generalization of just one configuration for adnominal genitives, where the genitive immediately follows the head noun (NG).

In Ancient Greek adnominal genitives can be realized in four different configurations, shown in (8). In two of them (NG and Doubl) the genitive is linearly after the head noun. In the other two (GN and Extr) the genitive occurs prenominally.

- (8) a. **NG:** (Pl. *Grg.* 482d)

τὸ	ἕθος	τῶν	ἀνθρώπων
<i>tò</i>	<i>et^hos</i>	<i>tôn</i>	<i>ant^hrôpôn</i>
DEF.NOM	habit.NOM	DEF.GEN	men.GEN

 ‘the men’s habit’
- b. **Doubl:** (Pl. *Cra.* 392c)

τὸ	παιδίον	τὸ	τοῦ	Ἑκτορος
<i>tò</i>	<i>paidíon</i>	<i>tò</i>	<i>toû</i>	<i>Héktoros</i>
DEF.NOM.N	son.NOM	DEF.NOM	DEF.GEN	Hector.GEN

 ‘Hector’s son’
- c. **GN:** (Pl. *Grg.* 523b)

τὸ	τῆς	τίσεως	τε	καὶ	δίκης
<i>tò</i>	<i>tês</i>	<i>tiseôs</i>	<i>te</i>	<i>kaì</i>	<i>díkês</i>
DEF.ACC	DEF.GEN	requital.GEN	and	and	penance.GEN

δεσμοτήριον

desmōtḗrion

dungeon.ACC

‘the dungeon of requital and penance’

d. **Extr:** (Pl. *Plt.* 270e)

τῶν	δὲ	ἡβόντων	τὰ	σώματα
tôn	dè	hēbōntōn	tà	sómata
DEF.GEN	and	young.GEN	DEF.NOM	body.NOM
‘the bodies of the young men’				

Note that the presence of the definite article represents crucial evidence to distinguish NG from Doubl, as well as GN from Extr.⁵ Namely, in the Doubl configuration, as the label suggests, the general definiteness value of the matrix DP is repeated by letting a copy of the article precede the genitive (as well as adjectives or prepositional phrases). In the Extr configuration, the definite article (the head of DP) represents the borderline between the main body of the DP and its edge. The latter can host one constituent with a marked pragmatic role: extraposed genitives function either as focused material or as a device to ensure textual cohesion (i.e. as topic-like elements), cf. Manolessou (2000). This information-structural role of the Extr construction is extremely persistent in the history of Greek, and it is still attested in Modern Greek, where these genitives have been analyzed as sitting in the DP’s left periphery (Horrocks & Stavrou 1987). It is all the more remarkable that these information-structural functions are not observed in those Extr constructions containing personal pronouns in NTG that, according to the present hypothesis, have been subject to reanalysis.

While the role of the Extr configuration emerges quite clearly from the data, it is more difficult to establish the conditions governing the other three configurations, which result from the interplay of pragmatic factors with a number of structural ones (cf. a survey in Benvenuto 2013). The general picture of Classical Greek emerging from Manolessou’s (2000) comprehensive work shows a predominance of NG and GN configurations over the pragmatically more marked Doubl and Extr configurations. As for NG and GN orders, in Classical Greek texts they tend to have a quantitatively equivalent distribution, with some tendencies emerging: the choice of configuration is also a stylistic matter, with the GN configuration being more typical of a formal language (Manolessou 2000: 85–86).

⁵ Further evidence is represented by the position of the genitive with respect to modifiers and other determiners in complex DPs, cf. Manolessou (2000: 98–99).

In NTG we witness the loss of pragmatic variability in the positioning of genitives, together with the loss of some syntactic configurations within the DP.⁶ The unmarked and largely predominant position for adnominal genitives is postnominal in the entire New Testament. More precisely, the unmarked construction, both for full nominal phrases and for pronouns, is the NG configuration, i.e. the postnominal structure with no preceding doubling determiner. Typically, the genitive nominal phrase is adjacent to the matrix noun.

Quantitative data from the Gospels have been collected by Manolessou (2000) and Gianollo (2010). Since the data on pronominal genitives discussed later on come from the Acts of the Apostles, it seems useful to provide evidence concerning the generalized postnominal position of genitives from this text as well.⁷ I collected, by means of a manual search, the first 100 instances of genitives represented by full nominal phrases (i.e. consisting of at least a lexical noun, excluding instead for the moment pronominal realizations) in the Acts (covering approximately the first five chapters). Following the criteria already applied in Gianollo (2011), I only considered genitive nominal phrases depending on a matrix noun, independently of the semantic relation they entertain with it (thematic proper, or epexegetical, or expressing substance; I excluded only partitive genitives). Since genitives depending on verbs and absolute genitives were not relevant for the issue at stake, I excluded them from the calculation.

The distribution in the Acts confirms the general picture gained from the Gospels: 96 of the 100 genitive noun phrases are postnominal. Of the four prenominal cases, one is found in the GN ‘internal’ construction (Act.Ap. 4.13) and three are discontinuous, being separated from the head noun by an intervening constituent extraneous to the nominal phrase (Act.Ap. 1.12, Act.Ap. 4.25) or being a complex phrase split in two parts by the head noun (Act.Ap. 5.36). These data confirm the existence of an innovative grammar for adnominal genitives in NTG, in which the postnominal position is generalized: in the case of full nominal phrases, the few prenominal instances are due to pragmatically motivated displacement operations.

6 Contact with Semitic is traditionally considered to play a fundamental role in favoring the postnominal positioning of genitives (cf. Manolessou 2000: 105–106). Note, however, that it does not play a role for the birth of the new EPC construction, because Biblical Hebrew (like Classical Arabic and unlike Modern Hebrew) does not have EPCs (Vennemann 2012).

7 The author of the Acts of the Apostles is uncontroversially considered to be the same person who composed the Gospel of Luke. These works are characterized by a more literary style than other parts of the New Testament (Burkett 2002: 195).

Once we also consider the genitives of personal pronouns (and of the deictic-anaphoric pronoun *autós* for the 3rd person), the situation is similar with respect to the predominance of the NG order. However, there are further innovative aspects that deserve attention: the decline of possessive adjectives, the overall increased frequency of use of pronominal possessors in contexts where they would have been avoided in Classical Greek, and the relatively high number of Extr constructions observed with pronominal genitives.

In Ancient Greek, possessive adjectives (e.g. *emós* ‘my’) formally compete with genitive forms of the personal pronouns. In NTG possessive adjectives are extremely rare, and typically the genitive form of the pronoun is used (as in Modern Greek), cf. Blass & Debrunner (1961: 149). The rarity of possessive adjectives is attested also by papyrological evidence (Mayser 1970: 64–68): it can thus be considered a general feature of Postclassical Greek.

Genitive forms of the personal pronouns and of *autós* take their place: they are typically postnominal, but can also be found in the Extr configuration. We will examine their behavior in 2.3. For now, let us remark their frequency and extension to contexts where they were typically omitted in Classical Greek (cf. Blass & Debrunner 1961: 146, and the discussion in Gianollo 2010: 105). In Classical Greek the expression of possession is usually omitted when it is contextually recoverable, which is typically the case with inalienable or inherently possessed entities (cf. Baldi & Nuti 2010: 346–350 for a cross-linguistic picture). For instance, with body parts it is typically not present if the subject and the possessor have the same referent. When a pronoun or a possessive adjective appears, this typically expresses contrast, emphasis, or otherwise disambiguates a situation where the absence of overt indication of possession could lead to coreference between possessor and subject of predication, cf. (9):

(9) (Plat. *Prt.* 310c)

καὶ ἅμα	ἐπιψηλαφήσας	τοῦ	σκήμματος	ἐκαθέζετο
<i>kaì háma</i>	<i>epipsēlap^hēsas</i>	<i>toû</i>	<i>skīmpos</i>	<i>ekat^hēzeto</i>
and at.once	feel.for.PTCP.PRS.NOM	DEF.GEN	bedstead.GEN	sit.IMP.F.3SG
παρὰ τοὺς	πόδας	μου		
<i>parà toûs</i>	<i>pódas</i>	<i>mou</i>		
by	DEF.ACC	feet.ACC	1SG.GEN	

‘With this he groped about for the bedstead, and sat down by my feet’

In NTG, instead, the possessor is in general explicitly mentioned in the frequent cases where body parts or kinship terms are involved in the construction. This, as we will see below, ensures a large number of appropriate contexts for EPCs constructions.

2.3 Extraposed Genitives in the New Testament

In the singular, personal pronouns display a systematic alternation between a prosodically strong and a prosodically weak form for all cases but nominative: for instance the genitive singular for the first person has a strong form *emoû* and a weak form *mou*.⁸

Weak forms are enclitic to a prosodic host and are preferred, unless the pronoun is topicalized, focused or occurs as the complement of a preposition. Being prosodically weak, genitive forms are subject to prosodic constraints (on which cf. Janse 1993) and may be found clustering with various elements in the clause's second position, thus displaced with respect to the nominal phrase to which they belong. In most of the cases, however, they occur in one of two positions in the nominal domain: either in the NG configuration or in the Extr position.

Let us examine evidence from the Acts of the Apostles in order to evaluate the distribution of these forms in New Testament Greek (for data from the Gospels cf. Gianollo 2010, 2011). In this case I performed an automatic search on the TLG text of the Acts to retrieve the data. I searched for the genitive forms of the personal pronouns (only the weak forms for the singular) and of *autós* (which has the functions of 3rd person pronoun). Table (10) shows how they are attested in five distributional classes: adnominal genitives following (“post-N”) or preceding (“pre-N”) the matrix noun (or another nominal head, such as a pronoun or a nominalized adjective); genitives selected as complements by verbs (“V+ObjG”); genitives selected by prepositions or adverbs (e.g. *metaxú* ‘in the midst’), as well as adverbial genitive forms, e.g. *autoû* ‘there’ (“Adv/P + G”); genitives in absolute constructions (“GenAbs”).

(10) Genitive of personal pronouns and *autós* in the Acts

<i>Acts of the Apostles</i>	post-N	pre-N	V+ObjG	Adv/P + G	GenAbs
μου (<i>mou</i>) (tot. 49)	35	3	6	2	3
σου (<i>sou</i>) (tot. 47)	40	2	4	/	1

⁸ For personal pronouns, the distinction between a strong and a weak form is plausibly to be reconstructed for Proto-Indo-European (Sihler 1995: 371). For the prosodic behavior of the oblique forms of *autós*, pointing to the existence of enclitic forms, cf. Kühner & Blass (1966: § 88).

ἡμῶν (<i>hēmōn</i>) (tot. 42)	27	1	2	6	6
ὕμῶν (<i>humōn</i>) (tot. 40)	27	1	2	10	/
αὐτοῦ, αὐτῆς (<i>autoû, autês</i>) (tot. 139)	87	4	12	21	15
αὐτῶν (<i>autōn</i>) (tot. 91)	38	3	2	34	14
all forms (tot. 408)	254 (62%) (95% of adnominal)	14 (3.5%) (5% of adnominal)	28 (7%)	73 (18%)	39 (9.5%)

The distribution of pronominal forms confirms the generalization of the postnominal position, more specifically of the NG configuration. Few verbs (e.g. *akoúō* ‘listen’) are still found with a genitive complement. Genitives occurring in the “Adv/P + G” and “GenAbs” category are not relevant for our main question and are given only for completeness.⁹

More interesting for our understanding of grammatical change in the domain of genitives are the residual pronominal cases. All 14 cases of pronominal order occur in the Extr configuration.^{10,11} Moreover, 10 of the total 14 cases qualify as EPCs.

9 The higher number and relative frequency of genitives selected by prepositions or adverbs with the genitive singular of *autós* and with all the plural forms is motivated by the impossibility of formally distinguishing, in these cases, between a strong and a weak form. With the 1st and 2nd pers. singular, in this context, predominantly the strong forms are used. Cf. Devine & Stephens (1994: 353–354) for a discussion on whether plural forms of the personal pronouns actually had a weak variant.

10 In one case (Act.Ap. 22.18) the DP is indefinite, thus in principle the configuration could be GN and not Extr. However, since with definite DPs the GN configuration is never attested in the case of pronouns, I considered it safe to treat also this case as Extr; I nonetheless excluded it from the count of EPCs because it does not satisfy both criteria in (11).

11 I consistently treated as Extr constructions cases like (i), where I took the genitive pronoun to belong to the nominal phrase (also in the genitive) selected by the predicate *akoúo*, and not to be dependent on the verb (cf. also the PROIEL annotation).

I classify prenominal orders as EPCs when both of the following conditions apply:

- (11) i. the genitive precedes an overt determiner (or a bigger syntactic unit containing it, e.g. a prepositional phrase);
- ii. the possessor can plausibly be depicted as positively or negatively affected by the event.

Examples of typical contexts are given in (12):

- (12) a. (Act.Ap. 21.13)

τί	ποιεῖτε	κλαίοντες	καὶ	συνθρύπτοντές
<i>tí</i>	<i>poiéite</i>	<i>klaíontes</i>	<i>kaì</i>	<i>sunt^húrptontés</i>
what	do.IND.2PL	weep.PTCP.PRS.NOM	and	break.PTCP.PRS.NOM
μου	τὴν	καρδίαν;		
<i>mou</i>	<i>tḗn</i>	<i>kardían?</i>		
1SG.GEN	DEF.ACC	heart.ACC		

‘Why are you weeping and breaking my heart?’

- b. (Act.Ap. 16.22)

καὶ οἱ	στρατηγοὶ	περιρῆξαντες	αὐτῶν	τὰ
<i>kaì hoi</i>	<i>stratēgoì</i>	<i>perirḗksantes</i>	<i>autōn</i>	<i>tà</i>
and	DEF.NOM	magistrates.NOM	strip.PTCP.AOR.NOM	3PL.GEN DEF.ACC
ἱμάτια	ἐκέλευον	ῥαβδίζειν		
<i>himátia</i>	<i>ekéleuon</i>	<i>rabdízein</i>		
dress.ACC	order.IND.3PL	beat.INF		

‘the magistrates ordered them to be stripped and beaten with rods’

This residual class of prenominal genitives does not obey the original pragmatic constraints applying to the Extr position, since these forms do not perform any special function at the discourse level: their persistence must be due to a process of reanalysis, acting on their licensing conditions. The results from the Acts confirm the picture obtained in Gianollo (2010) for the Gospel of John, which led me to propose that Extr genitives have assumed a new function in NTG. They occur in contexts where the affectedness of the possessor (i.e. its being transformed,

- (i) (Act.Ap. 22.1)

ἀκούσατέ	[_{DP} μου	τῆς	πρὸς ὑμᾶς	νυνὶ ἀπολογίας]
<i>akóusate</i>	[_{DP} <i>mou</i>	<i>tēs</i>	<i>pròs humās</i>	<i>nunì apologías</i>
listen.IMP	1SG.GEN	DEF.GEN	to	2PL.ACC now defense:GEN

‘listen now to my defense’

physically or psychologically, by the event) is salient for the interpretation, as in the case of highly transitive verbs implying transformation, removal or transfer of possession of the object (e.g. ‘perturb’, ‘cut’, ‘hit’) and of inherently possessed entities (e.g. body parts, personal belongings). Affectedness is universally acknowledged as a hallmark of EPCs (cf. the discussion in Seržant 2016 and further section 4). It is one determining parameter for the classification of external possession constructions proposed by Deal (2013, 2017). Deal distinguishes four external possession constructions, differing with respect to the combination of the values for two parameters: possessor movement and affectedness effect.¹² The type of external possession construction found in New Testament Greek has a positive value for both parameters, i.e. it displays both possessor movement and affectedness effects (as typical in Indo-European languages, cf. König & Haspelmath 1998). The source of the affectedness entailment is not homogeneous: it depends on the type of event conveyed by the verbal predicate, on the nature of the involved entities, on the more general discourse construal (cf. Seržant 2016). The fact that this construction in NTG is typically found with personal pronouns referring to animate entities, as such capable of mental experiences, is clearly connected with the contribution of the affectedness component brought about by EPCs.

Importantly, in 8 of the 10 EPC cases the DP containing the possessum is the object of a transitive verb, and the remaining two cases are subjects of passive predicates. This points to a clear syntactic restriction on EPCs, which is also known from modern languages, namely the fact that possessors in EPCs have a relation with internal arguments of verbs (which has implications for their structural analysis in terms of movement, cf. Deal 2013).¹³ This distributional fact is also important in connection to the conspiring changes at the clausal level contributing to the reanalysis of extraposed genitives, which will be our next topic.

In conclusion of this subsection we should note that the EPC construction is by no means obligatory in NTG: (13) shows a case where an EPC freely alternates with a plain NG construction:

¹² In fact, Deal’s typology is more complex. The two parameters mentioned above only apply to her Type A languages, i.e. those languages where the possessor entertains a syntactic relation with the internal argument of a verb (whereas in Type B languages external possessors are also possible with a verb’s external argument).

¹³ Lødrup (2009) discusses the interesting case of Norwegian, where also unergative verbs may appear in EPCs: in EPCs unergative verbs license a non-thematic internal argument, realizing the possessor, and the possessum occurs as a prepositional phrase.

(13) (Act.Ap. 2.26)

διὰ τοῦτο ηὐφράνθη μου ἡ καρδία καὶ
dià toûto euf^hránt^hē mou hē kardía kai
 through DEM.ACC be.glad.IND.3SG 1SG.GEN DEF.NOM heart.NOM and
 ἠγαλλιάσατο ἡ γλῶσσά μου
ēgalliásato hē glôssá mou
 rejoice.IND.3SG DEF.NOM tongue.NOM 1SG.GEN
 ‘Therefore my heart is glad and my tongue rejoices’

This situation seems to hold for Modern Greek as well, unlike e.g. modern Romance languages, where the choice of the EPC constructions is obligatory in the relevant contexts (cf. discussion in Gianollo 2010).

2.4 Conspiring Changes

The foremost motivation for the proposed reanalysis is to be found in the different grammar for adnominal genitives in NTG. As we saw, the reanalysis of extraposed adnominal genitives as clausal arguments of the verb is triggered by their increasing exceptionality in the NTG system: as the postnominal position for adnominal genitives becomes generalized, extraposed genitives end up being the only genitive construction with a prenominal order. They are mainly represented by pronominal forms, which do not have a marked information-structural function, unlike ‘full’ genitives occurring in the extraposed configuration in Classical Greek.

Possibly the clitic nature of the involved pronominal forms favors their syntactic displacement. The ongoing change in the syntax of pronominal clitics (Janse 1993, Condoravdi & Kiparsky 2001, 2004, Pappas 2004) is, in fact, one further local condition enabling the reanalysis. Weak pronouns tend to become consistently adjacent to the verb. On the one hand, this is due to the frequency of verb-initial orders in NTG (cf. Horrocks 1990, Kirk 2012), to the effect that clitics in Wackernagel position are very often prosodically hosted by the verb. On the other hand, NTG seems to witness a developing system of verbal clitics, i.e. the progressive shift from clausal second position to head dependence (Taylor 1996, Condoravdi & Kiparsky 2001), so that pronominal clitics are adjacent and enclitic to the verb even when the verb is not in clause-initial position.¹⁴ A further effect

¹⁴ For the much-debated later change from enclisis to proclisis, cf. the discussion in Pappas (2004) and Condoravdi & Kiparsky (2004).

of the clitic nature of pronominal forms involved in the reanalysis of extraposed genitives has to do with the formation, very clearly evidenced by stress reordering phenomena (Janse 1995), of a phonological word consisting of the verbal host and of the enclitic (cf. e.g. 6). The formation of a phonological word may have facilitated the reanalysis of the genitive as an element dependent on the verb, rather than on the complement nominal phrase.

Another crucial interacting condition concerns the intertwined changes in the positioning of the verb and of the direct object (Taylor 1994, Kirk 2012). NTG witnesses an increase of VO orders, i.e. of structures where potentially the extraposed genitive ends up between the inflected verb and the nominal phrase, yielding the structural conditions for its reanalysis as a verbal argument (thus, a “dative”).

We see, therefore, that a number of syntactic factors conspire in enabling the reanalysis of extraposed genitives in NTG: the ongoing change in the positioning of clitics in the clause, as well as the ongoing reorganization of clause structure, with a more fixed positioning of the verb, connected, in turn, to increasing VO order.

3 A Comparison with Other Texts

This section is dedicated to a comparison between the situation found in NTG and selected phenomena from Classical and Postclassical texts. The reconstruction proposed in section 2 raises a number of questions. First of all, was the genitive EPC construction already attested at previous stages? and if so, why should the reanalysis first happen in NTG? We will see that, although the pattern was already attested in Classical Greek, the conspiring factors for its reanalysis were not in place. Secondly, is the situation observed in NTG common to other Postclassical texts? An assessment of this aspect is important in order to evaluate whether sociolinguistic aspects play a role in the phenomena seen in section 2. In this respect, the short survey carried out here is very preliminary: its main aim is to single out issues for future research on a broader set of texts. The Classical Greek situation is illustrated by means of data from Plato’s corpus in 3.1. The NTG grammar for genitives is compared to what observed by Stolk (2015) for the papyri in 3.2, and to the situation found in the Septuagint in 3.3.

3.1 Plato

As shown by Havers' (1911) comprehensive survey, EPCs are well attested throughout Ancient Greek, especially with personal pronouns. In this context, the dative forms predominate over genitive ones. For instance, in Homer, in contexts where possession of body parts, psychological states, kinship relationships and similar is expressed, personal pronouns occur much more frequently in the dative (410 cases) than in the genitive (22 cases), cf. Havers (1911: 104). However, genitive forms are indeed attested in contexts that can be characterized as EPCs, and they keep gaining in frequency throughout the Classical period. In this section I present data from Plato's writings. Adopting the method applied in Stolk (2015), I probed the texts by looking for just one form, namely the genitive 1st person singular *mou*, which, due to the dialogic nature of Plato's work, is particularly frequent. Further work will have to assess whether EPC constructions are more frequent with the 1st person form in general: this would be plausible, in view of the nature of the construction, which entails the relevance of the possessor's affectedness, and, thus, an enhanced involvement of the participant, which is to be expected in first person narratives.

The table in (14) summarizes the results of the query for 1st person singular *mou* in all of Plato according to the TLG text:

(14) Distribution of *mou* in Plato

<i>Plato</i>	post-N	pre-N	V+ObjG	Adv/ P + G	StandComp	GenAbs
$\mu\omicron\upsilon$ (<i>mou</i>) (tot. 115)	15 (44% of adnominal)	19 (56% of adnominal)	70	/	3	8

The categories in the table are parallel to those seen in (10) (cf. section 2.3 for an explanation of the labels), with the addition of one context not attested in the Acts, the genitive in the standard of comparison ("StandComp"). First of all, we observe that the greatest number of weak pronominal forms is found as the complement of numerous verbs selecting the genitive (*akoúō* 'hear', *katagelāō* 'deride', *apék^hō* 'abstain', *p^heídomai* 'refrain', etc). Adnominal forms represent only 34 of the total instances. Among these forms, the pronominal orders only slightly outweigh the postnominal ones. In this respect, the distribution of *mou* in Plato is parallel to what is observed in general for adnominal genitive phrases in Classical Greek. Manolessou (2000: chapter 3)

shows that, with some variation depending on the author, prenominal orders for full genitive phrases in definite DPs are between 50% and 65%, whereas postnominal orders are between 35% and 50% in Classical Greek. Despite the similar ratio of pre- and postnominal orders, possessive pronouns have more reduced structural possibilities than full genitive phrases: as a rule they occur, when postnominal, in the NG construction, and, when prenominal, in the Extr configuration (cf. Kühner & Gerth 1966: § 464.4). The form *mou* in Plato conforms to this general rule: 17 of the 19 prenominal cases are represented by Extr configurations.

Interestingly, most of the prenominal orders found in Plato (more precisely, 16 of the 17 Extr constructions and of the 19 total cases) can be characterized as EPCs according to the criteria seen in (11). In the other two cases of prenominal orders that are not EPCs (Pl. *Ap.* 24b and 25a) the genitive is DP-internal, i.e. in a GN configuration. Given (11.ii) I excluded the Extr construction in (15) because it conveys no affectedness. Here the prenominal order is due to information structural requirements, specifically the contrastively focused status of the referent (Hermagoras):

(15) (Pl. *Cra.* 391c)

ἄτοπος	μεντᾶν	εἶη	μου ,	ὦ	Σώκρατες,	ἦ
<i>Átopos</i>	<i>mentàn</i>	<i>eīē</i>	<i>mou</i>	<i>ō</i>	<i>Sōkrates</i>	<i>hē</i>
absurd.NOM	indeed	be.OPT.3SG	1SG.GEN	o	Socrates.VOC	DEF.NOM
δέησις						
<i>dēēsis</i>						
request.NOM						
'It would be an absurd request for me, Socrates'						

An example showing an EPC is (16):

(16) (Pl. *Phd.* 89b)

καταψήσας	οὖν	μου	τὴν	κεφαλὴν	καὶ
<i>katapsēsas</i>	<i>oūn</i>	<i>mou</i>	<i>tēn</i>	<i>kep^halēn</i>	<i>kaì</i>
stroke.PTCP.AOR.NOM	then	1SG.GEN	DEF.ACC	head.ACC	and
συμπιέσας	τὰς	ἐπὶ	τῷ	αὐχένι	τρίχας
<i>sumpiēsas</i>	<i>tàs</i>	<i>epì</i>	<i>tōi</i>	<i>auk^hēni</i>	<i>trík^has</i>
gather.PTCP.AOR.NOM	DEF.ACC	on	DEF.DAT	neck.DAT	hair.ACC
–εἰώθει	γάρ,	ὅποτε	τύχοι,	παίζειν	
– <i>eīō^hei</i>	<i>gár</i>	<i>hopóte</i>	<i>túk^hoi</i>	<i>paízein</i>	
use.IND.3SG	in_fact	when	happen.OPT.3SG	play.INF	

μου εἰς τὰς τρίχας – [...]ἔφη [...]
mou eis tās trik^has – [...]éph^hē [...]
 1SG.GEN in DEF.ACC hair.ACC say.IND.3SG

‘He stroked my head and gathered the hair on the back of my neck into his hand – he had a habit of playing with my hair on occasion – and said [...].’

Here in both cases the possessum is represented by a body part, as in another 6 cases in the corpus; as further possessed entities we find ‘soul’, abstract feelings (‘confidence, inexperience’), personal items (‘mantle’). The predicates convey notions like ‘touch’, ‘take’, ‘distress’, ‘impede’, i.e., they are highly transitive and imply affectedness of the object (and consequently of its possessor). A non-affecting predicate like ‘see’ is also found (Pl. *Phd.* 115e), however the affectedness here is given by the whole context (Socrates wants to avoid that Crito sees his body being burnt or buried).

A last interesting point emerging from the survey is that also in Plato, as we saw for NTG, some cases of potential structural ambiguity are found involving genitives of pronouns. While, however, in NTG the potentially ambiguous string was [Verb-Genitive-Noun], in Plato we find, instead, in conformity with the more frequent OV orders, [Noun-Genitive-Verb] strings, as in (17):

(17) (Pl. *Tht.* 169b)

Ἄριστά γε, ὦ Θεόδωρε, τὴν νόσον **μου**
 Áristá ge ô Th^heódōre tēn nōson **mou**
 admirably sure o Theodorus.VOC DEF.ACC complaint.ACC 1SG.GEN
 ἀπῆκασας
 ap^héikasas
 represent.IND.3SG

‘Theodorus, you pictured my complaint admirably’

The pronominal clitic is in a postnominal configuration here, but the string is potentially ambiguous also in this case, since the context allows for an interpretation of the personal pronoun as a verb-dependent benefactive.

In conclusion, we see a number of signs (EPC specialization for Extr genitives, structurally ambiguous combinations with genitive clitics) that could suggest an early emergence for the new EPC construction with the genitive case. However, in Plato’s grammar the genitives of personal pronouns do not stand out yet, since their linear distribution is still comparable to the behavior of full genitives, unlike the situation in NTG, where the pronominal order is to a great extent reserved to pronouns.

3.2 Documentary Papyri: A Comparison with Stolk's (2015) Results

Stolk (2015) provides an overview of the distribution of the singular genitive form of the 1st person pronoun (*mou*) in a broad set of Egyptian documentary papyri from the Ptolemaic to the Byzantine period. Her results largely confirm the picture resulting from NTG with respect to the emergence of a new EPC construction marked by genitive case, and show its diachronic progression and the parallel demise of the dative in this context. At the same time, some interesting differences with respect to NTG point to the role of the text type in the distribution and allow for an improved understanding of the conditions licensing the new EPC.

Stolk considers also prenominal genitives in indefinite DPs (whose status is, in principle, ambiguous between a GN and an Extr configuration). In these cases, the semantic component of affectedness (cf. 11.ii) plays a determining role for the analysis, cf. (18):

(18) (Stolk 2015: 114, example 18)

ἐκλέπη	μου	δέλφαξ	πυρρόχρους	ἄξιο(ς)
<i>eklépē</i>	<i>mou</i>	<i>délp^haks</i>	<i>purrók^hrous</i>	<i>áksio(s)</i>
steal.IND.PASS.3SG	1SG.GEN	pig.NOM	tawny-colored.NOM	worth.NOM
(δραχμῶν)	ἡ	ὑπὸ	τινων	
(<i>drak^hmôn</i>)	<i>ē</i>	<i>hupò</i>	<i>tinōn</i>	
drachmas.GEN	8	by	some.GEN	
'a young tawny-colored pig worth eight drachmas was stolen from me by some people'				

The data from the papyri confirm that the first functional domain in which the genitive expands at the expense of the dative is the expression of benefactives and malefactives. The most frequent pattern involving Extr configurations in Stolk's data is represented by transitive structures featuring the combination of a patient-affecting change of state predicate with a possessed object, whose possessor is also interpreted as physically or mentally affected. Especially starting with the papyri of the Roman period, the resulting string is typically (in 97% of the cases according to Stolk 2015: 102) [Verb-Genitive-Noun], i.e. the structure at the basis of the reanalysis proposed in section 2. Also in Stolk's corpus, the DP containing the possessed entity is usually a direct object, occasionally the subject of passive predicates.

The broad chronological scope of Stolk's research allows her to detect a cline in the extension of the genitive to further dative functions, reaching, during the Ptolemaic period, first benefactive and malefactive arguments, then

goals, and only later, during the Roman and Byzantine period, recipients and addressees.¹⁵ This confirms Harrison's (2002), observations on early instances of genitive case with the recipient of 'send' in the private letters from Mons Claudianus (ca. 110–160 AD), cf. (19):

(19) (Harrison 2002: 50, example 9, letter 270)

μὴ	μέμψε	μαί	ὅτι	οὐκ	ἔπεμψά	σοῦ
<i>mì</i>	<i>mémψε</i>	<i>mai</i>	<i>hóti</i>	<i>ouk</i>	<i>épempzá</i>	<i>sou</i>
not	blame.IMP.2SG	1SG.ACC(?)	that	not	send.IND.3SG	1SG.GEN

λάχανο.	ἴάν	γένεται,	πέμψω	σοῦ
<i>lák^hano.</i>	<i>ēān</i>	<i>génetai</i>	<i>pémpso</i>	<i>sou.</i>
vegetables.ACC	if	be.IND.3SG	send.IND.1SG	you.GEN

'Don't blame me because I didn't send you the vegetables. If there are any, I'll send you'

The only major difference with respect to NTG remarked by Stolk concerns the fact that the inalienability of the possessum does not play a relevant role in the data from the papyri, differently from what happens in NTG (Gianollo 2010). This fact, as Stolk (2015: 108) notes, is probably simply due to the different topics covered by the texts (inalienable possession situations being more frequent in the New Testament), but allows us to better define the factors triggering the use of the construction: apparently the most important semantic factor is the possessor's affectedness, and not the inalienable nature of the relation. In her search over the NT, Stolk (2015: 108) finds that the great majority of relations expressed by *mou* in the NT are inalienable independently of the pre- vs. postnominal position of the genitive, which confirms that inalienability is overrepresented in the NT, due to the text's thematic content. This, however, cannot per se represent a counterargument to an EPC analysis (contra Stolk 2015: 112), as we will discuss in section 4.

Another discrepancy between NTG and the papyri concerns the lower percentages of postnominal orders for the latter given by Stolk. This is a particularly important point since, as I argue, the shift to a postnominal grammar for adnominal genitives is a crucial trigger for the reanalysis. Stolk (2015: 101) counts 34% NG orders in the Ptolemaic period, 57% in the Roman period, 45% in the Byzantine period. However, these percentages are calculated on the total number of forms, independently of their belonging to a DP or to a VP or PP.

¹⁵ According to Humbert (1930) the dative resisted the longest in the function of marking an indirect object of the verb. He gives a very late date for the disappearance of the dative from this context in spoken language, the 10th ct. AD, which apparently has to be revised in view much earlier of papyrological evidence.

Once we only consider adnominal genitives (i.e., Stolk's GN, AGN, and NG categories, cf. Stolk 2015: 101 fn. 13), we have percentages of 65% postnominal orders for the Ptolemaic period and 77% for the Roman one (1st–4th ct. AD, i.e., a stage partially comparable to NTG, where my data show percentages of 90%–95% postnominal orders).¹⁶ We see, thus, that the postnominal orders are predominant in the papyrological evidence as well, although to a lesser extent than in the NT. Consider also that these data are only relative to the pronominal form *mou*, which, also thanks to its clitic nature, may be expected to have a greater flexibility with respect to word order; thus, higher percentages for the pronominal orders than with full nominal genitives are to be expected. A future study on the position of non-pronominal genitives is needed to safely assess this point. It seems, however, undeniable that NTG is quite extreme in showing the generalization of the postnominal order. The hypothesis that this may be a typical feature of the Biblical language is suggested also by the data from the Septuagint that we will see below.

3.3 The Septuagint

The Septuagint version of the Bible (3rd ct. BC) substantially confirms the picture emerging from the later New Testament: genitive nominal phrases are for the greatest part postnominal. When pronominal, genitives strongly tend to appear in the extraposed configuration, especially in the case of personal pronouns. What differs from the data retrieved in the New Testament is the lower frequency with which extraposed constructions are found in the Septuagint.

I conducted a query on the Pentateuch (according to the TLG text) for the genitive of the 1st person singular pronoun *mou*. Most of the 514 total instances of the form are adnominal.¹⁷ Among adnominal forms of *mou*, only 19 occur in the extraposed construction (3.7% of the total instances). This is a low number

16 The data should be further refined by removing those GN cases where the genitive is in fact the subject of a participle in the genitive absolute construction (Stolk 2015: 103–104). In those cases, the genitive may linearly precede a noun (typically the object of the predicate realized by the participle form), but certainly does not build any syntactic unit with it (although, as Stolk 2015: 104 fn. 18 notes, a semantic link can be present). If we exclude them, we reach a percentage of 69% postnominal orders for the Ptolemaic period, and of 78% for the Roman period.

17 As the complement of prepositions, typically the strong form *emoû* is found (but *mou* sometimes occurs with elements like *émprost^hen*, *opísō*, *eggús*, *enantíon*). Non-adnominal *mou* is found as complement of a few verbs (*akoûō*, *mimnēskō*), and sporadically as the subject of genitive absolute constructions.

in comparison to the New Testament (and in fact also to Plato, where there were 19 extraposed constructions out of 115 total instances of *mou*, i.e. 16.5%). For the New Testament the PROIEL corpus, thanks to its syntactic annotation, offers the possibility to automatically search for the adnominal forms of *mou* (tagged ATR): of a total of 564 forms, 504 are adnominal. Of these, in turn, 47, i.e. 8.3% of the total forms, occur in the extraposed configuration (55, i.e. 9.7%, if we also consider the indefinite DPs, despite the absence of determiner). The Gospels provide the majority of the instances (36 cases).

Also in the Septuagint, as in the NT, the extraposed position of certain pronominal forms contrasts with the otherwise generalized postnominal order for genitives.

According to my criteria in (11), all of the 19 extraposed configurations in the Septuagint qualify as EPCs. The contexts where these constructions occur are similar to those of the NT, however a high frequency of perception verbs (psychological verbs and verbs of seeing) is observed. Verbs like *horáō* ‘see’ in their basic meaning are clearly not object-affecting. However a certain degree of affectedness is present under the interpretation as psychological verb ‘comprehend’, ‘grasp’ (cf. Vergnaud & Zubizarreta 1992 for similar phenomena with verbs of seeing in Romance); this interpretation seems to be the relevant one in (20):

(20) (LXX *Ge.* 29.32.3)

Διότι	εἶδέν	μου	κύριος	τὴν	ταπείνωσιν
<i>Dióti</i>	<i>eíden</i>	<i>mou</i>	<i>kýrios</i>	<i>tên</i>	<i>tapeínōsin</i>
because	see.IND.3SG	1SG.GEN	lord.NOM	DEF.ACC	misery.ACC
‘because the Lord has seen my misery’					

Interestingly, (20) shows that the extraposed pronoun is completely external to its host nominal phrase in object function, being separated from it by the subject. The clitic ends up being right-adjacent to the verb.

3.4 Summary of the Comparison

The comparison of the NT data with other Classical and Postclassical texts has shown that an EPC marked by genitive case was already well attested in Classical Greek and obeyed conditions similar to those seen in NTG. However, at the same time adnominal genitives, both with pronouns and full nominals, enjoyed a remarkable variability in their positioning. This is different from NTG, where the EPC construction represents the only systematic class of prenominal genitives. We saw that a genitive EPC construction comparable to the

NTG one is well attested also in the language of Egyptian documentary papyri, as well as in the Septuagint. In the latter text the generalization of the postnominal order for genitives is parallel to the NT situation, showing that the conditions for the reanalysis are attested in general in the Biblical language.

4 Discussion on External Possession Constructions

In this section I discuss some residual issues concerning my interpretation of the extraposed configuration for genitives as an EPC in NTG. I consider Seržant's (2016) insightful criticism of the notion of EPC in general, and, also in light of Seržant's observations, I address Stolk's (2015) skepticism with respect to a syntactic analysis of the process leading to dative-by-genitive replacement in the history of Greek.

Seržant (2016) proposes to re-evaluate the notion itself of EPC, which crucially makes reference to the concept of possession. According to Seržant, instead, possession is not an inherent, grammatically represented meaning of the construction; rather, it is a pragmatically motivated entailment, always parasitic on the basic meaning of other, independently available constructions involving non-thematic affectees, i.e. optional arguments of constructions as varied as 'free' datives, applicatives, non-active verbal voice, incorporation, etc. Consequently, according to Seržant, there is no dedicated EPC, but rather a general tendency for languages to mark the indirect affectedness of a non-selected participant, which is signaled as relevant in the context through various formal means. A relation of relevance ("the event is construed as being of immediate relevance for the participant coded by the dative argument", Seržant 2016: 135), thus, and not one of (inalienable) possession, is responsible for the differential marking. Indirect (physical or mental) affectedness of the animate participant emerges from the lexical content of the predicate and more generally from the representation of the event frame. In turn, the often observed correlation with inalienable possession is a by-product of the relevance relation, which emerges in particular when the object in the event is represented by an inherently possessed noun.

In the discussion of the Greek data, we have seen that affectedness is a core ingredient of the extraposed genitive structures that we treated as EPCs. The question raised by Seržant's (2016) observations is, in fact, which role possession plays. This connects to Stolk's (2015) finding that inalienability is not a relevant factor for extraposed constructions in the papyri. On the one hand, thus, the inalienable-alienable distinction is rejected as a determining factor for the observed

phenomenon, on the other hand, the role of possession altogether is questioned. What is the consequence of these considerations for the reanalysis proposed in this paper?

Note, first of all, that also in the case of adnominal genitive constructions it is questionable that possession *per se* plays a grammatical role. DP-internally, too, the meaning of possession typically emerges as an entailment from a general construction establishing an underspecified relation between two nominal (and, as we saw, it encompasses broader notions than ownership, as for instance kinship and part-whole relations). We know that adnominal genitives in Indo-European languages can in fact express a wealth of different semantic relations. The situation with EPCs seems similar, with the crucial difference that in EPCs the established relation emerges from a construction that is not DP-internal, but at the level of the clause, thus also involves the verbal predicate. It seems therefore legitimate to exclude possession as a defining characteristic of the construction in a typological perspective, as Seržant suggests. This, however, does not exclude the existence of an underspecified semantic relation between the extraposed genitive and the internal argument, emerging not necessarily as a discourse-pragmatic effect, but in virtue of a DP-internal syntactic relation.

For my reconstruction of the Greek facts, possession is relevant only inasmuch as it represents the link between the function of the original adnominal construct and the one of the reanalyzed clausal construct, and thus yields an explanation for the genitive marking. The only necessary grammatical ingredient is the establishment of a DP-internal dependency relation (justifying genitive case assignment), independent of the content of such relation, which may well be undetermined from a semantic point of view.

As a fact, we see that in the NTG examples an interpretational component of possession is always present, since the verb's internal arguments are typically represented by inherently possessed nouns. This is to be expected at an early stage of the reanalysis of an adnominal construction. In fact, from a semantic point of view and in the absence of further syntactic diagnostics, EPCs (the *dativus sympatheticus*) and clausal benefactive/malefactive constructions (the *dativus commodi/incommodi*) can be told apart only when there is no entailment that the positively or negatively affected participant is also the possessor. This confirms the semantic plausibility of the proposed reanalysis, since in most pragmatic contexts the possession entailment is actually triggered, facilitating the genitive's expansion to further dative-like functions (from *dativus sympatheticus* to *dativus commodi/incommodi*).

This revised scenario, where EPCs are not necessarily possessive constructions, but rather expressions of affected non-selected arguments of the verb, allows us to reconsider the role of inalienability, which is often considered a

characterizing feature of EPCs (cf. König & Haspelmath 1998) and has been so interpreted in Gianollo's (2010) analysis of NTG. In view of the evidence from other textual types (Stolk 2015), it is clear that inalienability cannot be the trigger for the extraposed construction in Postclassical Greek. Indeed, Gianollo's (2010) hypothesis that genitive-marked EPCs emerge in NTG as a device to code inalienable possession clashes with the well-known fact that the inalienability distinction is not a grammatical feature of the European linguistic area (cf. Seržant 2016: 147–152 for discussion and references).¹⁸ As a reviewer remarks, the defining role ascribed to inalienability in the typological literature on EPCs is based on the analysis of non-European languages, where EPCs belong to structurally different types, and does not necessarily extend to dative-like external possessors, which seem to be a peculiarity of the European linguistic area (Haspelmath 1999: 119). On the basis of both language-internal and typological arguments it thus seems reasonable to consider also inalienability in NTG as a contextually emerging entailment, whose epiphenomenal correlation with extraposed genitives can be explained through the affectedness component: inalienability is relevant only inasmuch as it increases the degree of affectedness of the possessor, and hence establishes a relevance relation (see also Stolk's 2015 observation that, in her corpus, if the predicate in the [Verb-Genitive-Noun] sequence is non-affecting, then the possessum is typically inalienable and contributes this way an affectedness component).

Note that, while this discussion is important to understand the nature of EPCs, it has no substantial effect on the plausibility of the syntactic explanation proposed for the Greek case: the crucial ingredient of the reanalysis is the movement operation, i.e. the idea that the genitive is originally a 'real' adnominal genitive case assigned within the nominal phrase, and that the constituent marked in genitive is displaced and performs a further function at the clausal level. Such function correlates with the expression of affectedness, in ways that have been variously modeled in syntactic theory (cf. Deal 2017). As we saw, the most convincing evidence for precise syntactic conditions (and not just semantic prerequisites) underlying the NTG construction is represented by the restriction of EPCs to complements of verbs (direct objects, prepositional objects and derived subjects).

18 This is not to deny, of course, that European languages as well show specific phenomena at the syntax-semantics interface in the domain of inherently possessed (or, better, inherently relational) nouns, which have been argued to be characterized by a different thematic structure than other nominal predicates (cf. for an overview Barker 2011, and specifically on Greek Alexiadou 2003 and Gianollo 2014).

5 Conclusions and Issues for Further Research

In this paper, I presented a case study from the history of Greek where I argued that syntactic factors might have conditioned the development of morphological paradigms, triggering a syncretism process between the genitive and the dative case. I refined the hypothesis put forward in Gianollo (2010), which attributes a fundamental role in this process to genitive forms of pronouns and singles out conspiring conditions for the genitive-to-dative reanalysis in New Testament Greek. In this variety, DP-peripheral genitive clitics are the only productive class of genitives in prenominal position and end up being linearly adjacent to the verb, in the position typically occupied by pronominal indirect objects in New Testament Greek (syntactic cue). The cohesion with the verb is strengthened by the encliticization and the consequent stress readjustment, causing a mismatch between syntactic and prosodic phrasing (prosodic cue). Genitives in this position specialize in the expression of affected possessors (semantic cue), with affectedness constituting the bridge towards other dative functions. The combination of these factors yields the conditions for the reanalysis of the DP-peripheral genitive as DP-external, i.e. to the birth of a new external possession construction, in which the genitive constituent occupies a ‘dative-like’ position in the clause and is reanalyzed as a syntactic dependent of the verb.

This conclusion leads to a twofold hypothesis: (i) the seeds of genitive-dative syncretism in Greek may lie in a much earlier period than what is assumed on the basis of studies such as Humbert (1930), and (ii) the morphological syncretism may be driven by precise syntactic factors. The comparison of the New Testament data with data from the Septuagint Bible has shown that this combination of factors is observable also there at an early age, although to a more limited extent. Biblical Greek, thus, can be characterized as a very progressive variety of Postclassical Greek, foreshadowing many developments of later Greek. We also saw that similar conditions emerge from the Egyptian documentary papyri, since the situation in the New Testament largely overlaps with Stolk’s (2015) results.

Some important open issues remain: in comparing Classical Greek with New Testament Greek we saw that we can single out a number of enabling conditions for the reanalysis, beyond the presence of a genitive EPC construction: the presence of genitive EPCs in Classical Greek is not sufficient to trigger the reanalysis. One enabling condition in later Greek concerns the generalization of the postnominal position for adnominal genitives. The other conditions have to do with the reorganization of clause structure. These conditions are first seen in place in Biblical Greek. However, much work has to be done to better understand this aspect: as Manolissou (2000) has shown, literary texts from the

Hellenistic age onwards do not reflect the change in the grammar of adnominal genitives that must have been going on in the spoken language. The enabling conditions for the reanalysis are not witnessed homogeneously throughout Postclassical Greek. Literary Postclassical texts still show a distribution of genitives similar to Classical Greek. The appearance of the enabling conditions for the reanalysis seems, thus, to be subject to sociolinguistic constraints, which should be further investigated by comparing different types of Postclassical texts.

Postclassical Greek can offer important insights on long-range dynamics characterizing the history of Greek. An open question for further research is whether we can reach an improved understanding of the sociolinguistic differentiation within Postclassical Greek with respect to morphosyntactic features on the basis of our documentation.

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Abbreviations

The abbreviations for Greek authors and works follow the conventions of the Liddell-Scott-Jones *Greek-English Lexicon* (available online in the TLG and in the Perseus corpus, cf. below). The abbreviations in the glosses follow the Leipzig Glossing Rules. Further abbreviations systematically used in this work are the following:

AOR	aorist
AppP	Applicative Phrase
OPT	optative
Doubl	Doubled definiteness construction
DP	Determiner Phrase
EPC	External Possession Construction
Extr	extraposed genitive construction
GN	genitive-noun order
GenAbs	genitives in absolute constructions
NG	noun-genitive order
NT	New Testament

NTG	New Testament Greek
StandComp	genitive in the standard of comparison
V+ObjG	genitives selected as complements by verbs

Corpora

PROIEL: Pragmatic Resources in Old Indo-European Languages. <https://proiel.github.io>. See Dag T.T.Haug & Marius L.Jøhndal. 2008. Creating a Parallel Treebank of the Old Indo-European Bible Translations. In Caroline Sporleder & Kiril Ribarov (eds.), *Proceedings of the Second Workshop on Language Technology for Cultural Heritage Data*, 27–34.

TLG: Thesaurus Linguae Graecae. A Digital Library of Greek Literature. <http://stephanus.tlg.uci.edu>

Perseus under PhiloLogic: Perseus Project Texts Loaded under PhiloLogic Greek and Latin Morphology Release, July 2009. <http://perseus.uchicago.edu>

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Future Periphrases in John Malalas

Abstract: The paper discusses the various means of expressing future reference in the earliest Byzantine world chronicle written in a language close to the vernacular. After the demise of the classical future tense formation, both simple present tense forms and periphrastic constructions are employed to this end. Some of the patterns found in Malalas continue pre-Byzantine uses, others are innovations neither found in Classical Greek nor in the later language: the use of the present tense for reference to the future and that of *méllō* ‘to be about’ as a future-in-the-past are attested already in Classical Greek, whereas the use of *ék^hō* ‘to have’ as a future-in-the-past and as a counterfactual is an innovation Malalas shares with other authors of his time. His use of *op^heīlō* ‘to owe/shall’ in the syntactic position where the classical language employs a future participle is not continued in Modern Greek.

Keywords: tense, future, periphrasis, chronicle, historiography, Byzantine Greek

1 Introduction

1.1 John Malalas and Postclassical Greek Futures

The work of John Malalas (6th ct. AD) is of special interest both for historians and linguists as it is the earliest example of a Byzantine world chronicle. Written in a language close to the vernacular (cf. Krumbacher 1897: 325–334, Jeffreys 1986: IX), it displays many of the characteristics typical of Postclassical Greek (cf. Merz 1911; Wolf 1911; Wolf 1912; Psaltēs 1913; Helms 1971; Jeffreys 1990). Among these is the loss of the classical future formation gradually supplanted by a periphrastic future based on classical *t^hélō* ‘wish, desire’ which results in the modern construction with the particle *t^ha* ‘FUT’ followed by the finite, present-tense form of the verb – a development which continues to be the object of study and debate (cf. the overview in Joseph & Pappas 2002). As discussed e.g. by Browning (1983: 39–40) and in detail by Markopoulos (2009), Postclassical Greek resorts to a number of different solutions to express futurity.

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After a discussion of the remnants of the classical future tense formations in section 1.2, section 2 analyses the use of present tense forms with future reference, sections 3 to 5 periphrastic constructions with the verbs *op^heilō* ‘to owe’, *mēllō* ‘to be about’ and *ék^hō* ‘to have’ respectively, and section 6 other constructions that have been claimed to be periphrastic future constructions in Malalas. The discussion in section 7 summarizes the results.¹

1.2 Synthetic Future Forms

The majority of synthetic future tense forms attested in Malalas are quotations from classical sources. Most of them are taken verbatim from the Greek Bible translation or imitate Biblical passages, usually in direct speech. The following example shows a quotation from the Greek translation of the Old Testament with three future tense forms marked with the future tense suffix *-s-*:

- (1) Malalas 156₁₃–157₃ = Isaiah 45.1

ισχὺν βασιλέων **διαρρήξω· ἀνοίξω** ἔμπροσθεν αὐτοῦ θύρας, καὶ πόλεις οὐ **συγκλεισθήσονται**

isk^hyn basilēōn diarr^hék-s-ō anoík-s-ō

might.ACC.SG emperor.GEN.PL break-FUT-1SG.ACT open-FUT-1SG.ACT

émprost^hen autoû t^hýras Kai póleis ou

before 3SG.GEN door.ACC.PL And cities.NOM.PL not

synkleis-t^hē-s-ontai

close-PASS-FUT-3PL.MID

‘(Thus says the Lord:) **I shall break** the might of emperors, **I shall open** gates before him and cities **will not be closed.**’

A second group consists of quotations from or imitations of oracles and sayings of famous persons of the past attested in Classical Greek. The following example shows a slightly varied quotation taken from a classical author, Herodotus, in the context of an oracle:

¹ Translations of authors of Classical Greek follow those of the Loeb Classical Library (Harvard University Press). For the translations of examples taken from Malalas cf. also Jeffreys (1986).

(2) Malalas 155₂₂

Κροΐσος Ἄλυν ποταμὸν διαβάς μεγάλην ἀρχὴν **καταλύσει**.

Kroïsos Hályn potamōn diabās megálēn

K. Halys.ACC.SG river.ACC.SG CROSS.AOR.PTCP.ACT.NOM.SG.M

*megálēn ark^hēn **katalý-s-ei***

great.ACC.SG.F empire.ACC.SG destroy-FUT-3SG.ACT

‘When Kroisos crosses the river Halys **he will destroy** a great empire.’

Compare with this the original passage in Herodotus, example (3), which contains a future infinitive of the same verb *katalý-ō* ‘destroy-1SG.ACT’ used in example (2):

(3) Herodotus 1.53

ἦν στρατεύεται ἐπὶ Πέρσας, μεγάλην ἀρχὴν μιν **καταλύσειν**

ēn strateúētai epì Pérsas megálēn

If march.PRS.SBJV.3SG.MID against Persian.ACC.PL great.ACC.SG.F

*ark^hēn min **katalý-s-ein***

empire.ACC.SG 3SG.ACC destroy-FUT-INF.ACT

‘(The oracles replied that) if he should send an army against the Persians **he would destroy** a great empire.’

Since nearly all future forms only occur in such verbatim or slightly adapted quotations from classical sources, they cannot be taken as evidence of Malalas’ own language use: they are still understandable at his time, but they are not used outside these specific contexts. The forms that behave in this way in Malalas are listed in the following table.

Only a small group of synthetic future tense forms remains that do not fit into this pattern. Some of them may be explained as formulaic and fossilized forms: the verb *angéllō* ‘to announce’ does not occur in Malalas except for three participles, two marked as future tense forms, *apangel-ou-nt-as* ‘announce-FUT-PTCP-ACC.PL’ (95₁₈) and *angel-ou-nt-a* ‘announce-FUT-PTCP.ACT-ACC.SG’ (123₉), and one marked as aorist, *apangel-t^he-nt-os* ‘announce-AOR.PASS-PTCP-GEN.SG’ (330₂₀).

Another fossilized form is the future infinitive *ése-s-t^hai* ‘be-FUT-INF.MID’, attested once in 417₁₂, headed by a form of *méll-ō* ‘be_about_to_be/do-ACT.1SG’:

Table 1: quotations from and imitations of classical sources²

1SG	3SG	1PL
65 ₉ <i>kōlyšō</i> ‘release’ (B)	50 ₃ <i>symmigēsetai</i>	113 ₅ <i>dōksomen</i> ‘seem’
148 ₁₅ <i>hyperaspiō</i> ‘shield’ (B)	‘lie with’ (O)	(Antenor)
152 ₂ <i>hermēneýsō</i> ‘explain’ (B)	77 ₁₈ <i>2x éstai</i> ‘be’ (O)	113 ₅ <i>apodósomen</i> ‘give
156 ₁₇ <i>diarréksō</i> ‘break’ (B)	77 ₂₁ <i>éstai</i> ‘be’ (O)	back’ (id.)
156 ₁₇ <i>anoíksō</i> ‘open’ (B)	78 ₁ <i>éstai</i> ‘be’ (O)	113 ₁₁ <i>apodósomen</i> ‘give
156 ₁₈ <i>proporeýsōmai</i>	78 ₁ <i>prosáksei</i> ‘lead’ (O)	back’ (id.)
‘precede’ (B)	83 ₂₀ <i>dōsei</i> ‘give’ (Steneboia)	136 ₁₆ <i>sōthēsómet^ha</i> ‘be
156 ₁₈ <i>homaliō</i> ‘flatten’ (B)	85 ₇ <i>mat^hésetai</i> ‘learn’	saved’ (Pylades to Orestes)
156 ₁₉ <i>syntrípsō</i> ‘break’ (B)	(Demokritos)	136 ₁₈ <i>kakisteýsomen</i>
156 ₂₀ <i>sygklásō</i> ‘break’ (B)	85 ₇ <i>p^hilosop^hései</i> ‘be a	‘suspect’ (id.)
156 ₂₀ <i>dōsō</i> ‘give’ (B)	philosopher’ (id.)	2PL
157 ₅ <i>apolýsō</i> ‘set free’ (B)	85 ₈ <i>ópsetai</i> ‘see’ (id.)	26 ₁₈ <i>dzētése</i> ‘ask’ (Hermes
195 ₈ <i>p^hyláksō</i> ‘protect’	92 ₅ <i>olése</i> ‘destroy’ (O)	Trismegistos)
(Alexander to Kandake)	123 ₄ <i>eksaleípsei</i> ‘wipe out’	144 ₂₀ <i>dynésest^he</i> ‘be able’
230 ₁₇ <i>proskynésō</i> ‘worship’ (B)	(Teukros)	(B)
434 ₁ <i>nikésō</i> ‘win’ (king of the	144 ₁₇ <i>eiseleysetai</i> ‘enter’ (B)	144 ₂₁ <i>dynésest^he</i> ‘be able’
Axioumitai)	145 ₁₂ <i>r^hysetai</i> ‘save’ (B)	(B)
2SG	145 ₁₉ <i>r^hysetai</i> ‘save’ (B)	384 ₁₀ <i>dōsete</i> ‘give’
136 ₆ <i>heyréseis</i> ‘find’ (O)	146 ₃ <i>r^hysetai</i> ‘save’ (B)	(Theoderic)
136 ⁶ <i>sōthēsēi</i> ‘save’ (O)	147 ₄ <i>apostrap^hésetai</i>	384 ₁₀ <i>apalláksete</i> ‘settle a
164 ₉ <i>parak^hōréseis</i> ‘grant’	‘return’ (B)	business’ (id.)
(Acheloos to Oineus)	147 ₄ <i>peseítai</i> ‘fall’ (B)	3PL
395 ₁₈ <i>kombōsei</i> ‘deceive’	148 ₁₅ <i>apostrap^hésetai</i>	156 ₁₈ <i>sygkleist^hésontai</i> ‘be
(Anastasios to John Isthmeos)	‘return’ (B)	closed’ (B)
403 ₉ <i>at^hyméseis</i> ‘lose courage’	155 ₂₂ <i>katalýsei</i> ‘dissolve’ (B)	455 ₃ <i>epikatalépsontai</i>
(Anastasios to Proklos)	157 ₁ <i>oikodomései</i> ‘build’ (B)	‘arrive’ (Persian king to
403 ₁₀ <i>pémpseis</i> ‘send’ (id.)	157 ₂ <i>epistrépsei</i> ‘return’ (B)	emperor Justinian)
403 ₁₉ <i>r^hípseis</i> ‘throw’ (id.)	266 ₄ <i>eleysetai</i> ‘come’ (O)	PTC
	358 ₁ <i>oikodomésetai</i> ‘build’ (B)	237 ₁₄ (letter of Veronica)
	495 ₁₆ <i>eiseleúsetai</i> ‘enter’ (B)	<i>teyksoménē</i> ‘prepare’

2 Abbreviations: B = Biblical quotation or imitation/context, O = oracle. Cf. also Wolf (1912: 54–55) who counts 71 future forms of which according to him 23 are quotations from the Septuagint. Of the remaining 48 forms the majority are quotations (9 occur in speeches, 6 in letters or decrees, 12 in oracles).

- (4) Malalas 417₁₂
 ὄστις ἐμπρησμὸς προεμήνυσε τὴν τοῦ θεοῦ μέλλουσαν ἔσεσθαι
 ἀγανάκτησιν
hóstis emprēsmod̄s proeményse tèn
 REL conflagration.NOM.SG foretell.IND.AOR.3SG.ACT DEF.ACC.SG.F
toû t^heoû méllousan é-se-st^hai
 DEF.GEN.SG.M god.GEN.SG be_about.PRS.PTCP.ACT.ACC.SG.F be-FUT-INF.MID
aganáktēs̄in
 displeasure.ACC.SG
 ‘This conflagration foretold God’s **coming** displeasure.’

The construction with the future infinitive *ésest^hai* is frequent already in 4th and 5th ct. authors, occurring over 100 times e.g. in John Chrysostomus (349–407 AD), who uses it with the same matrix verb *promēnýō* ‘to foretell’ as in (4) in the following example:

- (5) John Chrysostomus, *In Genesim hom. 1–67*, vol. 53 p. 328 l. 31
 πῶς ἄνωθεν καὶ ἐκ προοιμίῳ τὰ μέλλοντα ἔσεσθαι προεμήνυε
pōs anōt^hen kai ek prooimíōn t̄a
 how above and from preface.GEN.PL DEF.ACC.PL.N
méllonta é-se-st^hai proeményse
 be.about.PRS.PTCP.ACT.ACC.PL.N be-FUT-INF.MID foretell.IMP.F.3SG.ACT
 ‘(The Holy Scripture) which at the beginning and in the preface foretold the things that **would happen**.’

Since the future form *ésest^hai* only occurs in this fixed phrase, one may speculate that in Malalas’ time it was no longer analyzed as a future form, but as an alternative present tense form. In favour of this assumption one may note that the usual complementation pattern of *méllō* ‘to be about to’ in Malalas is a proposition with the dependent verb marked as present infinitive (cf. section 4).

The remaining future forms that are neither quotations or imitations of classical sources nor fossilized forms occur in subordinate clauses dependent on verbs of fearing and asking in which by the norms of the classical language a subjunctive form would be required (cf. Rijksbaron 2002: 55–59), e.g.

- (6) Malalas 177₉
 ἀμυχανῶν τί πράξει
amēk^hanōn tí práxei
 know_not.PTCP.ACT.NOM.SG.M what do.FUT.3SG.ACT
 ‘Not knowing what he should do.’

Other instances of this type are:

118₇ *k^hrē-s-e-tai* ‘use-FUT-THEM-3SG.MID’ (matrix verb: *p^hobé-o-mai* ‘fear-THEM-1SG.MID’)

200₁₀ *poiē-s-ei* ‘make-FUT-3SG.ACT’ (matrix verb: *bouleú-o-mai* ‘deliberate-THEM-1SG.MID’)

203₃ *ktí-s-ei* ‘found-FUT-3SG.ACT’ (matrix verb: *aité-o-mai* ‘ask-THEM-1SG.MID’)

374₄ *prodō-s-ei* ‘betray-FUT-3SG.ACT’ (matrix verb: *parap^hylátt-o-mai* ‘guard-THEM-1SG.MID’)

The use of future forms instead of subjunctives in these instances may partly be due to the phonological mergers of vowels in Postclassical Greek (cf. Horrocks 2014: 160–162): length disappeared as a phonemic feature which made the back-vowels /ɔ:/ and /ɔ/ collapse, and original /ɛ:/ (spelled <ē> and <ēi>) and /e:/ (<ei>) merged into a single phoneme /e/. As a result, various forms of the future and aorist subjunctive became phonologically identical (cf. also Wolf 1911: 69–71, Merz 1911: 25), see the following table:

Table 2: merger of future and aorist subjunctive.

	FUTURE	AORIST SUBJUNCTIVE
2SG	–<seis> [ses]	–<sēis> [ses]
3SG	–<sei> [se]	–<sēi> [se]
1PL	–<somen> [somen]	–<sōmen> [somen]

Another factor to be taken into account is that already in Classical Greek some contexts allowed the use of either future or subjunctive forms without any noticeable functional difference, e.g. after verbs such as *epimél-o-mai* ‘take_care-THEM-1SG.MID’ (that something happen/be done) and *speúd-ō* ‘strive_to-1SG.ACT’ (cf. Rijksbaron 2002: 59–60).

A tentative account for the use of future tense forms in contexts where a subjunctive would be expected might be the following: the phonological merger led to frequent morphological ambiguity in contexts where both future and aorist subjunctive forms could be used. This situation triggered the use of future forms in contexts formerly restricted to aorist subjunctives and *vice versa*, be it that the future tense forms were phonologically identical to aorist subjunctive forms, be it that they were phonologically different because of a different stem-formation. In Malalas, future tense forms and aorist subjunctives

with future reference occur side by side, cf. example (7) with a future tense form and an aorist subjunctive with future reference in a main clause, example (8) with an aorist subjunctive in the protasis of a conditional sentence introduced with the subordinator *ei* ‘if’, in which the classical language uses indicative forms (e.g. the future tense), and example (9) with a future tense form in the protasis of a conditional clause introduced with the subordinator *ean*, in which the classical language uses a subjunctive:

(7) Malalas 136₆

ἐν ἱερῷ Ἀρτέμιδος ληφθεὶς **σωθήσῃ** ἐκ βωμῶν· κάκειθεν ἐκφυγὼν ἐκ
χθονίης βαρβάρων χθόνα περάσας **καταλάβῃς** Συρίας γαίαν σειομένην

En hierōi Artēmidos lēp^ht^heīs

In temple.DAT.SG Artemis.GEN.SG keep.AOR.PTCP.PASS.NOM.SG.M

sōt^hēsēi ek bōmōn

save.FUT.IND.2SG.PASS from altar.GEN.PL

kakeit^hen ekp^hygōn ek k^ht^honiēs

and flee.AOR.PTCP.ACT.NOM.SG.M from land.GEN.SG

from there

barbārōn k^ht^hōna perásas katalábēis

barbarian.GEN.PL land.ACC.SG PASS.AOR.PTCP.NOM.SG.M reach.AOR.SUBJ.2SG.ACT

Syrīēs gáian seioménēn

Syria.GEN.SG land.ACC.SG shake.PRS.PTCP.PASS.ACC.SG.F

‘You will be a captive in the temple of Artemis but **will be saved** from the altar. Fleeing from there, from the land of barbarians, and travelling further, **you will come** to the land of Syria which shakes.’

(8) Malalas 30₂

Εἰ μὴ **ἀγάγητε** τὴν θυγατέρα μου Ἰώ

Ei mē agág-ē-te tēn t^hygatér-a mou Iō

If not bring.AOR-SUBJ-2PL.ACT DEF.ACC.SG.F daughter-ACC.SG GEN.1SG Io

‘if you do not **bring** my daughter Io’

(9) Malalas 136₁₆

ἐὰν **σωθησόμεθα**

eàn sō-t^hē-s-ó-met^ha

If save-PASS-FUT-THEM-1PL.MID

‘if **we will be saved**’

The phonological identity of the future and aorist subjunctive in many verbal paradigms and the possibility to use either of these forms in identical contexts

already in the classical language may have led to the reinterpretation of the future forms as alternative forms of the subjunctive similar to the case of *éset^hai* reinterpreted as an alternative present.

In one instance, a future tense form occurs in the protasis of a conditional clause headed by the subordinator *ei* ‘if’. In this context indicative forms are used in the classical language, among them those of the future tense, which does not have subjunctive forms:

(10) Malalas 253₃

εἰ μὴ **κελεύσει** ὁ Σίμων τῷ κυνί
*Ei mē̄ **keleú-s-ei** ho Simōn tōi*
 if NEG command-FUT-3SG.ACT DEF.NOM.SG.M Simon DEF.DAT.SG.M
κυν-ί
 dog-DAT.SG
 ‘if Simon did not **tell** the dog’ (to let visitors pass)

Since Malalas uses subjunctives in this context, as shown by example (8), *keleú-s-ei* ‘command-FUT-3SG.ACT’ may be an instance of a future tense form used as a phonologically identical variant of the corresponding subjunctive *keleú-s-ēi* ‘command-AOR-SUBJ.3SG.ACT’.

The reason why the development did not go in the opposite direction – the future supplanting the subjunctive – may be that the latter has a broader functional range than the future tense, e.g. adhortative/prohibitive in main clauses and purposive in subordinate clauses, and is built to all tense-aspect stems (i.e. present-, aorist- and perfect-stem) except for the stem of the future tense. In these stems no formal ambiguity and no functional overlap between future and subjunctive ever occurred, and learners could only misinterpret futures as subjunctives in the contexts described above.

2 Praesens pro futuro

The use of the present tense instead of the future is possible already in Classical Greek (cf. Schwyzer 1950: 273) and especially prominent in oracles where the use of the present might be understood as a fictitious eye-witness report of the prophet seeing the events before his mental eyes as happening while he pronounces them, cf. the present form *ereíp-ei* ‘tear-IND.PRS.ACT.3SG’ beside the future form *apol-ei* ‘destroy.FUT-ACT.3SG’ in the following passage from Herodotus:

(11) Herodotus 7.140

κατὰ γάρ μιν **ἐρείπει** πῦρ τε καὶ ὄξυς Ἄρης ... πολλὰ δὲ κάλλ' **ἀπολεῖ**
 πυργώματα κοῦ τὸ σὸν οἶον

katà gár min ereíp-ei pýr
 down because 3SG.ACC tear-IND.PRS.3SG.ACT fire.NOM.SG

te kai oxýs Árēs
 both and fierce.NOM.SG.M Ares.NOM.SG

pollà dè káll' apol-eî
 many.ACC.PL.N but also other.ACC.PL.N destroy.FUT-3SG.ACT

pyrgómata kou tò sòn oíon
 fortress.ACC.PL and not DEF.ACC.SG.N 2SG.POSS.ACC.SG.N only

'Fire **destroys** the city and fierce Ares. . . and he **will destroy** many fortresses, not only yours.'

This usage of present-tense forms with future reference is preserved in Malalas, cf. Zeus' prophecy to his son Perseus:

(12) Malalas 35₉

Νικᾷς πάντας τοὺς πολεμίους ἐξ αὐτοῦ

Nikâis pántas toûs

conquer.PRS.2SG.ACT all.ACC.PL.M DEF.ACC.PL.M

polemíous ex autoû

enemy.ACC.PL with 3SG.GEN

'**You will conquer** all your enemies with this [i.e. the *skyp^hos*].'

Apart from this special rhetorical context, Malalas uses the present of telic verbs to refer to future events, e.g. the present tense of verbs meaning 'to give, bring': (*epi-*)*didō-mi* 'to give', *komídz-ō* 'to bring' and *p^hér-ō* 'to bring':

(13) Malalas 138₉₋₁₃

ἐπόμοσαι κατ' αὐτῆς ὅτι τὸ δίπτυχον τοῦτο **ἐπιδίδως** τῷ Ὀρέστη καὶ **κομίσεις** μοι παρ' αὐτοῦ γράμματα ... εἰς τὰς χεῖρας αὐτοῦ **δίδωμι** αὐτὸ καὶ πρὸς σὲ αὐτὸν φέρω

epómosai kat' autês hótì tò díptykhon

swear.AOR.IMP.2SG.ACT by 3SG.GEN.F that DEF.ACC.SG.N diptych.ACC.SG

toûto epidídōs tōi Oréstēi

DEM.ACC.SG.N give.IND.PRS.2SG.ACT DEF.DAT.SG.M Orestes.DAT.SG

kai komídzeis moi par' autoû grámmata

and bring.PRS. 2SG.ACT 1SG.DAT from 3SG.GEN.M letter.ACC.PL

Eis tàs k^heîras autoû díðōmi autò
 into DEF.ACC.PL.F hand.ACC.PL 3SG.GEN give. PRS.1SG.ACT 3SG.ACC.N
kaì pròs sè autòn p^hérō
 and to 2SG.ACC 3SG.ACC.M bring. PRS.1SG. ACT

“Swear by her that **you will give** this diptych to Orestes and **bring** me a letter from him.” (He swore to her:) “**I will put** this into his hands and **bring** him to you.””

The verb *p^hérō* can be either atelic, meaning ‘I carry’, or telic, meaning ‘I bring’.³ In example (13) it is used with a prepositional phrase *pròs se* ‘to you’ which indicates the endpoint of the verbal process and makes it telic. The same applies to *ág-ō* ‘to lead’ in example (14) used with the PP *eis méson tōn basiléōn* ‘before the emperors’:

(14) Malalas 99₁₆

ποιήσαντες συνωμοσίας, ὅτι πάντα τὰ παρ’ αὐτῶν παραλαμβάνόμενα
ἄγουσιν εἰς μέσον τῶν βασιλέων καὶ προμάχων
poiésantes synōmosías hóti pánta
 do.AOR.PTCP.NOM.PL.M pact.ACC.PL that all.ACC.PL.N
tà par’ autōn paralambanόμενα
 DEF.ACC.PL.N from 3PL.GEN.M capture.PRS.PTCP.PASS.ACC.PL.N
ágousin eis méson tōn
 bring.IND.PRS.3PL.ACT to middle.ACC.SG DEF.GEN.PL.M
basiléōn kaì promák^hōn
 king.GEN.PL and leader.GEN.PL

‘They made a pact, that they **should bring** everything that they had captured before the emperors [and] the leaders.’

Other verbs used in the present tense with future reference in Malalas are ‘to take’ (*lambánō* 110₃, 164₉), ‘to send’ (*pémpō* 84₂), ‘to die’ (*apot^hnéskō* 208₁₆₋₁₈, 314₂₂), ‘to behead’ (380₁₁ *apokep^halídzō*), ‘to kill’ (380₁₁ *sp^hagiádzō*), ‘to come into being, to happen’ (*gínomai*, e.g. 136₈, 174_{8, 14}), ‘to overwhelm, conquer’ (*nikō*), ‘to catch fire’ (403₂₀ *háptomai*) and ‘to be consumed (by fire)’ (403₂₁ *analískomai*). The contexts in which these forms occur exclude a progressive reading such as ‘to be/lie dying’, cf. the present tense of *apot^hnésk-ō* ‘to die’ with future reference in example (15):

³ ‘Telicity’ understood as a feature of the verb phrase denoting a situation with an internal endpoint beyond which it cannot continue, cf. e.g. Smith (1997: 4).

(15) Malalas 208₁₈

λαβὼν χρησμὸν ὅτι ὑπὸ γυναικὸς ἀποθνήσκει
lab-ōn *kl̥r̥esmō-n* *hóti hypò gynaik-ōs*
 receive.AOR-PTCP.NOM.SG.M oracle-ACC.SG that by woman-GEN.SG
apot^hnēsk-ei
 die.PRS-3SG.ACT
 ‘after receiving a prophecy that **he would be killed** by a woman.’

In contrast to this, atelic predicates are not used in this way in Malalas. A polysemous verb like *basileú-ō* ‘be/become king’ has a telic reading when used as a present with future reference (cf. *p^hērō* ‘to bring’ and *ágō* ‘to lead’ above):

(16) Malalas 374₁

ὅτι βασιλεύει ὁ αὐτὸς Ὀλύβριος ἐν Κωνσταντινουπόλει
hóti basileúei *ho* *autōs* *Olybrios*
 That be(come)_king.PRS.3SG.ACT DEF.NOM.SG.M 3SG.NOM.SG Olybrios
en Kōnstantinoupólei
 in Constantinople
 ‘(But the emperor Leo suspected that Olybrius supported Geiseric and was on his side, and so Leo was on his guard against him in case, if Geiseric were to declare war on Leo, Olybrius should betray Constantinople to Geiseric [being a relative] and) Olybrius **should become emperor** in Constantinople.’⁴

This use seems comparable to the one in Slavonic languages where perfective presents regularly have a future meaning. Similarly, telic verbs (especially achievements) are less compatible with the progressive meaning of the present tense as the imperfective aspect of telic verbs does not highlight the telos in an event that is currently progressing. The telos is then likely to be interpreted as to take place in the future. All of the relevant attestations occur in direct or reported speech and in dialogues,⁵ so they may be part of the spoken language of Malalas’ time. A similar exploitation of telicity in a context of complementation can be seen in the periphrastic construction with *méll-ō* ‘to want, wish’ (see section 4 below).

⁴ Thurn (2000: 297) prints the respective future form *basileú-s-ei* ‘be(come)_king-FUT-3SG.ACT’ according to the testimony of the manuscript O (12th ct.); similarly, Chilmead in his *editio princeps* in Chilmead (1691). However, the main manuscript for Malalas (Baroccianus 182, Oxford, 11th/12th ct.) has the present tense, printed in Dindorf’s edition (1831: 374).

⁵ Including propositions introduced by matrix verbs such as ‘to make a pact/to agree upon’ and ‘to suppose’ as representing reported speech.

3 Periphrasis with *op^heĩlō* ‘to have to, shall’

The verb *op^heĩlō* retains its classical necessity meaning ‘shall, should’ in many instances in Malalas, cf.:

(17) Malalas 97₈

ἦτις καὶ ἐποίησε πρὸς αὐτὴν γράμματα καὶ ἔδωκε Μενελάω **ὀφείλοντα πείσαι** τὴν Ἑλένην

hétis *kaì* *epoĩese* *pròs autèn*
REL.NOM.SG.F also make.AOR.3SG.ACT to 3SG.ACC.F
grámmata *kaì* *édōke* *Meneláōi*
letter.ACC.PL and give.AOR. 3SG.ACT MenelaosDAT.SG

op^heĩlonta ***peĩsai*** *tèn* *Helénēn*
shall.PRS.PTCP.ACC.PL.N convince.AOR.INF.ACT DEF.ACC.SG.F Helen.ACC.SG

‘(When Agamemnon and Menelaos learnt that Helen had arrived in Troy with Paris, they sent ambassadors asking for her to be handed back. For her sister Klytaimnestra pressed her husband Agamemnon, the emperor of Argos, about the return of Helen, her sister.) She wrote a letter to her, which **was meant to persuade** her.’

When used in combination with an infinitive after a verb of motion in the matrix clause, the present participle of *op^heĩlō* ‘to owe, have to’, attested 12 times,⁶ expresses the intended action of the subject. While all cases of a matrix motion verb combined with the present participle of *op^heĩlō* and infinitive express intentionality, those cases of the participle of *op^heĩlō* without motion verb express obligation. The reading of intentionality is imposed by the motion verb in the matrix clause implying a volitional agent and may be marked in addition by the conjunction *hōs* ‘in order to’, cf.:

(18) Malalas 468₁₃

στρατηγοὶ γὰρ Περσῶν **καταδραμόντες** ... ὡς **ὀφείλοντες** παραλαβεῖν Μαρτυρόπολιν

stratēgoi *gàr* *Persōn* ***katadramóntes***
general.NOM.PL for Persian.GEN.PL march.AOR.PTCP.NOM.PL.M

⁶ *op^heĩlōn* ‘shall.PRS.PTCP.NOM.SG.M’ 7 times, always after motion verb: 42₁₄, 51₁₆, 94₆, 415₂, 415₇, 446₈, 465₁₅, *op^heĩlonta* ‘shall.PRS.PTCP.ACC.PL.N’ 97₈ (see above ex. 16), *op^heĩlontas* ‘shall.PRS.PTCP.ACC.PL.M’ 184₂₁ (after *propémp-s-as* ‘send-AOR-PTCP.NOM.SG.M’), *op^heĩlontōn* ‘shall.PRS.PTCP.GEN.PL.M’ 285₁₃, *op^heĩlontes* ‘shall.PRS.PTCP.NOM.PL.M’ (twice after motion verb) 455₄, 468₁₃.

hōs *op^heílontes* *paralabeîn* *Martyrópolin*
 in order to shall.PRS.PTCP.NOM.PL.M capture.INF.PRS Martyropolis.ACC
 ‘The Persian generals **had made a raid** . . . **to capture** Martyropolis.’

(19) Malalas 42₁₄

ὁ Διόνυσος . . . ἦλθεν ἐπὶ τὴν Καδμείαν πόλιν . . . ὀφείλων βασιλεῦσαι.
ho *Diónysos* *ēl^hen* *epì*
 DEF.NOM.SG.M Dionysos.NOM.SG come.AOR.3SG.ACT to
tēn *Kadmeían* *pólin* *op^heílōn*
 DEF.ACC.SG.F Kadmeia.ACC.SG city.ACC.SG shall.PRS.PTCP.NOM.SG.M
basileúsai
 reign.INF.AOR.ACT
 ‘Dionysos . . . **came** to the city of Kadmeia . . . **in order to reign** there.’

(20) Malalas 51₁₆

εἰσήγαγε τὸ λείψανον αὐτῆς ἐν τῇ τῶν Θηβῶν πόλει, ὡς ὀφείλων
 κομίσασθαι [. . .] χρήματα ἀπὸ τοῦ βασιλέως Λαΐου
eiségage *tò* *leípsanon* *autēs*
 bring.AOR.3SG.ACT DEF.ACC.SG.N corpse.ACC.SG 3SG.F.GEN
en tēi *tōn* *T^hēbōn* *pólei*
 in DEF.DAT.SG.F DEF.GEN.PL.F Theban.GEN.PL DAT.SG
hōs *op^heílōn* *komíast^hai* *h^hrémata*
 in_order_to shall.PRS.PTCP.NOM.SG.M receive.INF.AOR.MID money.ACC.PL
apò tou *basiléōs* *Laíou*
 from DEF.GEN.SG.M king.GEN.SG Laios.GEN.SG
 ‘(Oidipous) took (the Sphinx’s) corpse to the city of Thebes since he and his
 men **were expecting to receive** money from the emperor Laios.’ NB with
hōs to indicate the subject’s motivation, i.e. ‘in order to (as he thought) receive’

There are two borderline cases, one where the subject ‘ambassadors’ acts at someone else’s behest, hence the intentionality cannot be fully attributed to it:

(21) Malalas 455₄

ἐπικαταλήψονται οἱ ἡμέτεροι πρεσβευταί, ὀφείλοντες ἀναπληρῶσαι
 τὰ πρὸς ἀσφάλειαν τῆς εἰρήνης.
epikatalépsontai *hoi* *hēméteroi* *presbeutai*
 arrive.FUT.3PL.MID DEF.NOM.PL.M our.NOM.PL messenger.NOM.PL
op^heílontes *anaplērōsai* *tà* *pròs*
 shall.PRS.PTCP.NOM.PL.M fulfill.INF.AOR.ACT DEF.ACC.PL.N for

asp^háleian *tês* *eirénēs*
 security.ACC.SG DEF.GEN.SG.F peace.GEN.SG
 ‘Our ambassadors then **will arrive** with all speed, for they **must complete** what is necessary to secure the peace.’

In this instance, Malalas quotes a letter of the Persian king to the emperor Justinian, so *op^heílontes anaplērōsai* cannot be safely counted as an original use of Malalas. Note also the synthetic future form *epikatalēp-s-ontai* ‘arrive-FUT-3PL.MID’ which marks the passage as a quotation with linguistic forms that Malalas does not use himself (cf. the discussion in the introduction).

In the other case, the subject of the matrix verb *e-komí-sa-to* ‘PAST.IND-receive-AOR-MID.3SG’ and of the participle + infinitive is both an agent and a recipient, and the construction retains a possible reading of obligation: since the subject had accepted money, he literally owed something to the Romans:

- (22) Malalas 415₇
 παρὰ Ρωμαίων **έκομίσατο** χρήματα κατὰ Περσῶν, **όφείλων** αὐτοῦς
προδοῦναι
parà R^hōmaíōn *e-komí-sa-to* *k^hrémata*
 from Roman.GEN.PL PST-receive-AOR-3SG.MID money.ACC.PL
katà Persōn *op^heílōn* *autoùs*
 against Persian.GEN.PL shall.PRS.PTCP.NOM.SG.M 3PL.ACC.M
prodoúnai
 betray.AOR.INF.ACT
 ‘... (he told him that) **he had accepted** money from the Romans to act against the Persians, **to betray** them.’

The construction of *op^heílō* to express the intention of the subject is reminiscent of the classical construction with a motion verb in the main clause and the facultative purpose conjunction *hōs* heading the future participle of the lexical verb in the subordinate clause, inducing purposive meaning ‘go somewhere in order to do sth.’, attested from Homer onward (cf. Schwyzer 1950: II.295–296; Wakker 2006: 251 and fn. 30):

- (23) Homer, *Iliad* 1.12–13
 ὃ γὰρ ἦλθε θεὰς ἐπὶ νῆας Ἀχαιῶν **λυσόμενός** τε θύγατρα φέρων τ’
 ἀπερείσι’ ἄποινα
hō *gâr êlt^he* *t^hoàs*
 DEF.NOM.SG.M for come.IND.AOR.3SG.ACT fast.ACC.PL.F

epì nêas Ak^haiôn
 to ship.ACC.PL Achaean.GEN.PL
lysómenós te t^hýgatra p^hérōn
 buy.off.FUT.PTCP.P.MID.NOM.SG.M both daughter.ACC.SG bring.PRS.PTCP.NOM.SG.M
t' apereísi' ápoina
 and immeasurable.ACC.PL.N ransom.ACC.PL
 'He **went** to the ships of the Achaeans, **with the intention of buying off**
 his daughter, bringing immeasurable ransom.'

(24) Plato, *Phaedo* 116a–b

ἐκεῖνος μὲν ἀνίστατο εἰς οἴκημά τι ὡς λουσόμενος
ekeînos mèn anístato eis oíkē má ti
 DEM.NOM.SG.M but rise.AOR. 3SG.MID to room.ACC.SG INDF.ACC.SG.N
hōs lousómenos
 in order to wash.FUT.PTCP.MID.NOM.SG.M
 'He **rose** and went into a room **to take a bath.**'

The use in Malalas may be a case of formal renewal: the suffixal future participle is no longer available and is replaced by the present participle of *op^heílō* with the infinitive of the lexical verb, but the construction as such subsists:

(25) motion verb + *hōs* + future participle →
 motion verb + *hōs* + present participle of *op^heílō* + infinitive

A further argument for this view might be the complementation pattern: Malalas only uses the aorist infinitive, i.e. the form that in most cases is phonologically close to that of the classical future stem (cf. section 1), e.g. the future stem *polemê-se/o-* 'wage_war-FUT-' vs. the aorist infinitive *polemê-s-ai* 'wage_war-AOR-INF.ACT'.

The grammaticalization of *op^heílō* in Classical Greek has recently been studied by Allan (2013) who shows that from the original meaning 'to owe' the necessity and epistemic readings 'must' and the use for counterfactual assertions ('should have') and wishes ('if only...') developed. While the development from obligation to futurity is typologically common (cf. Bybee et al. 1996: 258–260) and may have happened in the case of *op^heílō* + participle independently from the classical construction of the future participle, the formal resemblance between the two constructions (cf. 25: motion verb, *hōs*, participle) may speak for a connection between them. Further research is needed to trace the development of *op^heílō* in Postclassical Greek, especially on the question

whether its use to express the intention of the subject and not the speaker as in Classical Greek is a development of this latter function or independent from it.

4 Periphrasis with *méllō* ‘be likely to do, be about to do’

The basic meaning of *méllō* in Homer is ‘to be likely to do/be’ (*inter alia*, Ruijgh 1985), expressing a probability assumed by the speaker, e.g.:

(26) Homer, *Odyssey* 18.19

ὄλβον δὲ θεοὶ μέλλουσιν ὀπάζειν
Ólbon *dè t^heoì* *méllousin* *opádzēin*
 wealth.ACC.SG but god.NOM.PL be_likely.PRS.3PL.ACT bestow.INF.PRS.ACT
 ‘I believe it is the gods who give wealth.’

By implication, ‘to be likely to’ has developed into ‘to be about to do s.th.’ Its use in Classical Greek has been studied extensively by Basset (1979) and by Wakker (2006). Wakker points out that *méllō* fills the functional gap of the future-in-the-past for which the simple future cannot be used. This is still the case in Malalas, cf.:

(27) Malalas 493_{16–20}

εὐρέθη Μάρκελλος τῇ αὐτῇ ἑσπέρα ἐν ἧ τὴν σκέψιν τῆς ἐπιβουλῆς
ἔμελλε ποιεῖν
heurét^hē *Márkellos* *tēi*
 find.IND.AOR.PASS.3SG Markellos.NOM.SG DEF.DAT.SG.F
autēi *hespérāi* *en hēi* *tèn*
 same.DAT.SG.F night.DAT.SG in rel.DAT.SG.F DEF.ACC.SG.F
sképsin *tēs* *epiboulēs* *émelle*
 plan.ACC.SG DEF.GEN.SG.F attack.GEN.SG be_about.IMPF.3SG.ACT
ποιεῖν
 do.INF.PRS.ACT

‘(When the plot had been revealed,) Markellos [. . .] was found, on the evening on which **he was going to carry out** what the plotters had planned.’

In Malalas *méllō* mainly occurs with the present infinitive of telic verbs or complex telic predicates such as ‘to found a city’. The construction with *méllō* is

used to depict the phase preceding the culmination of the event. The most frequent verbs used with *méllō* are *teleutân* ‘die.PRS-INF.ACT’ (15 times), *gíne-st^hai* ‘happen.PRS-INF.MID’ (5 times) and *exié-nai* ‘set out.PRS-INF.ACT’ (4 times), cf.:

(28) Malalas 18₁₅

μέλλων τελευτᾶν
méllōn *teleutân*
be_about.PTCP.PRS.M.NOM.SG die.INF
‘when **he was about** to die’

(29) Malalas 348₁₂

ἐμέλλε τελευτᾶν
é-méll-e *teleutân*
PST.IND-be_about-3SG.ACT die.INF
‘**he was about** to die’

(30) Malalas 47₁₉

τὸν **μέλλοντα** γίνεσθαι τῆς Ἀντιόπης θάνατον
tòn méllonta gíne-st^hai
DEF.ACC.SG.M be_about.PTCP.PRS.M.ACC.SG happen-INF.MID
tês Antiópēs t^hánato-n
DEF.GEN.SG.F Antiope.GEN.SG death-ACC.SG
‘(everyone from the estate learnt about) Antiope’s **imminent** death’

(31) Malalas 44₄

ἐν δὲ τῷ **μέλλειν** αὐτοὺς ἐξίεναι
en de tōi méll-ein autoùs exié-nai
in but DEF.DAT.SG.M/N be_about-INF ACC.3PL set_out-INF
‘when they **were about** to set out’

Example (32) shows the periphrasis with *méllō* meaning ‘to be about to die’ next to an aorist form of the same verb *teleutá-ō* ‘die-1SG.ACT’ meaning ‘he died’:

(32) 270₇

ἐτελεύτησεν ἰδίῳ θανάτῳ. ἐν τῷ δὲ **μέλλειν** αὐτὸν **τελευτᾶν**
eteleútēsen idíōi t^hanátoī en
die.AOR.3SG.ACT own.DAT.SG.M death.DAT.SG in
tōi de méllein autòn teleutân
DEF.DAT.SG.M but be_about-INF.PRS.ACT 3SG.M.ACC die.INF.PRS.ACT

‘(While he was plundering the district of Euphratesia, he was thrown off his horse as he was riding. He was badly injured and) **died** a natural death. When **on the point of death**, (he made his son Sanatroukios ‘Arsakes’, that is, emperor.)’

This usage is reminiscent of the classical pattern found e.g. in Plato:

(33) Plato, *Phaedo* 59a6

ἐνθυμουμένῳ ὅτι αὐτίκα ἐκεῖνος	ἔμελλε	τελευτᾶν			
<i>ent^hymouménōi</i>	<i>hóti autíka</i>	<i>ekéinos</i>	<i>émelle</i>	<i>teleutân</i>	
consider.PTCP.PRS.	that	presently	3SG.	be_about.	die.INF.
MID.DAT.SG			NOM.SG	IMPF.3SG.ACT	PRS.ACT

‘when I thought that Socrates **was presently to die.**’

The usage pattern of *méllō* in Malalas partly corresponds to the one in Classical Greek, where *méllō* is used both with telic and atelic predicates and the future infinitive, while *méllō* + present infinitive occurs nearly exclusively with telic predicates. In Markopoulos’ count for Lysias and Thucydides in 40 out of 45 cases of *méllō* with present infinitive of the dependent verb the latter is telic (Markopoulos 2009: 32; cf. also Kölligan 2012 on τελευτᾶω *teleutáō*). A similar claim has been made for Latin and the present infinitive instead of the expected future infinitive by Melo (2007), who shows that the present infinitive is licensed with telic predicates, since their telos is interpreted as happening in the future (cf. the discussion in section 2). The use of *méllō* in Malalas is thus more restricted than in Classical Greek, as it only occurs with the present infinitive (cf. the discussion of the future infinitive *éses^hai* in section 1).

5 Periphrasis with *ék^hō* ‘have’

The periphrasis consisting of a form of *ék^hō* ‘to have’ followed by an infinitive is used in Malalas to denote a future-in-the-past and counterfactual situations,⁷ cf. examples (34) and (35) respectively:⁸

⁷ On the use of the imperfect tense in counterfactuals in Malalas as in Classical Greek cf. Helms (1971: 356).

⁸ For other periphrastic uses of ἔχω in Greek cf. Bentein (2016), e.g. as a periphrastic perfect (*ék^hō p^hrontízōn* ‘I have been thinking’, *ék^hō pémpsas* ‘I have sent’).

(34) Malalas 367₁

διὰ Μαρκιανὸν τὸν ἔχοντα μετ' αὐτὸν βασιλεῦσαι

dià Markianòn tòn ék^honta

about Markianos.ACC.SG DEF.ACC.SG.M have.PTCP.PRS.ACT.ACC.SG.M

met' autòn basileûsai

after 3SG.ACC.M be(come)_king.INF.AOR.ACT

‘(Calling his sister the lady Pulcheria, he spoke to her) about Marcian, who **was to reign** after him.’

(35) Malalas 128₅

εἶχον δὲ καὶ τὰς ἡμῶν ναῦς καῦσαι οἱ βάρβαροι

eîk^hon dè kai tàs

have.IMPF.3PL.ACT but also DEF.ACC.PL.F

hēmōn naûs kaûsai hoi bárbaroi

1PL.GEN ship.ACC.PL burn.INF.AOR.ACT DEF.NOM.PL.M barbarian.NOM.PL

‘(But when huge numbers of our men had fallen, we, the leaders of the Hellenes, withdrew since we could not withstand the might of their army.) The barbarians **would/could have burnt** our ships (, had not night fallen).’

The use of *ék^h-ō* ‘to have’ in counterfactual situations is common also in other texts of the period, cf. Markopoulos (2009: 101–102):

(36) *Papiri greci e latini* 71, 6th ct.

εἶχαν ἀλλήλ[ους] ἀναιλιν καὶ ἐρημωθη [. . .] ἡ κώμη ἢ (ἡμετέρα)

eîk^han allél[ous] anailin [=aneleîn] kai

have.IMPF.3PL.ACT one_another.ACC.PL kill.INF.AOR.ACT and

erēmōt^hē hē kómē

destroy.IND.AOR.3SG.PASS DEF.NOM.SG.F village.NOM.SG

hē [hēmetéra]

DEF.NOM.SG.F our.NOM.SG.F

‘(And if divine providence had not helped . . .) **they would have killed** each other and our village would have been destroyed.’

(37) John Moschos, *Spiritual Meadow*, ch. 76, 6th ct.

διὰ τριῶν ἡμίσεως ἡμερῶν ἠνύσαμεν πλοῦν, ὃν εἶχομεν ποιῆσαι διὰ δεκαπέντε ἡμερῶν

dià triōn hēmíseōs hēmerōn

in three.GEN.PL.F half.GEN.SG day.GEN.PL

ēnýsamen ploûn hòn éik^homen
 cover.AOR.1PL.ACT voyage.ACC.SG REL.ACC.SG.M have.IMP.3PL.ACT

poiêsai dià dekapénte hēmerôn
 do.INF.AOR.ACT in fifteen day.GEN.PL

‘(The ship sailed in such a way that) in three and a half days we covered such a distance that **we would have covered** in fifteen days.’

The development of the future meaning in *ék^hō* may be explained as a development from a possessive into a modal construction denoting possibility and ability or obligation, e.g. ‘have something for saying’ → ‘have something to say’ = ‘have to/be able to say something’ (cf. Markopoulos 2009: 33–37).

6 Other Periphrases?

6.1 *t^hélō* ‘wish, want’

The periphrasis with *t^hél-ō* ‘to want’ that became the regular future tense formation in Modern Greek is not attested in Malalas (cf. Wolf 1912: 55). In early medieval Greek (5th–10th ct.) *t^hélō* is used only sporadically with a future meaning, mostly in papyri, not literary texts (cf. Markopoulos 2009: 105), e.g.:

(38) PMichael, 39.10, 5th–7th ct. (Egypt)

ει μητερα σου ασθενι αποθανιν θελι
ei [sc. *hē*] *mētera* *sou* *ast^heni*
 DEF.NOM.SG.F mother.NOM.SG 2SG.GEN be_sick.PRS.3SG.ACT
apot^hanin t^heli
 die.PRS.INF want.PRS.3SG.ACT

‘Your mother is sick, she **is going to die**.’

Markopoulos assumes the productivity of *t^hélō* as a future periphrasis to have started from the 7th ct. onward, i.e. *after* Malalas. Similarly, Lee (2010: 22) remarks that *t^hélō* followed by the subjunction *hína* ‘in order to’ may have been present ever since Classical Greek, but became productive only much later. In contrast to this, Wolf (1911: 70) argues that *t^hélō* is used as a replacement of the future participle with purposive meaning, the construction discussed in section 3, where it was argued that it may have been supplanted by the construction of *op^héilō* ‘to owe’ with a following infinitive. While in the case of *op^héilō* there is a change of the

verb's meaning from obligation to intentionality, *t^hélō* retains its full lexical meaning describing the subject's intention in all relevant examples, cf.:

(39) Malalas 328₁₀

πρὸς αὐτὸν συνάγεται ὁ ἐστὼς ὄχλος, **θέλων** ἰαθῆναι

pròs autòn synágetai ho

to 3SG.M.ACC assemble.PRS.ACT.3SG DEF.NOM.SG.M

hestōs ók^hlos t^hélōn

stand.PTCP.PRF.ACT.NOM.SG.M crowd.NOM.SG. want.PTCP.PRS.ACT.NOM.SG.M

iat^hēnai

heal.INF.AOR.PASS

‘([he] learned that there was a monk in the cave on the mountain and) it was around him that the crowd standing there was gathering, **wishing to be healed.**’

The following example shows the same construction in Classical Greek:

(40) Euripides, *Andromák^hē* 1095

δεῦρ’ ἦλθε, Φοίβου ναὸν ἐκπέρσαι **θέλων**;

deûr’ êlt^he P^hoíbou naòn

hither come.AOR.ACT.3SG Phoibos.GEN.SG temple.ACC.SG

ekpérsai t^hélōn

sack.INF.AOR.ACT want.PTCP.PRS.ACT.NOM.SG.M

‘Has he come hither **in order to sack** the temple of Phoibos?’

Since there is no change in the construction of *t^hélō* governing an infinitive from the classical language to its use in Malalas, it does not seem to make sense to speak of it as a replacement of the construction with future participle which no longer exists in Malalas’ language. There is no indication of a relationship between the two constructions other than synonymity. If the construction with *t^hélō* were a future periphrasis, it should also occur in contexts in which the intentionality reading is excluded, e.g. with inanimate agents or in impersonal constructions such as *It is going to rain*. This is not the case: in Malalas *t^hélō* is a fully inflected verb with a present indicative, imperfect and aorist, meaning ‘to wish, desire’. The participle can occur after all kinds of verbs, not just motion verbs. As for the complementation, it may also occur with the present infinitive (cf. 28₁₆ *t^hél-ousa* ‘wish-PTCP.PRS.ACT.NOM.SG.F’ *syneînai* ‘be_with-INF’) in contrast to the construction of motion verb and participle of *op^heílō* which takes only aorist infinitives, as discussed in section 3.

6.2 *boúloomai* ‘want’

The same is true for Wolf’s claim (Wolf 1911: 70) regarding *boúl-o-mai* ‘want-THEM-1SG.MID’ as a periphrasis supplanting the future participle with purposive meaning after a verb of motion, e.g.:

(41) Malalas 78₈

κάκειθεν ἀνήλθον τὸν Χαλκηδόνας πλοῦν, περᾶσαι βουλόμενοι τὸν ἀνάπλου τῆς Ποντικῆς θαλάσσης

kakeít^hen anēít^hon tón

and_from_there follow.AOR.3PL.ACT DEF.ACC.SG.M

K^halkēdónos ploûn perâsai

Chalkedon.GEN.SG route.ACC.SG pass.INF.AOR.ACT

boúlómenoi tòn *anáploun tês*

want.PTCP.PRS.MID.NOM.PL DEF.ACC.SG.M strait.ACC.SG DEF.GEN.SG.F

Pontikês t^halássēs

Pontic.GEN.SG sea.GEN.SG

‘From there they followed the route to Chalkedon, **wishing** to pass through the strait to the Pontic Sea.’

Boúloomai, like *t^hélō*, also occurs after other than motion verbs, cf.:

(42) Malalas 115₁₇

τοὺς δὲ λοιποὺς ἀπέκλεισε, βουλόμενος κατὰ μέρος τοὺς πάντας φονεῦσαι

toùs dè loipou̓s apékleise

DEF.ACC.PL.M but other.ACC.PL shut_up.AOR.3SG.ACT

boulómenos katà

want.PTCP.PRS.MID.NOM.SG.M by

méros toùs pántas p^honeúσαι

part.ACC.SG DEF.ACC.PL.M all.ACC.PL.M kill.INF.AOR.ACT

‘He shut the rest up, **intending to kill** them all one by one.’

In contrast to *op^heílō*, which no longer has its original lexical meaning ‘to owe, be obliged, have to’, but one of intentionality, when used in the construction with an infinitive after a motion verb, *boúloomai* retains its full lexical meaning.

7 Discussion and Summary

As shown in section 1, forms of the classical future with the suffix *-s-* and those of the so-called “Attic” type with an accented vocalic suffix are restricted to verbatim or approximate quotations taken from sources of classical Greek literature and the Bible translation. They are archaisms, not used outside this specific context and no longer productive. With the classical future being extinct in Malalas’ language, there are various possibilities to express future reference:

1. the *praesens pro futuro* used with telic predicates such as *apot^hnéiskō* ‘to die’, and *lambánō* ‘to take’ – a usage already present to some extent in the classical language (cf. Schwyzer 1950: 275),
2. the present participle of *op^heílō* ‘to owe/shall’ governing an aorist infinitive with a verb of motion as matrix verb. This construction apparently fills in for the classical construction of the future participle (with or without the subjunction *hōs*) and may be a case of formal renewal,
3. a form of *méllō* ‘to be about’ governing the present infinitive of a telic verb such as *teleutáō* ‘to die’ depicting the pre-phase of the event (‘to be about to be/do’) used as a future-in-the-past, also continuing part of the usage in Classical Greek,
4. *ék^hō* ‘to own, have’ governing an infinitive, used as a future-in-the-past and to depict counterfactual situations.

The verbs listed in 2.-4. show features of incipient auxiliarization in various respects: a) they are semantically bleached in the constructions discussed above, in which *op^heílō* does not mean ‘owe, shall’, *méllō* does not mean ‘be likely’ or ‘delay, hesitate’, and *ék^hō* does not mean ‘possess’. All three supply temporal and modal information of the complex predicate, while the lexical meaning comes from the non-finite dependent verb; b) they impose formal restrictions on their complements: *op^heílō* takes an aorist infinitive, *méllō* a present infinitive; c) they are partly formally restricted themselves: it is only the participle of *op^heílō* that can be used in the construction discussed above and it is the most frequent form of this verb (13× vs 4× present indicative, 1× present infinitive), and the use of *méllō* and *ék^hō* as futures-in-the-past and for counterfactuals is restricted to their participles and past tense forms.⁹

⁹ For a discussion of auxiliarization cf. e.g. Anderson (2009: 4): “an item on the lexical verb-functional affix continuum, which tends to be at least somewhat semantically bleached, and grammaticalized to express one or more of a range of salient verbal categories, most typically aspectual and modal categories, but also not infrequently temporal, negative polarity, or voice categories.” Wakker (2006) describes *méllō* + infinitive in Classical Greek as a semi-auxiliary,

By contrast, the verbs *t^hél-ō* ‘want’ and *boúl-o-mai* ‘id.’ do not show any signs of incipient grammaticalization such as restriction of contexts in which they may appear, loss of morphological forms, phonological reduction and change of meaning. It is by their lexical meaning that they describe the intention of the subject to carry out an action, which implies future time reference. The development of *t^hél-ō* ‘to want’ followed by *hína* ‘in order to/that’ into the modern Greek particle *t^ha* ‘FUT’ is a later development.

The language used by Malalas is intermediate between Classical and later Byzantine Greek in that it retains a number of patterns of the former and does not yet show characteristics of the latter: *t^hélō* and *boúloomai* ‘to want’ behave as in Classical Greek, the use of the present tense for reference to the future and that of *méllō* ‘to be about’ as a future-in-the-past are attested already in Classical Greek, too. The use of *ék^hō* ‘to have’ as a future-in-the-past and as a counterfactual is an innovation Malalas shares with other authors of his time, as shown in section 5. Neither this nor the use of *op^heílō* ‘to owe/shall’ in the syntactic position where the classical language employs a future participle are continued in Modern Greek. The language of early Byzantine authors has to be understood as a language in its own right that deserves further study.

The options available in Malalas’ text to express intentionality, future time reference and counterfactuality are summarized in the following table:

Table 3: means of expression of intentionality, futurity and counterfactuality in Malalas.

intentionality	future	future-in-the-past	counterfactual
<i>t^hélō</i> , <i>boúloomai</i>	<p> aorist subjunctive; present tense of telic verbs; motion verb + <i>op^heílō</i> + aorist infinitive </p>	<p> periphrasis with <i>méllō</i>, ék^hō </p>	<p> imperfect; periphrasis with <i>ék^hō</i> </p>

Abbreviations

- B Biblical quotation or imitation/context
 O oracle

The glosses follow Leipzig Glossing rules.¹⁰ Additionally, the following glosses have been adopted:

as it retains some of its original meaning also when used as a future-in-the-past. Cf. also Kölligan (2017).

¹⁰ <https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf>

ACT	active
AOR	aorist
IMPF	imperfect
MID	middle voice
THEM	thematic vowel

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Joanne Stolk

Combining Linguistics, Paleography and Papyrology: The Use of the Prepositions *eis*, *prós* and *epí* in Greek Papyri

Abstract: The prepositions *eis*, *prós* and *epí* alternate with the plain dative case to express an animate goal of motion and transfer verbs in Greek. The preposition *eis* ‘to’ is commonly used for inanimate goals and to express ‘on account of what/whom’ a payment is made, *prós* ‘to’ is used for the transfer of an animate object to an animate goal and *epí* ‘for’ to express a special purpose of sending for someone. Exceptions to these general tendencies merit closer examination of the paleographical and linguistic context. In this paper, I provide several new interpretations, translations and readings of exceptional usages of these prepositions in Greek documentary papyri from Egypt.

Keywords: Greek linguistics, Greek papyrology, paleography, prepositions, dative alternation

1 Introduction

In a previous study (Stolk 2017), I analyzed various ways of expressing the human goal of motion and transfer verbs in Greek papyrus letters from Egypt (300 BC – 400 AD), comparable to the alternation between ‘I send **you** a letter’ and ‘I send a letter **to you**’ in English. In Postclassical Greek, the preposition *prós* with accusative is used to express the animate (i.e. human) goal of motion verbs (1) and for transfer of an animate object to an animate goal (see section 3 below), alternating with the plain dative case in these constructions (Stolk 2017: 218–225). The dative case is the default argument realization for the animate goal of transfer of an inanimate object (2), and with verbs of communication (3) and giving (4).

<https://doi.org/10.1515/9783110677522-005>

- (1) (PSI IV 341, 4–5; Philadelphia, 256 BC)¹
 ἔδοκιμάσαμεν παραγενέσθαι εἰς Φιλαδέλφειαν πρὸς σέ²
edokimásamen paragenést^hai eis P^hiladélph^heian prós sé
 approve:1PL come.INF to Philadelphia.ACC.SG to 2SG.ACC
 ‘we decided to come to Philadelphia **to you**’
- (2) (P.Tebt. II 424, 2; Tebtynis, late 3rd ct. AD)
 ἔπεμψά σοι ἐπιστολήν
épempsá soi epistolên
 send.1SG 2SG.DAT letter.ACC.SG
 ‘I sent **you** a letter’
- (3) (P.Thomas 14, 3–4; Karanis, 2nd half 2nd ct. AD)
 εἶπόν σοι μισθῶσαι | τήν οἰκίαν
eîpón soi mist^hôsai tèn oikían
 tell.1SG 2SG.DAT let.INF DEF.ACC.SG house.ACC.SG
 ‘I told **you** to let the house’
- (4) (P.Brem. 51, 14–15; Hermopolis, 113–120 AD)
 ἔγραψα Ὀλύμπῳ δῶναί σοι | τήν δαπά[ν]ην
égrapsa Olýmptōi dônaí soi tèn dapánēn
 write.1SG Olympos.DAT.SG give.INF 2SG.DAT DEF.ACC.SG expenses.ACC.SG
 ‘I wrote to Olympos to give **you** the expenses’

Besides the preposition *prós* and the dative case, several other prepositions, such as *eis* and *epí*, can be used in the constructions illustrated in examples (1)–(4) above. Although the prepositions became largely synonymous in Medieval and Modern Greek (Bortone 2010: 208–210), their individual uses can still be distinguished in Postclassical Greek (Stolk 2017: 217–218, 226–228). For example, the preposition *eis* is generally used to express an inanimate (i.e. non-human) goal of movement, such as a place name or location, in Classical and Postclassical Greek (Luraghi 2003: 107–109; Mayser 1934: 408), e.g. ‘I send him to London’, cf. *eis Philadélphēian* ‘to Philadelphia’ in example (1). Most

¹ Papyrus editions are cited according to the *Checklist*; metadata are based on the information available in TM and the HGV (accessible through the PN).

² The Greek text is taken from the *Papyrological Navigator* (PN) and checked against the *editio princeps* (ed.pr.) and the *Berichtigungsliste* (BL). Transliteration, basic glosses and translation are provided; translations are my own but may be based on the edition of the ed.pr.

attestations in documentary papyri confirm this tendency, but there are some exceptional cases, such as example (5).

- (5) (SB VI 9121, 12–13; Arsinoite, ca. 31–64 AD)
 ἐλεύσομαι **εἰς** **σέ** εἶν' | ἢ τῆν
eleúsomai **eis** **sè** *heín'* *èi* *tēn*
 come.1SG **to** **2SG.ACC** so_that be.3SG DEF.ACC.SG
 Ed.pr.: 'I will come **to you** in order that (?)'

This papyrus contains the preposition *eis* 'to' followed by an animate goal, namely the personal pronoun *sé* 'you'. Apart from the prepositional phrase *eis sé* 'to you', the following words (interpreted as *heín' èi tēn* by the first editor) do not make much sense either. Dots under some of the letters indicate that part of the reading is uncertain and may need revision.³ Finally, many years after its first edition in 1951, the reading of this phrase was corrected into *eleúsomai eis Arsinoétēn* 'I will come to the Arsinoite' by Litinas (2013: 312), providing the expected inanimate goal (i.e. the Arsinoite district in Egypt) after the preposition *eis* 'to'. In this case, the problematic reading of the first edition was adapted after close inspection of the contents of the papyrus by Litinas. Similar problems, however, could be identified during a linguistic study into the usage of prepositions in papyri.⁴

In this paper, I explore the potential of this interaction between linguistics, paleography and papyrology in more detail on the basis of the prepositions *eis* 'to' (section 2), *prós* 'to' (section 3) and *epí* 'for' (section 4). Each of those three prepositions can be used in the papyri to express the goal of motion or transfer, besides the plain dative case. In section 2, I first illustrate the semantic distinction between the use of the dative case and the preposition *eis* 'to' with animate goals, before suggesting an alternative reading for another problematic example of *eis* 'to'. After close study of the use of the remaining two prepositions in the papyri, I propose two more examples for which the reading of the

³ The critical signs used in papyrus editions are in accordance with the so-called "Leidener Klammersystem" (Van Groningen 1932). Text between square brackets [] is not preserved on the papyrus, but supplemented by the editor; a dot under a letter signifies an uncertain reading; text between pointed brackets < > is added by the editor; between curly brackets { } is removed by the editor and between double square brackets [] means that it was removed by the scribe.

⁴ This example also shows that one has to be careful with uncertain readings. At the same time, it is important to keep track of corrections provided to previously edited papyri. Since 1913, the BL collects the corrections in interpretation and reading of all published papyri from secondary literature. The digital editions in the PN offer an opportunity to integrate older and newer corrections immediately in the online version of the text. However, this is an on-going process which relies on the support of all scholars working with papyri.

preposition *eis* ‘to’ should be changed, respectively into *prós* ‘to’ (section 3) and *epí* ‘for’ (section 4). My main aim is to show how linguistic exceptions could provide a starting point to improve philological interpretation.

2 The Preposition *eis* ‘to’

The preposition *eis* ‘to’ with the accusative case is generally used for motion and transfer to an inanimate goal in Greek (cf. discussion in section 1). However, there is a special meaning of *eis* ‘to’ in the papyri which can be used both for human and non-human goals of transfer, namely the expression ‘on account of whom’ a payment shall be made. This usage is frequently attested in accounts in documentary papyri (Mayser 1934: 356–357). Mayser (1934: 356 fn. 1) remarks about this usage that “it should be noticed explicitly that in many cases the paraphrase with *eis* is not in complete agreement with the real dative” (my translation). The difference between the preposition *eis* ‘to’ and the plain dative case as recipient can be observed in example (6).

- (6) (P.Cair.Zen. IV 59647, 49–51; Philadelpheia, before 248–247 BCE; Mayser 1934: 356 fn. 3)

ἔστι	δὲ	ὃ	ἀξιούμην	σε	τότε	
<i>ésti</i>	<i>dè</i>	<i>hò</i>	<i>aksióúmén</i>	<i>se</i>	<i>tóte</i>	
be.3SG	PRT	REL.ACC.SG	ask.1PL	2SG.ACC	then	
εἰς τοὺς	ὑπογραφεῖς			ποιήσαι	ἡμῖν	
<i>eis toùs</i>	<i>hypograp^heîs</i>			<i>poiêsai</i>	<i>hēmîn</i>	
to	DEF.ACC.PL	undersecretary.NOM.ACC.PL		make.INF	1PL.DAT	
τρῖσιν						
<i>trisîn</i>						
three.DAT.PL						

‘this is what we ask you then: **on account of the undersecretaries** to supply **to us three** ...’

The intended beneficiaries of the payments are first expressed by a prepositional phrase, *eis toùs hypografeîs* ‘to the undersecretaries’, later referred to by the dative *hēmîn trisîn* ‘us three’. The editor, C. C. Edgar, commented that “the construction is compressed, the meaning being ἔστι ὃ ἀξιούμην σε ποιήσαι ἡμῖν, τοῖς μὲν ὑπογραφεῦσιν, οὓσιν τρισίν, δοῦναι” (*ésti ó aksióúmén se poiêsai hēmîn, toîs mèn hypograp^heûsin, oûsin trisîn, doûnai* ‘this is what we ask you to supply to us [dative], the undersecretaries [dative], being three [dative]’). In

fact, there is no need to change all elements into the dative case, as the editor seems to suggest, in order to understand the message. In my opinion, the above formulation perfectly illustrates the difference between the prepositional phrase related to the topic of payment ‘on account of the undersecretaries’ and the following real recipients of the salaries ‘supply to us three, to the one . . . , to the others . . .’ in the dative case. Similar extensions from concrete to abstract direction can be found in Classical Greek referring “to a human landmark with respect to whom an action is performed” (Luraghi 2003: 114). This usage may seem to come close to the semantic role of beneficiary, but it also occurs with inanimate landmarks (Luraghi 2003: 113–115). There is no essential difference, though, in payments ‘regarding the office’ or ‘regarding the secretaries’, both conceptualized as an abstract direction of payment rather than a concrete (and animate) beneficiary or recipient of the performed action.

Still, there remain a few instances of the use of the preposition *eis* ‘to’ with human beings which do not fit this semantic interpretation either. One of those problematic instances is found in the private letter in example (7).

(7) (SB XIV 12027, 4–5; unknown provenance, 2nd–3rd ct. AD)

τοῦ σὺν ἡμεῖν εἰς σαῖ | καταπλεῦσαι

toû sùn hēmeîn eis sai | katapleûsai

DEF.GEN.SG with 1PL.DAT **to** **2SG.ACC** sail_down.INF

Ed.pr.: ‘to sail down (the river) with us **to you**’

Just as in example (5), the preposition *eis* seems used to express an animate goal ‘to you’ instead of its normal use with inanimate goals, cf. example (1). Since only these last words are preserved of the body of the letter, it is difficult to get a proper understanding of the context. Furthermore, one has to assume an alternative spelling for the accusative case of the pronoun, namely *sai* for *se* ‘you’. Although variation between <ai> and <e> is relatively common in the Roman period (Gignac 1976: 191–193), it is not entirely satisfactory to assume an alternative form in an uncertain context. Even if we accept the reading of *eis* (the final sigma is not entirely clear) and *sai*, there seem to be some small traces of one more letter after *sai* on the photo, possibly a <n>.⁵ A reading such as *eis Sáin* could provide the expected location, namely ‘to Sais’. As a personal name, Sais is rarely attested during the Roman period (see TM Name 7561) and this

⁵ An image of the papyrus can be found in Sijpesteijn (1971), plate II (after p. 76). For paleographical comparison, one could compare the shape of this letter with for example the *n* in *otan* in l. 2.

would not solve the problematic use of the preposition *eis* with an animate goal. However, Sais could also be understood as the name of a city (TM Geo 2072), the capital of the Saite district.⁶ Its location in the Egyptian delta would fit as the destination of a journey sailing downstream.

3 The Preposition *prós* ‘to’

The preposition *prós* ‘to’ with the accusative case is used for the animate goal of verbs of motion (‘I come **to you**’) and transfer (‘I send someone **to you**’), alternating with the dative case (Stolk 2017: 218–225). There is an important difference between the preposition and the dative case with verbs for sending: the preposition is only used when sending people (8), while the dative case is also used for the sending of inanimate objects (9). This distinction has been shown by Danove (2007) for the use of *prós* ‘to’ in the New Testament and the same distribution can be found in papyrus letters (Stolk 2017). The following examples (8)–(9) illustrate the two variant realizations of an animate goal with the same verb for sending.

- (8) (P.Mich. VIII 474, 8; Alexandria(?), early 2nd ct. AD)

[ἔ]πεμψε	Ἰσίδωρον	τὸν	υἰόν	[σ]ου	πρὸς σέ
<i>épempse</i>	<i>Isídōron</i>	<i>tòn</i>	<i>huión</i>	<i>sou</i>	<i>pròs sé</i>
send.3SG	Isidoros.ACC.SG	DEF.ACC.SG	son.ACC.SG	2SG.GEN	to 2SG.ACC

‘she sent your(?) son Isidoros **to you**’

- (9) (P.Mich. VIII 481, 35; Alexandria(?), early 2nd ct. AD)

ἔπεμψά	σοι	χάρτην
<i>épempsá</i>	<i>soi</i>	<i>k^hártēn</i>
send.1SG	2SG.DAT	papyrus.ACC.SG

‘I sent **you** papyrus’

In the first instance, Isidoros is sent (meaning: caused to move) towards a prepositional goal (8), while in the second event the sending of papyrus (meaning: change of possessor) is expressed with a dative case as the endpoint of transfer (9). This difference in meaning could help to solve another problematic instance

⁶ It is not often attested in papyri from this period; a possible – but equally uncertain – attestation can be found P.Strasb. IV 253, l. 6: ‘he has gone to the (city of) Sais’.

of *eis* ‘to’ with a personal pronoun instead of an inanimate goal. Example (10) is attested in a letter of a bailiff to his master Dionysios.

(10) (P.Mert. I 38, 22–27; unknown provenance, mid 4th ct. AD)

ἀνάγη	μοι	καίνε τω	τῶν	ἀδελφῶν	μου
<i>anágē</i>	<i>moi</i>	<i>kaínetō</i>	<i>tōn</i>	<i>adelph^hōn</i>	<i>mou</i>
necessity.NOM.SG	1SG.DAT	become.3SG	DEF.GEN.PL	brother.GEN.PL	1SG.GEN
ἔπεμψα	γὰρ	ἰς	σὲ	περὶ	τοῦ τω<v>
<i>épempsa</i>	<i>gār</i>	<i>is</i>	<i>sè</i>	<i>perì</i>	<i>toútōn</i>
send.1SG	for	to	2SG.ACC	about	DEM.GEN.PL
καὶ	ἐν	συστάσ[ε] {v}	αὐ τῶν	σχῖς	πρὸς Ἀπολλῶ νιων
<i>kaì</i>	<i>en</i>	<i>sustási</i>	<i>autōn</i>	<i>sk^his</i>	<i>pros Apollōniōn</i>
and	in	care.DAT.SG	3PL.GEN	have.2SG	To Apollonios.ACC.SG

‘Necessity arose to me concerning my brothers; I sent (someone) **to you** about these things and may you recommend him before Apollonios’

The first editors, Bell and Roberts, translate the lines quoted in example (10) as follows: “I had need of my brothers; for I sent to you about them and that you might commend them to Apollonius”. The last part of that sentence was reinterpreted by Worp (2000: 190), translating “for I sent (a messenger) to you about them and take care of him with respect to Apollonios”. It is indeed likely that the phrase ‘I sent to you’ implies the sending of a person delivering the message.⁷ Furthermore, it seems that this person who is sent to the land-owner Dionysios is the same as the person who needs to be recommended to Apollonios.⁸ This type of sending of a person to an animate goal would

⁷ The contents of that message are likely to concern his brothers, but that does not mean that we need to translate the topic *perì toutō<n>* as ‘about them’. In both previous translations, the personal and demonstrative pronouns in this part of the letter are understood to refer to persons: both to the brothers in the first edition; the demonstrative pronoun *toutō* to the brothers and the personal pronoun *autōn* to the messenger (by understanding the genitive plural *autōn* as standing for an accusative singular *autōn*) in Worp (2000: 190). However, the scribe seems to distinguish between the two types of pronouns in other parts of the letter (cf. ll. 6–8, 13). In my opinion, there is no need to understand *perì toutō* in ll. 24–25 as anything else than a demonstrative pronoun referring to the contents of the letter ‘about these things’; compare the personal pronouns ‘their’ and ‘them’ in ll. 6 and 7, next to same phrase *perì toutōn* translated as “about that” in l. 8 of the edition.

⁸ This transfers the problem to the interpretation of the object of the next phrase, literally ‘to have in care/commendation’. The first editors understood the personal pronoun *autōn* as a genitive plural ‘you have care/commendation of them’, but the parallels for the new interpretation suggested by Worp (2000) take an accusative object ‘you have him in care / commendation’. Due to

normally be expressed by the preposition *pros*, cf. example (8). While Worp (2000: 190) is arguing for a new interpretation of *en sustási* in the second part of this sentence, he adopts the reading of this remarkable *gâr is sé* ‘for to you’ without further comment. Even though there are a few small lacunae at this spot on the papyrus, I would argue to read *pròs sé* ‘to you’ rather than *gâr is sé* ‘for to you’ here.⁹ The new reading also avoids the assumption that the scribe spelled *is* instead of *eis* only here, while he writes *eis* elsewhere in the letter (ll. 14, 17 and 21).

4 The Preposition *epí* ‘for’

The preposition *epí* ‘for’ with the accusative case can be used for motion or transfer towards an inanimate or animate goal in papyri.¹⁰ Apart from the neutral motion towards a goal (1934: 476–479), Mayser (1934: 480–482) distinguishes a final use in which the preposition expresses the purpose of movement, i.e. “the object or purpose for which one goes” (LSJ s.v. III.1). Already in Homeric and Classical Greek, the preposition *epí* can have this metaphorical meaning to express the purpose of an action, although *epí* with accusative is limited to inanimate landmarks in Homer (Luraghi 2003: 307–308). In Classical Greek, *epí* with accusative for animate landmarks often takes the role of maleficiary (Luraghi 2003: 312–313). In private letters from the Roman period, *epí* with accusative is

the frequent interchange of *omicron* and *omega* in this letter (see e.g. the name *Apollóniōn* in ll. 26–27 which is declined as a genitive plural while it should be understood as the accusative singular *Apollónion*), it would be possible to understand the genitive plural *autôn* ‘them’ as an accusative singular *autón* ‘him’. The accusative singular would mean that just one person is recommended and this could be the same person that is implied in the sending. If the brothers are indeed to be understood in plural in l. 23, the text seems to say that a message about them is delivered by just one person and that this (to us unknown) messenger is the one who needs to be introduced to Apollonios.

9 An image can be found in the edition P.Mert. I, plate XL. The upper part of the *pi* is rounded (in contrast to the classic three-stroke *pi* in *épempsa*) and, because of that, the editors may have thought of a combination of *gamma* and *alpha*. However, the *pi* of *pròs* two lines below is also rounded and the space before the following *rho* seems too narrow for an *alpha* in this hand. The small trace coming out of the lacuna afterwards could fit almost any small letter, but the space and height seem more than adequate for an *omicron*.

10 For the seemingly free variation between cases used with *epí* ‘for’ and the prepositions *en* ‘in’ and *eis* ‘to’ with an accusative (inanimate) goal of motion in Hellenistic-Roman Greek see Skopeteas (2008); for the merger of *en* ‘in’, *pròs* ‘to’, *epí* ‘for’ and *eis* ‘to’ in Medieval Greek see Bortone (2010: 208–210).

commonly used to express the purpose of movement with animate referents, see examples (11) and (12).

- (11) (BGU VII 1676, 9–11; Philadelphia, 2nd ct. AD)

ἔδωκα	ἐνγύην	τῷ	μαλχεροφόρῳ	ἕως	κγ
<i>édōka</i>	<i>engúēn</i>	<i>tōi</i>	<i>mak^heroph^hórōi</i>	<i>héōs</i>	23
give.1SG	security.ACC.SG	DEF.DAT.SG	sword-bearer.DAT.SG	until	23
ἄχρει	οὔ	πέμψω	ἐπὶ	σαί	
<i>ákhrei</i>	<i>hoú</i>	<i>pémpsō</i>	<i>epì</i>	<i>saí</i>	
until	REL.GEN.SG	send.1SG	for	2SG.ACC	

‘I gave security to the sword-bearer till the 23rd to give me time to send **for you**’

- (12) (P.Fay. 135, 5–7; Euhemeria, 4th ct. AD)

ἵνα	μ[ὴ]	δοῦξῃ	μ[ο]ι	στρατιώτας	ἀποστῆλαι	ἐπὶ	σαί
<i>hína</i>	<i>mē</i>	<i>dóksēi</i>	<i>moi</i>	<i>stratiōtas</i>	<i>apostīlai</i>	<i>epì</i>	<i>saí</i>
so_that	not	seem.3SG	1SG.DAT	soldier.ACC.PL	send.INF	for	2SG.ACC

‘so that I will not decide to send soldiers **for you**’

In example (11), the subject Sarapodoros is not just sending someone to his friend Phaneion (which would have been expressed with the preposition *prós* ‘to’ instead of *epí* ‘for’), but he is sending someone to fetch Phaneion. A similar situation occurs in example (12). The subject, Agathos, warns his father that he will have to send soldiers after him to get him and put him in prison, if he does not pay now. In both letters, the prepositional phrase with *epí* ‘for’ does not express the endpoint of motion, but the purpose of sending: to fetch the person sent for.¹¹

The same meaning denoting the purpose of one’s own travelling is attested with verbs of going;¹² see example (13).

¹¹ This purposeful ‘sending for someone’ is already attested in Classical Greek: ‘for it was Cyrus who sent to Amasis for (*epi* + accusative) his daughter (to marry him)’ (Herodotus, *Histories* 3.2.1; Luraghi 2003: 313, example 55). Other examples in the papyri are found in SB XIV 12034, 13 (Upper Egypt, 175 AD) and perhaps O.Claud. II 293, 13–14 (Mons Claudianus; ca. 142–143 AD).

¹² Other examples with a verb of going in the papyri are found in PSI XIV 1404, 11–17 (unknown provenance, 41–42 AD) with BL 4, 92 and 11, 251; P.Paris 18, 9 (unknown provenance, 3rd ct. AD); P.Ant. I 43, 21–23 (Antinoite, late 3rd–4th ct. AD), although the interpretation and use of prepositions in this text is puzzling; and perhaps SB X 10476, 6 (unknown provenance, 5th–6th ct. AD).

- (13) (P.Mich. XV 750, 17–19; unknown provenance, 19.11.172 BC)
 μέχρι τοῦ | παραγενέσθαι με | ἐπί σέ συντόμως
mek^hri toũ | paragenést^hai me epí sè suntómōs
 until DEF.GEN.SG come.INF 1SG.ACC **to** 2SG.ACC shortly
 ‘until I come **for you** shortly’

The letter, possibly from a husband to his wife, explains that he cannot come to her right now and he is not able to send her anything. Sijpesteijn, the editor, translates the last lines of the letter as follows: “Please look after yourself until my forthcoming arrival. Secure your things as you’ll be moving with us” (p. 129). The prepositional phrase *epí sé* ‘for you’ is only translated implicitly in “until my forthcoming arrival”, namely ‘to you, at your place’. However, *epí* with accusative does not generally express arrival at a certain location.¹³ The above mentioned special meaning of *epí* expressing the reason for coming, namely to fetch someone, would make more sense in this situation. That her husband is not just travelling to her, but will come to fetch her, becomes clear in the following sentence: “as you’ll be moving with us”. In this instance, a slightly different translation, such as ‘until I come for you shortly’, provides a more coherent interpretation of the event described.

The special meaning of the preposition *epí* would also be suitable for the situation described in the following letter from Theon to his father; see example (14).

- (14) (P.Oxy. I 119, ll. 13–14; Oxyrhynchos, 2nd–3rd ct. AD)
 λυπὸν πέμψον εἰς | μὲ παρακαλῶ σε
lypòn pémpson eis mē parakalō se
 then send.IMP **to** 1SG.ACC beg.1SG 2SG.ACC
 ‘then, send **for me**, I beg you’

Again, we find the preposition *eis* ‘to’ used with an animate goal ‘you’. The first editors, Grenfell and Hunt, read *lypòn* ‘then’ as *lyron* ‘lyre:ACC.SG’ and thought that Theon asked his father to send a lyre to him. This reading was corrected by Wilamowitz into *lypòn* as misspelling for *loipòn* ‘then’ (P.Oxy. II, p. 320), but this also removes the object of the sending, resulting in translations such as

¹³ For the locative meaning of *epí* + dative see Rodríguez Somolinos 2013. A motion verb combined with a locative sense of the preposition *epí* ‘upon’ is found in the bilingual Latin-Greek letter P.Oxy XVIII 2193, 7 (Oxyrhynchos, late 4th – early 5th ct. AD) ‘the most holy hortatory word has come upon you’, possibly because the language of this letter was influenced by biblical sources, cf. e.g. Luke 11.20: ‘the kingdom of god has come upon you (pl.)’, see *ed.pr.* n. to l. 7.

“so, send me (something good), I beg you” (Humbert 1930: 181; my translation). Even assuming an implicit object, we would still expect the sending of an inanimate object (“something good”) to an animate goal to be expressed with a plain dative case or the sending of an animate object (‘send someone to me’) with the preposition *prós* (see section 3 above). A young boy is writing this letter to his father begging him to take him on his journey to Alexandria. Unfortunately, his father has already left and it seems that the only way in which he could still join his father in Alexandria is by sending someone down to fetch him. Winter (1933: 60), therefore, translated the phrase as “send for me”. As we have seen above in examples (11)–(13), the meaning ‘send for me (to fetch me)’ is denoted by the preposition *epí* in other letters from this period. The preposition *ei[s]* ‘to’ is written at the end of the line and the final letters have been damaged. Reading *ep[í]* instead of *ei[s]* seems unproblematic.¹⁴ The only problem to this reading is posed by the weak form of the 1st personal singular pronoun (*me*) at the beginning of the following line. In contrast to the 2nd person singular, Greek distinguishes between weak and strong forms of the oblique cases of the 1st person singular pronoun. Usually, the strong form (*emé*) is preferred after prepositions, except after the prepositions *eis* ‘to’ and *prós* ‘to’ which also occur with weak forms (Gignac 1981: 161–162). If the young boy indeed followed these rules, the most likely supplement would be *ep’ [e]me* ‘for me’. The word boundary through the personal pronoun may be unproblematic, as he breaks several words in the preceding sentences in a similar way, e.g. *el|pistolén* ‘letter’ in ll. 4–5. Both the reading and meaning of the preposition *epí* ‘for’ fit the context better than *eis* ‘to’.

5 Conclusion and Discussion

Papyrus editions are not only useful sources for linguistic research, but, as I argue in this paper, linguistic research can also be beneficiary for papyrus editions. Apparent exceptions to linguistic theories may be explained by different interpretations, such as the new explanations and translations proposed for examples (6) and (13). Others can be understood by providing a new reading that fits both the paleographical traces and the linguistic context, such as examples (5), (7), (10) and (14).

¹⁴ An image of the papyrus can be found in Parsons (2007), plate 26 (after p. 194). The little hook to the left at the bottom of the second letter seems more fitting for a *pi* than an *iota* and even a small trace of the second leg of the *pi* is visible at the edge of the lacuna.

This approach is not without perils. In the first place, I would strongly argue against just altering the reading of the edition in order to fit a linguistic theory. Correction of a reading should always be based on paleography in the first place, besides other considerations. On the other hand, one has to accept that editing a papyrus is often a combination of understanding the language and reading the traces. Ultimately, what is written on the papyrus itself should form the basis for linguistic studies and not a (wrong) interpretation by the first editor. Therefore, corrections of readings should be possible, also in linguistic studies.

In the Handbook of Papyrology, Schubert (2009: 212–213) describes the editing of papyri as “an evolving process” of reading, misreading, correction and reinterpretation, often prompted by newly published papyri and studies about the cultural and historical context:

“documents on papyrus display a regularity that makes papyrologists beware of exceptions. If these occur, they should be justified as far as possible. Unparalleled personal names, grammatical oddities, and geographical and chronological inconsistencies should alert a reader to the possibility of an erroneous reading. The process of editing a papyrus therefore never ends.”

In this paper, I hope to have shown that linguistic studies can make a valuable contribution to this continuous process of reading and interpreting Greek documentary papyri.

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Abbreviations

The glosses follow Leipzig Glossing rules, accessible at www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf. Additionally, the following gloss have been adopted: PRT - particle

Papyrus editions are cited according to the Checklist = Oates, John, William Willis et al. *Checklist of Editions of Greek, Latin, Demotic, and Coptic Papyri, Ostraca, and Tablets*, accessible at www.papyri.info/docs/checklist.

BL Preisigke, Friedrich, et al. 1913–2017. *Berichtigungsliste der Griechischen Papyrusurkunden aus Ägypten. Band I – XIII*. Leiden: Brill.

- HGV *Heidelberger Gesamtverzeichnis der griechischen Papyrusurkunden Ägyptens* at <http://aquila.zaw.uni-heidelberg.de>
- LSJ Liddell, Henry George & Robert Scott, revised by Sir Henry Stuart Jones. 1996. *A Greek-English Lexicon*. Oxford: Clarendon.
- PN *Papyrological Navigator* at www.papyri.info
- TM *Trismegistos* at www.trismegistos.org

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Liana Tronci

Future Forms in Postclassical Greek. Some Remarks on the Septuagint and the New Testament

Abstract: This research aims at providing answers to questions concerning the morphological strategies used to mark future tense in Postclassical Greek. On the one hand, I consider diachronic changes that took place during the Hellenistic and Roman periods and try to establish language-internal principles driving these changes. On the other hand, I take into account the specific characteristics of the two texts investigated here in order to establish which language-external factors influenced the composition of these texts. In particular, I discuss how and to what extent the language of a text can be influenced by external factors such as register variation, language model, and prestige language.

Keywords: future forms, voice, Septuagint, New Testament, register

1 Introduction

This paper deals with the general issue of the diachronic change occurring in the category of future from Ancient Greek onwards and focuses on Postclassical Greek with special emphasis on the language of the Septuagint (from now on LXX) and the New Testament (NT). The topic of the paper is the distribution of the synthetic vs. periphrastic futures in the two texts. Among the synthetic futures, special attention will be paid to the different morphological classes, in particular the sigmatic and passive futures, which spread in both the LXX and the NT at the expense of other classes, namely the Attic futures. As far as the periphrases with μέλλ-ω (*méll-ō*) [be_going_to-PRS.1SG.ACT] ‘I am going to’ and θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ plus the infinitive of the lexical verb are concerned, their distribution is not comparable in the two texts, because they are rare in the LXX, while they occur in a higher proportion in the NT. As I will show, this study does not concern only the grammatical category of tense, but also those of voice and aspect, which changed considerably from Ancient to Medieval Greek (cf., *inter alia*, Browning [1969] 1983: 29–31).

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The texts selected for investigation provide data for a sociolinguistically-oriented analysis. As a translation, the LXX provides data for scholars interested in investigating the Greek language written in Egypt in the 3rd/2nd ct. BC by presumably bilingual speakers. The language of the NT is an instance of the everyday written Greek of the 1st ct. AD.

I proceed as follows. Section 1.1 provides an overview of the textual tradition of the Old and New Testament; section 1.2 is a critical overview of research on the future tense in these texts. In Section 2 I compare the language of the Old and the New Testament. Some discussion will be also dedicated to a comparison with the Classical Greek system of future tense, in order to explain how the Hellenistic and Roman system differs from the Classical one. In Section 3 I investigate the external factors responsible for the productivity of some synthetic forms of the future, namely the passive futures. In Section 4 I draw conclusions.

1.1 Some Remarks on the Textual Tradition of the LXX and the NT

The complex vicissitudes of the composition of the LXX are well-known. Many studies have been dedicated to this subject: besides the essential work by Swete ([1914] 1989), Jellicoe (1968), Dorival et al. (1988), see the recent books by Collins (2000), Fernández Marcos (2000), Jobes & Silva (2000), Dines (2004), Léonas (2007), Aitken (2015) and references therein. I will briefly discuss some aspects.

It is well-known that the LXX was not translated as a whole at the same time. The Pentateuch (Genesis, Exodus, Numbers, Leviticus, and Deuteronomy) was translated first, presumably in the early 3rd ct. BC (around the year 250 BC, according to Jobes & Silva 2000: 29), by different translators (cf. Tov ([2010] 2015: 448)). For many scholars, the label LXX should only be used to refer to the Pentateuch, and not to the entire Old Testament. Among the Postpentateuchal books, scholars distinguish three groups of works, namely the historical books, the sapiential books and the prophetic books. It is very difficult to date the translation of these books (cf. Aitken 2015: 4). Some translators include some information, e.g. the translator of Sirach, who informs us that he came from Jerusalem at the end of the 2nd ct. BC. The so-called historical (Joshua, Judges, Ruth, 1–4 Kings, 1–2 Chronicles, 1–2 Esdras, Esther, Judith, Tobit, 1–4 Maccabees) and sapiential books (Psalms, Proverbs, Ecclesiastes, Song of songs, Job, Sirach) were translated in different periods, later than the Pentateuch. They were also translated by different translators, and some of them, e.g. the second book of Maccabees, have no correspondence with the Masoretic text, which is the official Hebrew and Aramaic text of Judaism. In some cases, e.g. Ecclesiastes and Song

of songs, they are so literal and Hebraizing in style that they are thought to have been translated later, from the 2nd ct. BC onwards, when great attention was placed on the original Hebrew text and its faithful reproduction in Greek (cf. Fernández Marcos 2000: 147–148, Jobes & Silva 2000: 37–38, Dines 2004: 81–89). The last part of the LXX contains the minor prophets, Isaiah, Jeremiah, Ezekiel, and Daniel.

As far as the NT is concerned, the text is formed of two main types of materials: the earliest manuscripts, which were mainly written on papyrus, and the citations of the Church Fathers (cf. Wasserman 2012: 83). Many studies have been recently devoted to the reconstruction of the original text, after the discovery of new papyri: I refer to chapters 5 to 12 in Hill & Kruger (2012), and to chapters 1 to 4 in Ehrman & Holmes (2013), which provide an overview of the main topics concerning the manuscript tradition throughout the centuries. See also Schenker & Hugo (2005) and Dorival et al. (1988: 142–173) for discussion on the tradition of the Bible in its entirety.

1.2 A Critical Overview of Previous Studies on the Language of the LXX and the NT

It is well-known that the linguistic distance between Classical and Koiné Greek depends on the geographical and social expansion of the Greek language, which became either the mother language or the second language of a huge variety of peoples (see Horrocks 2010: 79–84 for more details). Among them were Jewish communities, who were settled across several Hellenistic kingdoms of the East Mediterranean area. The Greek language used by the Jewish translators of the Old Testament became a model for other Jewish and Christian religious texts, including the NT. However, most of the Jewish features of the NT listed by George (2010: 274–276) have been proved to also characterize the language of the documentary papyri and have thus been shown to be Koiné Greek.

Despite the common Jewish origin, the NT differs thoroughly from the LXX, because of the type of text and the period of composition (George 2010: 278). Moreover, the shared opinion that the language of the two texts is an instance of the ordinary or everyday written Greek of the times in which these works were composed (cf. Horrocks 2010: 106, 146) needs to be reviewed in favour of a more cautious and nuanced assessment. As far as the future forms are concerned, both texts present some changes with respect to Classical Greek, which involve the synthetic futures, on the one hand, and the relationship between them and the new periphrastic futures, on the other hand. In particular, some synthetic forms, e.g. passive futures, increase in number and are lexically productive

in the LXX and the NT, whilst periphrastic futures are few in number and express modal values rather than a temporal one. This evidence appears to contrast with the shared opinion that in Postclassical Greek synthetic futures progressively declined in use and were replaced by periphrases composed by auxiliaries, such as μέλλ-ω (*méll-ō*) [be_going_to-PRS.1SG.ACT] ‘I am going to’ and θέλ-ω (*thél-ō*) [want-PRS.1SG.ACT] ‘I want’ with infinitive (cf. Markopoulos 2009: 46–47; Lee 2010: 16–17).

The decline in use of synthetic futures and their replacement by periphrases are traditionally correlated with their inability to express aspectual values (cf. Evans 2001: 34). Like aspect, the category of voice appears to be problematic for future-tense formations. To express the passive voice, purely morphologically, there are some verbs which take the suffixes -η/-θη- (*-ē/-thē-*) (accompanied by middle endings) and other verbs which take middle endings without any suffix. Passive voice is thus formally distinguishable from middle voice in the case of certain verbs but not in other cases. The consequences are that the functional values of middle endings change according to the verb, and the passive is allomorphic.

My paper provides an investigation of the system of voice of the future in the LXX and the NT. The aim is to understand how the changes which concerned the synthetic futures and their replacement by periphrases spread in Postclassical Greek.

2 Analysis of Data

The lexical data for this research were collected by a manual search in the dictionaries by Muraoka (2016) and Vignini (2003), as far as the LXX and the NT respectively are concerned. Textual occurrences were collected through the electronic resources of the *Thesaurus Linguae Graecae*, abbreviated TLG (<http://stephanus.tlg.uci.edu/>), and were verified by comparison to the printed editions by Rahlfs & Hanhart ([1935] 2006), for the LXX, and by Nestle et al. ([1898] 2012), available also on the web (<http://www.nestle-aland.com/en/home/>), for the NT. Before I investigate these two texts, I will give a short account of the voice markers in the future tense of Classical Greek. This is useful for approaching the issue of diachronic changes.

2.1 The Distribution of Voice Markers in the Future Tense of Classical Greek

The two strategies of voice marking which overlap in the future tense of Classical Greek are based on the inflectional middle vs. active endings and

the suffixes $-\eta/-\theta\eta-$ ($-\bar{e}/-t^h\bar{e}-$), respectively. I refer to them as inflectional and suffixal systems accordingly. In the inflectional system, there is a binary opposition between the active inflection, which expresses active voice, and the middle inflection, which encodes functions typically associated with middle voice markers, including but not limited to the passive function (for a general overview cf. Kemmer 1993). In the suffixal system, three distinct morphological oppositions are found: (i) the verb stems suffixed with $-\eta/-\theta\eta-$ ($-\bar{e}/-t^h\bar{e}-$) in combination with the middle endings and the bare future stem with either (ii) the middle or (iii) the active inflection. The first strategy (i) is used to denote a passive or middle intransitive. The second strategy (ii) encodes a middle transitive. Finally, the third strategy (iii) denotes the active voice. Thus, the middle voice can be coded either by the suffixed stem or by the bare future stem, both supplied by the middle inflection. In the former case, the middle inflection appears to be redundant, because the voice markers are the suffixes $-\eta/-\theta\eta-$ ($-\bar{e}/-t^h\bar{e}-$).

An example of the two systems is given in (1), where the same verb $\zeta\eta\mu\acute{\iota}\omega$ ($z\bar{e}mi\acute{o}-\bar{o}$) [punish-PRS.1SG.ACT] ‘I punish’ is inflected according to the inflectional system in (a) and (b) and to the suffixal one in (c):¹

- (1) a. (Lys. 1.48)
- | | | | |
|-----------------|-------------|------------|---------------------|
| οἵτινες | τοὺς | μὲν [...] | ζημιώ-σ-ουσι |
| <i>hoítines</i> | <i>toús</i> | <i>mèn</i> | <i>zēmió-s-ousi</i> |
| REL.NOM | DET.ACC | PRT | punish-FUT-3PL.ACT |
- ‘[other laws] which will punish them (= the men).’
- b. (Th. 3.40)
- | | | | |
|-----------|------------|--------------|---------------------|
| ἡ | μὲν | πόλις [...] | ζημιώ-σ-εται |
| <i>hē</i> | <i>mèn</i> | <i>pólis</i> | <i>zēmió-s-etai</i> |
| DET.NOM | PRT | city.NOM | punish-FUT-3SG.MID |
- ‘the city will be punished.’
- c. (Lys. 6.15)
- | | |
|----------------------------|------------------------------------|
| θανάτῳ | ζημιω-θή-σ-εται |
| <i>t^hanátoi</i> | <i>zēmiō-t^hē-s-etai</i> |
| death.DAT | punish-PASS.AOR-FUT-3SG.MID |
- ‘he shall be punished with death.’

Both (1b) and (1c) are passive. The different verb forms can be explained in terms of an aspectual difference. According to Allan (2003: 178), middle futures

¹ Abbreviated names of Classical authors and texts follow the systems used in Liddell, Scott & Jones ([1843] 1996).

express a continuing action, whereas passive futures express completed events, since their verbal stems are aoristic. So, the middle-inflected future in (1b) is interpreted as a durative passive ('he will be punished' as a general punishment without an endpoint), whereas the suffixed future in (1c) is interpreted as a punctual or non-durative one ('he will be punished' as a specific punishment with an endpoint). Evidence for this interpretation is also given by the complement $\theta\alpha\nu\acute{\alpha}\tau\omega$ ($t^h\text{anátōi}$) [death.DAT] 'with death' in (1c) and the lack of a complement in (1b). This aspectual difference is also marked in the verbal stem, which is that of the present for the middle future, for example (2a), and that of the aorist for the passive future, e.g. (2b):

(2) a. (Pl. *Grg.* 521e)

κριν-οὔμαι	γὰρ	ὡς	ἐν	παιδίοις	ιατρὸς	ἂν
<i>krin-ou̐mai</i>	<i>gār</i>	<i>hōs</i>	<i>en</i>	<i>paidíois</i>	<i>iatrōs</i>	<i>àn</i>
judge-FUT.1SG.MID	in_fact	like	in	children.DAT	doctor.NOM	PRT
κρίνοίτο	κατηγοροῦντος	ὄψοποιοῦ				
<i>krinoito</i>	<i>katēgorōūntos</i>	<i>opsopoioū</i>				
judge.PRS.3SG.MID	accusing.PTCP.GEN	cook.GEN				

'I shall be tried as a doctor would be tried by a bench of children on a charge brought by a cook.'

b. (Ar. *Th.* 76–77)

τῆδε	θῆμέρα	κρι-θή-σ-εται /	εἴτ'	ἔστ'
<i>tēide</i>	<i>t^hēmērāi</i>	<i>kri-t^hē-s-etai</i>	<i>eít'</i>	<i>ést'</i>
DEM.DAT	day.DAT	judge-PASS.AOR-FUT-3SG.MID	whether	be.PRS.3SG.ACT
ἔτι	ζῶν	εἴτ'	ἀπόλωλ'	Εὐριπίδης
<i>éti</i>	<i>zōn</i>	<i>eít'</i>	<i>apólōl'</i>	<i>Euripídēs</i>
yet	living.PTCP.NOM	or	die.PRF.3SG.ACT	Euripides.NOM

'This day will decide whether it is all over with Euripides or not.'

The two futures of the verb κριν-ω (*krín-ō*) [judge-PRS.1SG.ACT] 'I judge' are formed on the present stem κρι-ν- (*krí-n-*) (verbal root plus present nasal suffix) and the aorist stem κρι-θη- (*kri-t^hē-*) (verbal root plus aorist passive suffix), respectively. Despite this difference, there is not a clear-cut aspectual difference between the two clauses. Even though the temporal complement 'in this day, today' in (2b) provides evidence for a non-durative reading of the clause, there is no evidence for a durative reading of the verb in (2a). As Allan (2003: 184) recognizes, "it is not self-evident to assume a connection between the future middle and the present", because futures, with the exception of the passive ones, are formed on the verbal root, for the most part. The durative aspect of middle futures can be considered to be an effect of the differentiation from the passive futures, which are never

durative. According to Wackernagel (1920: 202–204), they are the unmarked term of the privative opposition [\pm perfective], whose marked term is the passive future.

Following this idea, we can presume that the middle future of εὐφραίν-ω (*eup^hrain-ō*) [be_glad-PRS.1SG.ACT] ‘I am glad’, which is formed on the verbal root εὐφραίν- (*eup^hrain-*) (cf. Kühner & Gerth 1892: §264; Schwyzer [1953] 1990: 785), is the unmarked term of the opposition, whilst the passive future, which is formed on the aorist stem εὐφρανθη- (*eup^hrant^hē-*), is aspectually perfective:

(3) a. (X. *Smp.* 7.5)

ἐφ’	οἷς	ὕμεις	εὐφραν-εἴσθε	
<i>ep^h</i>	<i>hoîs</i>	<i>humeîs</i>	<i>eup^hrain-eîst^he</i>	
because_of	REL.DAT	2PL.NOM	be_glad-FUT.2PL.MID	

‘[a spectacle] that will delight you.’ [lit. ‘through which you will be delighted/you will be glad.’]

b. (Ar. *Lys.* 165–166)

οὐ γὰρ	οὐδέποτε’	εὐφραν-θή-σ-εται /	ἀνήρ, [. . .]
<i>ou gar</i>	<i>oudepot’</i>	<i>eup^hrain-t^hē-s-etai</i>	<i>anēr</i>
not_in_fact	never	be_glad-PASS.AOR-FUT-3SG.MID	man.NOM

‘our men have no delight.’ [lit. ‘will not be delighted/will not be glad.’]

Nevertheless, the comparison between (3a) and (3b) does not provide evidence for such an aspectual difference. Both futures in (3a) and (3b) can be interpreted as perfective, according to the idea of a privative opposition. Allan (2003: 201–202), who supports the aspectual hypothesis, cautiously concludes that “both aspectual and diathetical distinctions are relevant to the middle-passive future” and admits that “[t]he contrast between the middle and the passive future is to be explained differently for each individual verb”. The two futures in (3a) and (3b) are free variants with respect to aspect as well as voice. Both of them are middle, compared with the active in (3c):

(3) c. (E. *Med.* 1058)

ἐκεῖ	μεθ’	ἡμῶν	ζῶντες	εὐφραν-οὔσι	σε
<i>ekēi</i>	<i>met^h</i>	<i>hēmōn</i>	<i>zōntes</i>	<i>eup^hrain-ōûsí</i>	<i>se</i>
there	with	1PL.GEN	living.PTCP.NOM	gladden-FUT.3PL.ACT	2SG.ACC

‘if they live with me in another place, they will gladden you.’

The middle inflection occurs in both (3a) and (3b), but is functionally relevant as a voice marker only in (3a). The voice marker in (3b) is the suffix -θη- (*-t^hē-*), the middle endings displaying no meaning with respect to the voice.

Besides the cases of interchangeability between middle and passive futures, there are cases, such as (4), in which the two forms are in complementary distribution, the middle future occurring in middle transitive structures (4b) and the passive future in the passive ones (4c):

(4) a. (X. Cyr. 7.5.83)

τούτους **κολά-σ-ομεν**, ἦν πονηροὶ ὄσι;
toútous kola-s-omen ên ponēroî ôsi?
 DEM.ACC punish-FUT-1PL.ACT if bad.NOM be.PRS.3PL.ACT
 ‘we will punish them, if they are bad?’

b. (Pl. Resp. 575d)

οὕτω πάλιν τὴν πατρίδα [...] **κολά-σ-εται**
houútō pálin tēn patriída kola-s-etai
 so in_turn DET.ACC fatherland.ACC punish-FUT-3SG.MID
 ‘so now in turn he will punish his fatherland.’

c. (Th. 3.66.3)

πάντων δὲ αὐτῶν ἕνεκα **κολασ-θή-σ-εσθε**
pántōn dê autōn hēneka kolas-t^hē-s-est^he
 all.GEN PRT 3PL.GEN because_of punish-PASS.AOR-FUT-2PL.MID
 ‘you will be punished for all together.’

Both middle and passive futures are in an opposition to the active future in (4a). This means that the middle inflection is not just a morphological subsidiary of the suffixal passive strategy but that it is also able to express middle functions, which are different from those of passive futures. This variation in the field of middle inflection is not predictable and depends on the lexical items.

The picture becomes even more intricate once *media tantum* futures and *media tantum* verbs are taken into account as well. Functionally, *media tantum* futures do not differ from the respective active forms, cf. ἀκού-σ-ομαι (*akou̓-s-omai*) [hear-FUT-1SG.MID] ‘I will hear’ vs. ἀκού-ω (*akou̓-ō*) [hear-PRS.ACT.1SG] ‘I hear’ and λή-ψ-ομαι (*lēp-s-omai*) [take-FUT-1SG.MID] ‘I will take’ vs. λαμβάν-ω (*lambán-ō*) [take-PRS.ACT.1SG] ‘I take’. In these futures, middle inflection is meaningless with respect to the voice, because it is functionally active (cf. Tronci 2017).

2.2 Simplification Processes in Postclassical Greek: Evidence from the LXX and the NT

According to Markopoulos (2009: 46–47), synthetic futures disappeared in Hellenistic and Roman Greek and were supplanted by the periphrases with

μέλλ-ω (*méll-ō*) [be_going_to-PRS.1SG.ACT] ‘I am going to’ and θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ plus infinitive. This process was not abrupt: synthetic futures continued to be used, particularly in the texts which were much influenced by Classical language. In the LXX and the NT, there are three tendencies concerning the synthetic futures: firstly, the reduction of the diverse morphological classes to two types, i.e. the sigmatic and the suffixed futures (Section 2.2.1); secondly, the persistence of the middle inflection in some transitive *media tantum* futures (Section 2.2.2); thirdly, the simplification of the allomorphy in the middle voice, by replacing the non-suffixed middle futures (type (ii) above) by the suffixed ones (i) (Section 2.2.3). The latter two phenomena provide evidence for restricting the functional domain of the middle inflection, with the consequence that middle forms were reduced in number. The result is a new binary system, in which voice markers are maximally differentiated: active inflection (without suffixes) for active voice and suffixes -η/-θη- (-ē/-t^hē-) (with middle inflection) for middle/passive voice (I put in brackets the morphological features which are not relevant for the voice). Table 1 summarizes the quantitative data collected for this research:

Table 1: Number of *types* for inflectional classes of voice.

	Active-inflected futures	Non-suffixed middle futures	Suffixed futures	TOTAL
LXX	988	339	421	1748
NT	286	90	128	504
TOTAL	1274	429	549	2252

2.2.1 The Reduction of Inflectional Classes: Attic Futures Disappear

According to Blass et al. ([1898] 1961: 40), Attic futures are in general lacking in Hellenistic Greek, because they were replaced by the sigmatic futures, for instance καλέσω (*kalé-s-ō*) [call-FUT-1SG.ACT] ‘I will call’ instead of καλ-ῶ (*kal-ō*) [call-FUT.1SG.ACT] ‘I will call’. Attic futures do not display the sigmatic marker of the future and resemble the present stem. For instance, the form καλ-ῶ (*kal-ō*) can be both future [call-FUT.1SG.ACT] ‘I will call’ and present [call-PRS.1SG.ACT] ‘I call’. Thackeray (1909: 228) points out that the disappearance of Attic futures was gradual in the LXX. Even if “[t]he tendency was to bring these anomalous forms into line with the other sigmatic futures” (1909: 228), the state of affairs in the LXX is very dynamic (cf. Abel 1927: 66–67): doublets of Attic futures (5b) and sigmatic futures (5a) are attested for the same verb, as the following example shows:

(5) a. (Sir. 29.6)

ἐὰν ἰσχύσῃ, μόλις κομί-σ-εται τὸ
eàn isk^húsēi, *mólis komí-s-etai* *tò*
 if be_capable.AOR.3SG.ACT scarcely recover-FUT-3SG.MID DET.ACC

ἥμισυ καὶ λογι-εῖ-ται αὐτὸ εὕρεμα
hémisu kai logi-eî-tai autò heúrema
 half.ACC and consider-FUT-3SG.MID 3SG.ACC windfall.ACC

‘if he is capable, he will recover scarcely half and will consider that as a windfall.’²

b. (Hos. 2.11)

διὰ τοῦτο ἐπιστρέ-ψ-ω καὶ κομι-οὔ-μαι τὸν
dià tou̅to epistré-ps-ō kai komi-ou̅-mai tòn
 for DEM.ACC return-FUT-1SG.ACT and recover-FUT-1SG.MID DET.ACC

σῖτόν μου
sítón mou
 grain.ACC 1SG.GEN

‘therefore I will return and carry off my grain.’

The new sigmatic future in (5a) occurs instead of the older contracted future in (5b). The latter is formed in analogy to the contracted future *λογι-οὔ-μαι* (*logi-ou̅-mai*) [consider-FUT-1SG.MID] ‘I will consider’, which never occurs as a normalized sigmatic form **λογι-σ-ομαι* (*logi-s-omai*) [consider-FUT-1SG.MID] in the LXX.

The replacement of Attic futures by sigmatic futures was not abrupt: as Thackeray (1909: 228) states, “the *κοινή* even employed some ‘Attic’ futures from verbs in *-ζω* which were unknown to Attic writers”. In the LXX, the verb *ἀρπάζ-ω* (*harpáz-ō*) [carry_off-PRS.1SG.ACT] ‘I carry off’ occurs as a sigmatic future in (6a) according to the Classical language, with the exception of the occurrence (6b), where a “hypercorrect” Attic future is found:

(6) a. (Lev. 19.13)

οὐκ ἀδική-σ-εις τὸν πλησίον καὶ οὐχ
ouk adikē-s-eis tòn plēsíon kai ouk^h
 not injure-FUT-2SG.ACT DET.ACC neighbour.ACC and not

² English translations are from the New English Translation of the Septuagint (<http://ccat.sas.upenn.edu/nets/edition/>), and the World English Bible, available on the website of the Perseus Project (<http://www.perseus.tufts.edu>), with some adjustments.

ἄρπά-σ-εις*harpá-s-eis*

plunder-FUT-2SG.ACT

‘you shall not act unjustly towards your neighbour, and you shall not plunder’

b. (Ezek. 18.7)

ἐνεχυρασμὸν ὀφείλοντος ἀποδώ-σ-ει καὶ ἄρπαγμα
enek^hurasmòn op^heílontos apodṓ-s-ei kai hárpagma
 pledge.ACC debtor.GEN restore-FUT-3SG.ACT and robbery.ACC
 οὐχ ἄρπ-ᾶ-ται
ouk^h harp-â-tai
 not rob-FUT-3SG.MID
 ‘he shall restore a debtor’s pledge and shall not commit robbery.’

In the NT, some fluctuations between Attic and sigmatic futures are registered for the verbs κομίζ-ω (*komíz-ō*) [receive-PRS.1SG.ACT] ‘I receive’ and ἀπόλλυ-μι (*apóllu-mi*) [kill-PRS.1SG.ACT] ‘I kill’. The former verb is attested as a sigmatic future (7b), with the exception of the passage in (7a), whilst in the latter verb, sigmatic futures and Attic futures are distributed according to the active vs middle voices respectively, see (8a)–(8b):

(7) a. (1 Pet. 5.4)

κομι-εἶ-σθε τὸν ἀμαράντινον τῆς δόξης
komí-eî-st^he tòn amarántinon tês dóksēs
 receive-FUT-2PL.MID DET.ACC unfading.ACC DET.GEN glory.GEN
 στέφανον
stéphanon
 crown.ACC
 ‘you will receive the crown of glory that does not fade away.’

b. (Col. 3.25)

ὁ γὰρ ἀδικῶν **κομί-σ-εται** ὃ
ho gàr adikṓn komí-s-etai hò
 DET.NOM in_fact injuring.PTCP.NOM receive-FUT-3SG.MID REL.ACC
 ἠδίκησεν
ēdikēsen
 injure.AOR.3SG.ACT
 ‘but he who does wrong will receive again for the wrong that he has done.’

(8) a. (Mark 12.9)

ἐλεύ-σ-εται καὶ ἀπολέ-σ-ει τοὺς γεωργούς
eleú-s-etai kai apolé-s-ei toùs geōrgoús
 come-FUT-3SG.MID and kill-FUT-3SG.ACT DET.ACC farmers.ACC
 ‘he will come and destroy the farmers.’

b. (Matt. 26.52)

πάντες γὰρ οἱ λαβόντες μάχαιραν ἐν μαχαίρῃ
pántes gâr hoi labóntes mákhairan en mak^háirēi
 all.NOM in_fact DET.NOM taking.PTCP.NOM sword.ACC in sword.DAT
ἀπολ-οῦ-νται
apol-ou-ntai
 die-FUT-3PL.MID
 ‘all those who take the sword will die by the sword.’

The disappearance of Attic futures can be viewed as part of the general tendency of Koiné Greek to create more morphological transparency in the relation between the form and function of its grammatical categories. This also concerns voice in the future forms, with the sigmatic morpheme being used for the active voice and the suffixes -η-/-θη- (-ē-/-t^hē-) for the middle and passive voices. A similar state of affairs is found in the language of the documentary papyri. In the Ptolemaic papyri, Attic futures are still attested, while in the Postptolemaic papyri there are only a few traces of them. According to Mandilaras (1973: 172–173), they disappeared at the beginning of the Christian Era.

2.2.2 *Media tantum* Futures

In Classical Greek, there are two classes of *media tantum* forms, namely those which are middle-inflected only in the future stem (*media tantum* futures), and those which are middle-inflected in all stems (*media tantum* verbs). The morphological changes they underwent in Hellenistic Greek are not the same (cf. Mandilaras 1973: 178 on the language of the papyri). The *media tantum* futures were replaced by active futures, whilst the middle futures of *media tantum* verbs were replaced by suffixed futures (Thackeray 1909: 238, Helbing 1907: 89 on the language of the LXX, and Blass et al. [1898] 1961: 42, Moulton & Turner 1963: 54 on the language of the NT). These changes led to a one form-one meaning relationship in the domain of voice. They also led to an increase in the number of future types, because some *media tantum* futures survived besides the new active and suffixed forms.

Let us start with the *media tantum* futures. The first example concerns the verb ἁμαρτάν-ω (*hamartán-ō*) [do_wrong-PRS.1SG.ACT] ‘I do wrong’. The active future is attested twice in the Sirach, e.g. (9a); elsewhere in the LXX, the middle future is attested, e.g. (9b). In the NT, only the active future is attested, see (9c):

(9) a. (Sir. 24.22)

καὶ οἱ ἐργαζόμενοι ἐν ἐμοὶ οὐχ ἁμαρτή-σ-ουσι
kaì hoi ergazómenoi en emoì ouk^h hamartē-s-ousin
 and DET.NOM working.PTCP.NOM in 1SG.DAT not sin-FUT-3PL.ACT
 ‘and those who work with me will not sin.’

b. (Num. 32.23)

ἁμαρτή-σ-εσθε ἔναντι κυρίου καὶ γνώ-σ-εσθε τὴν
hamartē-s-est^he énantí kuríou kaì gnō-s-est^he tēn
 sin-FUT-2PL.MID against Lord.GEN and know-FUT-2PL.MID DET.ACC
 ἁμαρτίαν ὑμῶν
hamartían humōn
 sin.ACC 2PL.GEN
 ‘you will sin against the Lord and you will know your sin.’

c. (Matt. 18.21)

κύριε, ποσάκις ἁμαρτή-σ-ει εἰς ἐμέ ὁ
kúrie, posákis hamartē-s-ei eis emè ho
 Lord.VOC how_often sin-FUT-3SG.ACT against 1SG.ACC DET.NOM
 ἀδελφός μου καὶ ἀφή-σ-ω αὐτόν;
adelph^hós mou kaì ap^hē-s-ō autōi?
 brother.NOM 1SG.GEN and forgive-FUT-1SG.ACT 3SG.DAT
 ‘Lord, how often shall my brother sin against me, and I forgive him?’

The fluctuations in the LXX can be explained by assuming that *media tantum* futures were not affected by normalization in the earlier translated books, e.g. the book of Numbers, presumably translated in the first half of the 3rd ct. BC, whilst they were affected by normalization in the later translated books, e.g. Sirach, presumably translated in the latter third of the 2nd ct. BC (cf. Wright 2015: 412–413). Another example is provided by the verb θαυμάζ-ω (*t^haumáz-ō*) [marvel-PRS.1SG.act] ‘I marvel’, which is inflected as an active future θαυμά-σ-ουσι (*t^haumá-s-ousin*) [marvel-FUT-3PL.ACT] ‘they will marvel’ in Isa. 14.16, and as a middle future θαυμά-σ-ονται (*t^haumá-s-ontai*) [marvel-FUT-3PL.MID] in Lev. 26.32. In the NT, the verb is attested once as a suffixed future θαυμασ-θή-σ-ονται (*t^haumás-t^hē-s-ontai*) [marvel-PASS.AOR-FUT-3PL.MID] in Rev. 17.8.

Some normalized futures can also be found in the Pentateuch. For instance, the verb ἀπαντά-ω (*apantá-ō*) [meet-PRS.1SG.MID] ‘I meet’ occurs as an active

future in Genesis (10a), but preserves middle inflection in the later books of the LXX, e.g. the first book of Kings (10b). In the NT, the verb is attested once as an active future (10c):

(10) a. (Gen. 49.1)

τί **ἀπαντή-σ-ει** ὑμῖν ἐπ' ἐσχάτων τῶν ἡμερῶν
tí apantē-s-ei humîn ep' esk^hátōn tōn hēmerōn
 what.NOM happen-FUT-3SG.ACT 2PL.DAT at last.GEN DET.GEN days.GEN
 '[in order that I may tell you] what will happen to you at the last of the days.'

b. (1 Kings 28.10)

εἰ **ἀπαντή-σ-εταί** σοι ἀδικία ἐν τῷ λόγῳ
ei apantē-s-etai soi adikia en tōi lōgōi
 if befall-FUT-3SG.MID 2SG.DAT injustice.NOM in DET.DAT matter.DAT
 τούτῳ
toutōi
 DEM.DAT

'[The Lord lives,] if injustice shall befall you in this matter.'

c. (Mark 14.13)

καὶ **ἀπαντή-σ-ει** ὑμῖν ἄνθρωπος κεράμιον ὕδατος
kai apantē-s-ei humîn an^hrōpos kerámion húdatos
 and meet-FUT-3SG.ACT 2PL.DAT man.NOM pitcher.ACC water.GEN
 βαστάζων
bastázōn
 carrying.PTCP.NOM

'a man carrying a pitcher of water will meet you.'

Free alternation between active and middle futures can be observed within the same book of the LXX, e.g. σιωπά-ω (*siōpá-ō*) [be_silent-PRS.1SG.ACT] 'I keep silent' in (11a) and (11b). There is not free alternation for this verb in the NT, where only active futures are possible, e.g. (11c):

(11) a. (Isa. 65.6)

οὐ **σιωπή-σ-ω**, ἕως ἂν ἀποδῶ εἰς τὸν
ou siōpē-s-ō, hēōs an apodō eis tōn
 not be_silent-FUT-1SG.ACT until PRT repay.AOR.1SG.ACT into DET.ACC
 κόλπον αὐτῶν τὰς ἁμαρτίας αὐτῶν
kōlpon autōn tās hamartias autōn
 bosom.ACC 3PL.GEN DET.ACC sins.ACC 3PL.GEN

'I will not keep silent until I repay into their bosom their sins.'

b. (Isa. 62.1)

διὰ Σιων οὐ σιωπή-σ-ομαι [...] ἕως ἄν
dià Siōn ou siōpḗ-s-omai hēōs ἄn
 because_of Sion not be_silent-FUT-1SG.MID until PRT
 ἐξέλθῃ ὡς φῶς ἡ δικαιοσύνη μου
ekséltḥēi hōs pḥōs hē dikaiosúnē mou
 go.forth.AOR.3SG.ACT as light.NOM DET.NOM righteousness.NOM 1SG.GEN
 ‘because of Sion I will not be silent until my righteousness goes forth
 like light.’

c. (Luke 19.40)

ἐάν οὗτοι σιωπή-σ-ουσιν, οἱ λίθοι
eàn houṭoi siōpḗ-s-ousin, hoi lítḥoi
 if DEM.NOM be_silent-FUT-3PL.ACT DET.NOM stones.NOM
 κρά-ξ-ουσιν
krá-ks-ousi
 cry_out-FUT-3PL.ACT
 ‘if these were silent, the stones would cry out.’

According to Thackeray (1909: 233), some *media tantum* futures, such as γνώ-σ-ομαι (*gnō-s-omai*) [know-FUT-1SG.MID] ‘I will know’, λή-ψ-ομαι (*lē-ps-omai*) [take-FUT-1SG.MID] ‘I will take’, μαθή-σ-ομαι (*matḥḗ-s-omai*) [learn-FUT-1SG.MID] ‘I will learn’, ὄ-ψ-ομαι (*ó-ps-omai*) [see-FUT-1SG.MID] ‘I will see’, are in free alternation with the corresponding suffixed futures, e.g. γνώ-σ-ομαι (*gnō-s-omai*) [know-FUT-1SG.MID] ‘I will know’ and γνωσ-θή-σ-ομαι (*gnōs-tḥḗ-s-omai*) [know-PASS.AOR-FUT-1SG.MID] ‘I will be known’, in both the LXX and the NT. I am not convinced that these are cases of free alternation. I will come back to this issue in Section 2.2.3.

In the reassessment of the voice markers of the future, the frequency of the verb is a relevant parameter. The *media tantum* futures of frequent verbs, such as ὄ-ψ-ομαι (*ó-ps-omai*) [see-FUT-1SG.MID] ‘I will see’ and γνώ-σ-ομαι (*gnō-s-omai*) [know-FUT-1SG.MID] ‘I will know’, occur as *media tantum* in both the LXX and the NT. Some of them also occur with active inflection in the LXX, e.g. ἀκού-σ-ω (*akou-s-ō*) [hear-FUT-1SG.ACT] ‘I will hear’, along with ἀκού-σ-ομαι (*akou-s-omai*) [hear-FUT-1SG.MID] ‘I will hear’. In the NT, the middle ἀκούσομαι (*akou-s-omai*) [hear-FUT-1SG.MID] ‘I will hear’ occurs in the Acts and the active ἀκούσω (*akou-s-ō*) [hear-FUT-1SG.ACT] ‘I will hear’ in the Gospels.

Let us now turn to the futures of *media tantum* verbs. In Classical Greek, these verbs are inflected in the middle in all stems, included that of the future. Some of them also occur as middle futures in the LXX and the NT, e.g. ἀρνέ-ομαι (*arné-omai*) [refuse-PRS.1SG.MID] ‘I refuse’, γίγν-ομαι (*gígn-omai*) [become-PRS.1SG.MID] ‘I become’, δύνα-μαι (*dúna-mai*) [be_able-PRS.1SG.MID] ‘I am able’,

καυχά-ομαι (*kauk^há-omai*) [speak_loud-PRS.1SG.MID] ‘I speak loud’, φείδ-ομαι (*p^héid-omai*) [spare-PRS.1SG.MID] ‘I spare’. Other verbs occur as suffixed futures in the LXX, see examples (12); among them, only the verb αἰσχύν-ομαι (*aisk^hún-omai*) ‘to be ashamed’ is attested as a suffixed future in the NT.

(12) a. (Isa. 45.16)

αἰσχυν-θή-σ-ονται καὶ
aisk^hun-t^hē-s-ontai *kai*
 be_ashamed-PASS.AOR-FUT-3PL.MID and
 ἐντραπ-ή-σ-ονται
entrap-ē-s-ontai
 be_disgraced-PASS.AOR-FUT-3PL.MID
 ‘(all who oppose him) shall be ashamed and disgraced.’

b. (Sir. 38.14)

καὶ γὰρ αὐτοὶ κυρίου **δεη-θή-σ-ονται**
kai gār autoi kuríou deē-t^hē-s-ontai
 and in_fact 3PL.NOM Lord.GEN have_need-PASS.AOR-FUT-3PL.MID
 ‘for they will also petition the Lord.’

c. (Deut. 7.4)

καὶ **ὀργισ-θή-σ-εται** θυμῷ κύριος εἰς
kai orgis-t^hē-s-etai *t^humōi kúrios eis*
 and be_angered-PASS.AOR-FUT-3SG.MID wrath.DAT Lord.NOM against
 ὑμᾶς
humās
 2PL.ACC
 ‘and the Lord will be angered with wrath against you.’

d. (Sir. 34.14)

ὁ φοβούμενος κύριον οὐδὲν
ho p^hoboúmenos kúrion oudèn
 DET.NOM fearing.PTCP.NOM Lord.ACC nothing.ACC
εὐλαβη-θή-σ-εται
eulabē-t^hē-s-etai
 be_timid-PASS.AOR-FUT-3SG.MID
 ‘he who fears the Lord will be timid in nothing.’

The progressive loss of middle futures and their replacement by either active or suffixed futures provide evidence of the functional erasure of middle inflection in the future tense of Greek. This process concerned the middle forms of both *media tantum* futures and *media tantum* verbs since Classical Greek onwards and affected all morphological classes (cf. Thackeray 1909: 238).

2.2.3 The Increase in Passive Futures

Passive futures spread in Classical Greek on the model of passive aorists. According to scholars (cf. Thackeray 1909: 233–241, Abel 1927: 70, Blass et al. [1898] 1961: 41, and Magnien 1912: 375), they are very productive in both the LXX and the NT. Some of them are not attested earlier than the LXX, as they are either inflected as middle futures in Classical Greek, e.g. *πλανή-σ-ομαι* (*planē-s-omai*) [lead_astroy-FUT-1SG.MID] ‘I will lead astray’ from *πλανά-ω* (*planá-ō*) [lead_astroy-PRS.1SG.MID] ‘I lead astray’, or they never occur in the middle voice in earlier usage, e.g. *δικαιώ-σ-ω* (*dikaiō-s-ō*) [justify-FUT-1SG.ACT] ‘I will justify’ from *δικαιό-ω* (*dikaiō-ō*) [justify-PRS.1SG.ACT] ‘I justify’. Some examples follow:

(13) a. (Exod. 29.43)

καὶ	ἁγιασ-θή-σ-ομαι		ἐν	δόξῃ	μου
<i>kaì</i>	<i>hagias-t^hē-s-omai</i>		<i>en</i>	<i>dóksēi</i>	<i>mou</i>
and	regard_as_holy-PASS.AOR-FUT-1SG.MID	in	glory.DAT	1SG.GEN	
	‘and I will be regarded as holy by my glory.’				

b. (Isa. 26.19)

καὶ	ἐγερ-θή-σ-ονται	οἱ	ἐν	τοῖς	μνημείοις
<i>kaì</i>	<i>eger-t^hē-s-ontai</i>	<i>hoi</i>	<i>en</i>	<i>toîs</i>	<i>mnēmēiois</i>
and	raise-PASS.AOR-FUT-3PL.MID	DET.NOM	in	DET.DAT	tombs.DAT
	‘and those who are in the tombs shall be raised.’				

c. (Sir. 31.5)

ὁ	ἀγαπῶν	χρυσίον	οὐ	δικαιω-θή-σ-εται /	
<i>ho</i>	<i>agapōn</i>	<i>k^hrusíon</i>	<i>ou</i>	<i>dikaiō-t^hē-s-etai</i>	
DET.NOM	loving.PTCP.NOM	gold.ACC	not	justify-PASS.AOR-FUT-3SG.MID	
καὶ	ὁ	διώκων	διάφορα	ἐν	αὐτοῖς
<i>kaì</i>	<i>ho</i>	<i>diōkōn</i>	<i>diáph^hora</i>	<i>en</i>	<i>autoîs</i>
and	DET.NOM	pursuing.PTCP.NOM	profits.ACC	in	3PL.DAT
	πλανη-θή-σ-εται				
	<i>planē-t^hē-s-etai</i>				
	lead_astroy-PASS.AOR-FUT-3SG.MID				
	‘He who loves gold will be not justified, and he who pursues profits will be led astray by them.’				

The productivity of passive futures is also evidenced by their occurrence with verbal items which denote notions of the Christian religion:

(14) a. (Mark 10.39)

καὶ τὸ βάπτισμα ὃ ἐγὼ βαπτίζομαι
kai tò báp̄tisma hò egò̄ baptízomai
 and DET.ACC baptism.ACC REL.ACC 1SG.NOM baptize.PRS.1SG.MID

βαπτισ-θή-σ-εσθε

baptis-t^hē-s-est^he

baptize-PASS.AOR-FUT-2PL.MID

‘and you shall be baptized with the baptism that I am baptized with.’

b. (Luke 14.29)

εἰ καὶ πάντες σκανδαλισ-θή-σ-ονται, ἀλλ’ οὐκ ἐγὼ
ei kai pantes skandalis-t^hē-s-ontai all’ ouk egò̄
 if and all.NOM take_offence-PASS.AOR-FUT-3PL.MID but not 1SG.NOM

‘and if all people begin to mock him, but I not.’

c. (John 14.21)

ὁ δὲ ἀγαπῶν με ἀγαπη-θή-σ-εται
ho dè agarōn me agarē-t^hē-s-etai
 DET.NOM PRT loving.PTCP.NOM 1SG.ACC love-PASS.AOR-FUT-3SG.MID

ὑπὸ τοῦ πατρός μου

hypò toū patrós mou

by DET.GEN father.GEN 1SG.GEN

‘One who loves me will be loved by my Father.’

The two pairs of verbs of the following examples display the opposition between active vs. middle/passive voices realized by the suffixal system of voice marking. The redundancy of this strategy is evidenced by the co-occurrence of both the suffix -θη- (-t^hē-) and the middle inflection, cf. (15a) and (16a), compared to the active inflection of the active term, cf. (15b) and (16b):

(15) a. (Deut. 18.12)

κύριος ἐξολεθρεύ-σ-ει αὐτοὺς ἀπὸ σοῦ
kýrios eksolet^hreú-s-ei autoús apò soú
 Lord.NOM drive_out-FUT-3SG.ACT 3PL.ACC from 2SG.GEN

‘your God does drive them out from before you.’

b. (Lev. 20.18)

ἐξολεθρευ-θή-σ-ονται ἀμφότεροι ἐκ τοῦ γένους
eksolet^hreu-t^hē-s-ontai amphóteroi ek toū génous
 drive_out-PASS.AOR-FUT-3PL.MID both.NOM from DET.GEN people.GEN

αὐτῶν

autōn

3PL.GEN

‘and both of them shall be cut off from among their people.’

(16) a. (Luke 9.24)

ὃς δ' ἂν ἀπολέσῃ τὴν ψυχὴν αὐτοῦ
hōs d' ἂn apolésēi tēn psukhēn autoū
 REL.NOM PRT PRT lose.AOR.3SG.ACT DET.ACC life.ACC 3SG.GEN
 ἕνεκεν ἐμοῦ, οὗτος σῶ-σ-εἰ αὐτήν
hēneken emou hoūtos sō-s-ei autēn
 because_of 1SG.GEN DEM.NOM save-FUT-3SG.ACT 3SG.ACC
 ‘but whoever will lose his life for my sake, the same will save it.’

b. (Matt. 9.21)

ἐὰν μόνον ἅψωμαι τοῦ ἱματίου αὐτοῦ
eān monon hāpsōmai tou himatiou autoū
 if just touch.AOR.1SG.MID DET.GEN garment.GEN 3SG.GEN
σω-θή-σ-ομαι
sō-t^hē-s-omai
 save-PASS.AOR-FUT-1SG.MID
 ‘if I just touch his garment, I will be saved.’

The suffixed futures are not redundant in pairs such as (17)–(19), in which transitive *media tantum* futures occur. With respect to these transitive forms, the suffixed futures are the sole morphological strategy for expressing the passive:

(17) a. (Isa. 29.15)

καὶ τίς ἡμᾶς γνῶ-σ-εται ἢ ἃ ἡμεῖς
kaì tís hēmās gnō-s-etai ἢ ἃ hēmeīs
 and INT.NOM 1PL.ACC know-FUT-3SG.MID or REL.ACC 1PL.NOM
 ποιοῦμεν;
poioumen
 do.PRS.1PL.ACT
 ‘and who will know us or the things we do?’

b. (Isa. 61.9)

καὶ γνωσ-θή-σ-εται ἐν τοῖς ἔθνεσιν τὸ
kaì gnōs-t^hē-s-etai en toīs ét^hnesin tò
 and know-PASS.AOR-FUT-3SG.MID in DET.DAT nations.DAT DET.NOM
 σπέρμα αὐτῶν
spérma autōn
 offspring.NOM 3PL.GEN
 ‘and their offspring will be known among nations.’

(18) a. (Jdt. 2.5)

καὶ **λήμ-ψ-η** μετὰ σεαυτοῦ ἄνδρας πεποιθότας
kaì lēm-ps-ēi metà seautoû ándras pepoit^hótas
 and take-FUT-2SG.MID with yourself.GEN men.ACC relying.PTCP.ACC
 ἐν ἰσχύι αὐτῶν
en isk^húi autôn
 in strength.DAT 3PL.GEN
 ‘and you shall take with you men who rely on their strength.’

b. (Jdt. 8.21)

καὶ **λημφ-θή-σ-εται** πᾶσα ἡ Ἰουδαία
kaì lēmp^h-t^hē-s-etai pāsa hē Ioudaía
 and take-PASS.AOR-FUT-3SG.MID all.NOM DET.NOM Judea.NOM
 ‘also all Judea will be taken.’

(19) a. (Deut. 28.10)

καὶ **ὄψ-ονταί** σε πάντα τὰ ἔθνη τῆς
kaì ó-ps-ontai se pánta tà é^thñē tēs
 and see-FUT-3PL.MID 2SG.ACC all.NOM DET.NOM nations.NOM DET.GEN
 γῆς
gēs
 earth.GEN
 ‘and all the nations of the earth shall see you.’

b. (Lev. 9.6)

καὶ **ὄφ-θή-σ-εται** ἐν ὑμῖν δόξα κυρίου
kaì op^h-t^hē-s-etai en humîn doksa kuríou
 and see-PASS.AOR-FUT-3SG.MID in 2PL.DAT glory.NOM Lord.GEN
 ‘and the glory of the Lord will be seen among you.’

Further evidence of the productivity of suffixed futures is provided by the verb ὁρά-ω (horá-ō) [see-PRS.1SG.ACT] ‘I see’, whose paradigm counts not only the suffixed future ὄφ-θή-σ-ομαι (op^h-t^hē-s-omai) [see-PASS.AOR-FUT-1SG.MID] ‘I will be seen’, formed on the aorist stem ὄφθη- (op^ht^hē-), but also the suffixed future ὄρα-θή-σ-ομαι (hora-t^hē-s-omai) [see-PASS.AOR-FUT-1SG.MID] ‘I will be seen’, formed on the present stem ὄρα- (hora-) (19c):

(19) c. (Job 22.14)

νέφη ἀποκρυφῆ αὐτοῦ, καὶ οὐχ
nép^hē apokryp^hē autoû, kaì ouk^h
 clouds.NOM hiding_place.NOM 3SG.GEN and not

ὄρα-θή-σ-εται καὶ γῦρον οὐρανοῦ
hora-t^hē-s-etai *kai gûron* *ouranou*
 see-PASS.AOR-FUT-3SG.MID and circle.ACC heaven.GEN
 δια.πορεύ-σ-εται
dia.poreú-s-etai
 pass.through-FUT-3SG.MID
 ‘clouds are his hiding-place, and he will not be seen
 and he will pass through the circle of heaven.’

Except for the form παρ.ορα-θή-σ-εσθαι (*par.ora-t^hē-s-est^hai*) [over.see-PASS.AOR-FUT-INF.MID] ‘to disregard’ attested in the third book of Maccabees, this is the unique occurrence of the verb in the LXX. The form was not unusual in the Hellenistic age, however, because it is attested in the works by the mathematicians Autolycus and Euclid (4th/3rd ct. BC).

For the sake of simplicity, I have only given examples of futures with -θη- (-*t^hē-*) and not with -η- (-*ē-*). The latter are not productive and belong to a closed word class, which includes the following lexical items in: (a) the LXX, (b) the NT, and (c) the LXX and the NT:

(a) ἀναγγελ-ή-σ-ομαι (*anaggel-ē-s-omai*) [inform-PASS.AOR-FUT-1SG.MID] ‘I will be informed’, ἀνα.στραφ-ή-σ-ομαι (*ana.straph^h-ē-s-omai*) [turn.back-PASS.AOR-FUT-1SG.MID] ‘I will turn back’, ἀπαγγελ-ή-σ-ομαι (*apaggel-ē-s-omai*) [announce-PASS.AOR-FUT-1SG.MID] ‘I will be announced’, ἀποκρυβ-ή-σ-ομαι (*apokrub-ē-s-omai*) [make_invisible-PASS.AOR-FUT-1SG.MID] ‘I will be invisible’, ἀπο.ρυ-ή-σ-ομαι (*apo.ru-ē-s-omai*) [flow.off-PASS.AOR-FUT-1SG.MID] ‘I will flow off’, ἀποσταλ-ή-σ-ομαι (*apostal-ē-s-omai*) [send-PASS.AOR-FUT-1SG.MID] ‘I will be sent’, ἀπο.στραφ-ή-σ-ομαι (*apo.straph^h-ē-s-omai*) [turn.away-PASS.AOR-FUT-1SG.MID] ‘I will turn away’, βαφ-ή-σ-ομαι (*baph^h-ē-s-omai*) [dip-PASS.AOR-FUT-1SG.MID] ‘I will be dipped’, γραφ-ή-σ-ομαι (*grap^h-ē-s-omai*) [write-PASS.AOR-FUT-1SG.MID] ‘I will be written’, διαγγελ-ή-σ-ομαι (*diaggel-ē-s-omai*) [spread_knowledge_of-PASS.AOR-FUT-1SG.MID] ‘I will be known’, διαλλαγ-ή-σ-ομαι (*diallag-ē-s-omai*) [change-PASS.AOR-FUT-1SG.MID] ‘I will change’, διαρπαγ-ή-σ-ομαι (*diarpag-ē-s-omai*) [plunder-PASS.AOR-FUT-1SG.MID] ‘I will be plundered’, δια.ρραγ-ή-σ-ομαι (*dia.rrag-ē-s-omai*) [tear.apart-PASS.AOR-FUT-1SG.MID] ‘I will be teared apart’, διασπαρ-ή-σ-ομαι (*diaspar-ē-s-omai*) [disperse-PASS.AOR-FUT-1SG.MID] ‘I will be dispersed’, δια.σταλ-ή-σ-ομαι (*dia.stal-ē-s-omai*) [set.apart-PASS.AOR-FUT-1SG.MID] ‘I will be set apart’, διαστραφ-ή-σ-ομαι (*diastrap^h-ē-s-omai*) [divert-PASS.AOR-FUT-1SG.MID] ‘I will be diverted’, διατραφ-ή-σ-ομαι (*diatrap^h-ē-s-omai*) [provide_food-PASS.AOR-FUT-1SG.MID] ‘I will be fed’, διαφθαρ-ή-σ-ομαι (*diaph^ht^har-ē-s-omai*) [ruin-PASS.AOR-FUT-1SG.MID] ‘I will be ruined’, ἐκ.ρυ-ή-σ-ομαι (*ek.ru-ē-s-omai*) [fall.off-PASS.AOR-FUT-1SG.MID] ‘I will fall off’, ἐκ.ριφ-ή-σ-ομαι (*ek.rip^h-ē-s-omai*)

[throw.out-PASS.AOR-FUT-1SG.MID] ‘I will be threw out’, ἐκτριβ-ή-σ-ομαι (*ektrib-ē-s-omai*) [destroy_completely-PASS.AOR-FUT-1SG.MID] ‘I will be completely destroyed’, ἐλιγ-ή-σ-ομαι (*helig-ē-s-omai*) [roll_along-PASS.AOR-FUT-1SG.MID] ‘I will roll along’, ἐντακ-ή-σ-ομαι (*entak-ē-s-omai*) [melt-PASS.AOR-FUT-1SG.MID] ‘I will be melted’, ἐντραπ-ή-σ-ομαι (*entrap-ē-s-omai*) [show_respect-PASS.AOR-FUT-1SG.MID] ‘I will show respect’, ἐνυποταγ-ή-σ-ομαι (*enupotag-ē-s-omai*) [give_a_command-PASS.AOR-FUT-1SG.MID] ‘I will be given a command’, ἐπαναστραφ-ή-σ-ομαι (*epanastrap^h-ē-s-omai*) [return-PASS.AOR-FUT-1SG.MID] ‘I will return’, ἐπαποσταλ-ή-σ-ομαι (*epapostal-ē-s-omai*) [cause_to_come-PASS.AOR-FUT-1SG.MID] ‘I will come’, ἐπιφαν-ή-σ-ομαι (*epip^han-ē-s-omai*) [make_appearance-PASS.AOR-FUT-1SG.MID] ‘I will appear’, ταφ-ή-σ-ομαι (*taph^h-ē-s-omai*) [bury-PASS.AOR-FUT-1SG.MID] ‘I will be buried’, θλιβ-ή-σ-ομαι (*t^hlib-ē-s-omai*) [squeeze-PASS.AOR-FUT-1SG.MID] ‘I will be squeezed’, καταλλαγ-ή-σ-ομαι (*katallag-ē-s-omai*) [reconcile_oneself_with-PASS.AOR-FUT-1SG.MID] ‘I will reconcile myself with’, κατανυγ-ή-σ-ομαι (*katanug-ē-s-omai*) [affect-PASS.AOR-FUT-1SG.MID] ‘I will be affected’, κατασκαφ-ή-σ-ομαι (*kataskap^h-ē-s-omai*) [raze_to_the_ground-PASS.AOR-FUT-1SG.MID] ‘I will be razed to the ground’, κατασπαρ-ή-σ-ομαι (*kataspār-ē-s-omai*) [spread_abroad-PASS.AOR-FUT-1SG.MID] ‘I will spread abroad’, καταστραφ-ή-σ-ομαι (*katastrap^h-ē-s-omai*) [ruin-PASS.AOR-FUT-1SG.MID] ‘I will be ruined’, κρυβ-ή-σ-ομαι (*krub-ē-s-omai*) [hide-PASS.AOR-FUT-1SG.MID] ‘I will be hidden’, παγ-ή-σ-ομαι (*pag-ē-s-omai*) [position_firmly-PASS.AOR-FUT-1SG.MID] ‘I will be solid’, πλαγ-ή-σ-ομαι (*plag-ē-s-omai*) [hit-PASS.AOR-FUT-1SG.MID] ‘I will be hit’, ρυ-ή-σ-ομαι (*hru-ē-s-omai*) [flow_forth-PASS.AOR-FUT-1SG.MID] ‘I will flow forth’, ραγ-ή-σ-ομαι (*hrag-ē-s-omai*) [split-PASS.AOR-FUT-1SG.MID] ‘I will be split’, ριφ-ή-σ-ομαι (*hrip^h-ē-s-omai*) [cast-PASS.AOR-FUT-1SG.MID] ‘I will be cast’, σαπ-ή-σ-ομαι (*sap-ē-s-omai*) [make_rot-PASS.AOR-FUT-1SG.MID] ‘I will rot’, σπαρ-ή-σ-ομαι (*spar-ē-s-omai*) [disperse-PASS.AOR-FUT-1SG.MID] ‘I will be dispersed’, στραφ-ή-σ-ομαι (*strap^h-ē-s-omai*) [transform-PASS.AOR-FUT-1SG.MID] ‘I will be transformed’, συγχαρ-ή-σ-ομαι (*sug^har-ē-s-omai*) [congratulate-PASS.AOR-FUT-1SG.MID] ‘I will congratulate’, συμμυγ-ή-σ-ομαι (*summig-ē-s-omai*) [mix_together-PASS.AOR-FUT-1SG.MID] ‘I will mix together’, συμπροσπλακ-ή-σ-ομαι (*sumprosplak-ē-s-omai*) [get_entangled-PASS.AOR-FUT-1SG.MID] ‘I will get entangled’, σφαγ-ή-σ-ομαι (*sp^hag-ē-s-omai*) [slaughter-PASS.AOR-FUT-1SG.MID] ‘I will be slaughtered’, τακ-ή-σ-ομαι (*tak-ē-s-omai*) [melt-PASS.AOR-FUT-1SG.MID] ‘I will be melted’, τραφ-ή-σ-ομαι (*trap^h-ē-s-omai*) [allow_to_grow-PASS.AOR-FUT-1SG.MID] ‘I will grow’;

(b) ἀναπα-ή-σ-ομαι (*anapa-ē-s-omai*) [stop-PASS.AOR-FUT-1SG.MID] ‘I will be stopped’, ἀνοιγ-ή-σ-ομαι (*anoig-ē-s-omai*) [open-PASS.AOR-FUT-1SG.MID] ‘I will be open’, ἀρπαγ-ή-σ-ομαι (*harpag-ē-s-omai*) [seize-PASS.AOR-FUT-1SG.MID] ‘I will be seized’, δαρ-ή-σ-ομαι (*dar-ē-s-omai*) [flay-PASS.AOR-FUT-1SG.MID] ‘I will be

flayed’, ἐκ.τραπ-ή-σ-ομαι (*ek.trap-ê-s-omai*) [turn.aside-PASS.AOR-FUT-1SG.MID] ‘I will turn aside’, ἐπανα.πα-ή-σ-ομαι (*epana.pa-ê-s-omai*) [rest.upon-PASS.AOR-FUT-1SG.MID] ‘I will rest’, φραγ-ή-σ-ομαι (*p^hrag-ê-s-omai*) [stop-PASS.AOR-FUT-1SG.MID] ‘I will be stopped’, ψυγ-ή-σ-ομαι (*psug-ê-s-omai*) [make_dry-PASS.AOR-FUT-1SG.MID] ‘I will be dry’;

(c) ἀλλαγ-ή-σ-ομαι (*allag-ê-s-omai*) [change-PASS.AOR-FUT-1SG.MID] ‘I will change’, ἐκ.κοπή-σ-ομαι (*ek.kop-ê-s-omai*) [cut.out-PASS.AOR-FUT-1SG.MID] ‘I will be cut out’, ἐν.τραπ-ή-σ-ομαι (*en.trap-ê-s-omai*) [turn.about-PASS.AOR-FUT-1SG.MID] ‘I will turn about’, κατακα-ή-σ-ομαι (*kataka-ê-s-omai*) [burn-PASS.AOR-FUT-1SG.MID] ‘I will be burnt’, μετα.στραφ-ή-σ-ομαι (*meta.straph^h-ê-s-omai*) [turn.round-PASS.AOR-FUT-1SG.MID] ‘I will turn round’, συντριβ-ή-σ-ομαι (*suntrib-ê-s-omai*) [crash-PASS.AOR-FUT-1SG.MID] ‘I will be crashed’, ὑποταγ-ή-σ-ομαι (*hypotag-ê-s-omai*) [place-PASS.AOR-FUT-1SG.MID] ‘I will be placed’, φαν-ή-σ-ομαι (*p^han-ê-s-omai*) [show-PASS.AOR-FUT-1SG.MID] ‘I will appear’, φθαρ-ή-σ-ομαι (*p^ht^har-ê-s-omai*) [destroy-PASS.AOR-FUT-1SG.MID] ‘I will be destroyed’, χαρ-ή-σ-ομαι (*k^har-ê-s-omai*) [rejoice-PASS.AOR-FUT-1SG.MID] ‘I will rejoice’.

2.2.4 Periphrases for the Future in the LXX and the NT

Let us now turn to the periphrases with μέλλ-ω (*méll-ō*) [be_going_to-PRS.1SG.ACT] ‘I am going to’ and with θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ plus the infinitive of the lexical verb, which are commonly considered as replacing the synthetic futures in Hellenistic-Roman Greek (cf. Markopoulos 2009: 46–47). As far as the Pentateuch is concerned, Evans (2001: 227–229) remarks that the construction with θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ plus infinitive is more common than that with μέλλ-ω (*méll-ō*) [be_going_to-PRS.1SG.ACT] ‘I am going to’ plus infinitive, which is very rare. However, neither of them has yet developed an auxiliary function in the LXX. Lee (2010: 29–30) gives three examples of future-oriented periphrases with θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’, one of which is from the Pentateuch:

(20) (Exod. 2.14)

ὁ	δὲ	εἶπεν [...]	μὴ	ἀνελεῖν	με	σὺ
<i>ho</i>	<i>dè</i>	<i>eîpen</i>	<i>mè</i>	<i>aneleîn</i>	<i>me</i>	<i>sù</i>
DET.NOM	PRT	say.AOR.3SG.ACT	not	kill.INF	1SG.ACC	2SG.NOM
θέλ-εις,	ὄν	τρόπον	ἀνείλες	ἐχθὲς	τὸν	
<i>t^hél-eis</i>	<i>hòn</i>	<i>trópon</i>	<i>aneîles</i>	<i>ek^ht^hès</i>	<i>tòn</i>	
want-PRS.2SG.ACT	REL.ACC	way.ACC	kill.AOR.2SG.ACT	yesterday	DET.ACC	

Αἰγύπτιον;

*Aigúption?**Egyptian-ACC*

‘He said, “Do you plan to kill me, as you killed the Egyptian?”’

The verb θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ occurs as a present tense and is translated as ‘I plan to’. Different readings are possible: they range from the plain desiderative nuance (‘do you wish to kill?’) to the ingressive one (‘are you going to kill?’), as suggested by Lee (2010: 30). The translation ‘do you plan to kill me’, given by the American Standard Bible, is an in-between solution which maintains both the modal (desiderative) value of the verb θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ and the aspectual (ingressive) value which is presumed to occur in the grammaticalization.

The other two occurrences of future-oriented periphrases are from the book of Tobit (3.10 and 6.15). In both of them, the verb θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ is inflected in the aorist stem and is interpreted as an ingressive aorist ‘was going to, was about to’ (Lee 2010: 20). To sum up, the periphrases with θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ can never be translated as plain futures in the LXX.

The use of periphrases is thought to have spread two/three centuries later, when the Gospels and the other books of the NT were composed. As a reflection of the vernacular language of the time, the NT is expected to be characterized by periphrases for the future (Markopoulos 2009). Actually, both verbs μέλλ-ω (*méll-ō*) [be_going_to-PRS.1SG.ACT] ‘I am going to’ and θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ occur in periphrases with infinitives in the NT, but they express modal values, namely intention for μέλλ-ω (*méll-ō*) [be_going_to-PRS.1SG.ACT] ‘I am going to’ and volition for θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’, rather than a reference to the future tense.

(21) a. (John 5.40)

καὶ οὐ θέλ-ετε	ἐλθεῖν	πρός με	ἵνα ζῶῃν
<i>kaì ou t^hél-ete</i>	<i>el^heîn</i>	<i>pros me</i>	<i>hína zōèn</i>
and not want-PRS.2PL.ACT	come.INF	to	1SG.ACC that life.ACC
ἔχητε			
<i>ék^hēte</i>			
have.PRS.2PL.ACT			

‘Yet you will not come to me, that you may have life.’

b. (John 6.15)

Ἰησοῦς οὖν γνοῦς	ὅτι μέλλ-ουσιν
<i>Iēsoûs ouñ gnoûs</i>	<i>hóti méll-ousin</i>
Jesus.NOM PRT knowing.PTCP.NOM	that be_going_to-PRS.3PL.ACT

ἔρχεσθαι [. . .] ἀνεχώρησεν
érk^hest^hai *anek^hōrēsen*
 come.INF withdraw.AOR.3SG.ACT

‘Jesus therefore, perceiving that they were about to come, withdrew.’

There are very few occurrences in which the periphrases with μέλλ-ω (*méll-ō*) [be_going_to-PRS.1SG.ACT] ‘I am going to’ and θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ plus infinitive can be interpreted as futures. These are the cases in which the periphrases co-occur with future verb forms (see also Lee 2010: 27 for the first example):

(22) a. (Matt. 26.15)

τί	θέλ-ετέ	μοι	δοῦναι	κα=γὼ	ὑμῖν
<i>tí</i>	<i>t^hél-eté</i>	<i>moi</i>	<i>doûnai</i>	<i>ka=gō</i>	<i>humîn</i>
INT.ACC	want-PRS.2PL.ACT	1SG.DAT	give.INF	and=1SG.NOM	2PL.DAT
παραδώ-σ-ω	αὐτόν;				
<i>paradō-s-ō</i>	<i>autón?</i>				
give-FUT-1SG.ACT	3SG.ACC				

‘what are you willing to give me, that I should deliver him to you?’

b. (John 7.35)

ποῦ	οὗτος	μέλλ-ει	πορεύεσθαι	ὅτι
<i>poû</i>	<i>hoûtos</i>	<i>méll-ei</i>	<i>poreúest^hai</i>	<i>hóti</i>
where	DEM.NOM	be_going_to-PRS.3SG.ACT	go.INF	that
ἡμεῖς	οὐχ	εὕρη-σ-ομεν	αὐτόν;	
<i>hēmeîs</i>	<i>ouk^h</i>	<i>heurē-s-omen</i>	<i>autón?</i>	
1PL.NOM	not	find-FUT-1PL.ACT	3SG.ACC	

‘where will this man go that we won’t find him?’

The interpretation of the periphrases as futures is possible, but this is not the only one. Markopoulos (2009: 77) remarks that example (22a) “does not constitute a clear example of future reference but only of the path leading from volition, through intention, to futurity”. In both cases, the periphrases are anchored in the present and precede the future, which is referred to by the morphological futures παραδώ-σ-ω (*paradō-s-ō*) [give-FUT-1SG.ACT] ‘I will give’ and εὕρη-σ-ομεν (*heurē-s-omen*) [find-FUT-1PL.ACT] ‘we will find’. Despite the fact that both periphrases and morphological futures refer to the future, there is a temporal gap between them, as in the case of the following two occurrences of θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ plus infinitive:

(23) a. (Rev. 11.5)

καὶ εἴ τις αὐτοὺς θέλ-ει ἀδικῆσαι, πῦρ
kaì eí tis autoùs t^hél-ei adikêsai pûr
 and if INDF.NOM 3PL.ACC want-PRS.3SG.ACT harm.INF fire.NOM
 ἐκπορεύεται [...] καὶ εἴ τις θελή-σ-ει αὐτοὺς
ekporeúetai kaì eí tis t^helê-s-ei autoùs
 proceed.PRS.3SG.MID and if INDF.NOM want-FUT-3SG.ACT 3PL.ACC
 ἀδικῆσαι, οὕτως δεῖ αὐτὸν ἀποκτανθῆναι
adikêsai houtôs deî autòn apoktant^hênai
 harm.INF in_this_way need.PRS.3SG.ACT 3SG.ACC be_killed.INF
 ‘if anyone desires to harm them, fire proceeds [...]. If anyone desires to
 harm them, he must be killed in this way.’

The entire passage is future-oriented: the vision of the two witnesses (the two olive trees and the two lampstands) and their actions are projected into the future. However, the reference to the future is made through synthetic futures in the parts of the text which precede (23b) and follow (23c) the passage in (23a):

(23) b. (Rev. 11.3)

καὶ δώ-σ-ω τοῖς δυσὶν μάρτυσίν μου,
kaì dô-s-ō toîs dusìn mártusín mou,
 and give-FUT-1SG.ACT DET.DAT two.DAT witnesses.DAT 1SG.GEN
 καὶ προφητεῦ-σ-ουσιν
kaì prop^heteú-s-ousin
 and prophesy-FUT-3PL.ACT
 ‘I will give power to my two witnesses, and they will prophesy.’

c. (Rev. 11.7)

τὸ θηρίον [...] ποιή-σ-ει μετ’ αὐτῶν πόλεμον καὶ
tò t^heríon poiê-s-ei met’ autôn pólemon kaì
 DET.NOM beast.NOM make-FUT-3SG.ACT with 3PL.GEN war.ACC and
 νική-σ-ει αὐτοὺς καὶ ἀποκτεν-εῖ αὐτούς
nikê-s-ei autoùs kaì apokten-eî autoùs
 overcome-FUT-3SG.ACT 3PL.ACC and kill-FUT.3SG.ACT 3PL.ACC
 ‘the beast will make war with them, and overcome them, and kill them.’

Compared with the latter two clauses, the periphrases with θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ in (23a) clearly show a modal value. In both of them, the verb θέλ-ω (*t^hél-ō*) [want-PRS.1SG.ACT] ‘I want’ occurs in conditional clauses and displays a desiderative value. In the first occurrence the reference to the present tense (θέλ-ει (*t^hél-ei*) [want-PRS.3SG.ACT] ‘he wants, wishes’) is consistent with

the verb of the main clause ἐκπορεύ-εται (*ekporeú-etai*) [proceed-PRS.3SG.MID] ‘he proceeds’. In the second occurrence, the reference to the future tense (θελή-σ-ει (*thélē-s-ei*) [want-FUT.3SG.ACT] ‘he will wish’) is consistent with the deontic meaning of the verb δεῖ (*dei*) [need.PRS.3SG.ACT] ‘it needs’ of the main clause.

Summing up, the periphrases with μέλλ-ω (*méll-ō*) [be_going_to-PRS.1SG.ACT] ‘I am going to’ and θέλ-ω (*thél-ō*) [want-PRS.1SG.ACT] ‘I want’ plus infinitive are not used to replace synthetic futures, in the NT. They express primarily a modal meaning in addition to the future tense. A similarly cautious view is expressed by Horrocks (2007: 626–627) who, even speaking of a “renewal” of the future-referring forms through periphrases in the Koiné, traces the bleaching of the verbs of the periphrases into auxiliaries to the Medieval age (cf. also Porter 1989, Joseph 1990, Joseph & Pappas 2002).

3 Some Remarks from a Sociolinguistic Perspective

Two main results emerge from my investigation on the future forms in the LXX and the NT. The first one is the functional reduction of middle inflection as a voice marker in the future stems and the parallel increase in suffixed futures. The second one concerns the rare occurrences of periphrases with μέλλ-ω (*méll-ō*) [be_going_to-PRS.1SG.ACT] ‘I am going to’ and θέλ-ω (*thél-ō*) [want-PRS.1SG.ACT] ‘I want’ plus infinitive against Markopoulos (2009: 46–47), who argues for a general increase in periphrases at the expense of synthetic futures in the Koiné.

These results are significant for our knowledge of the morpho-syntactic changes in the domain of future-referring forms of Postclassical Greek. The texts studied here provide further evidence for the long-lasting diachronic change which led middle inflection to disappear as a voice marker in future stems from Ancient to Modern Greek. They also challenge the traditional accounts of Koiné, which argue for the spread of periphrases as future-referring forms and the loss of synthetic futures. How can we explain this discrepancy between the data provided by the LXX and the NT and the traditional accounts of the Koiné?

3.1 The Koiné

The label “Koiné” is commonly used to refer to the language of very different types of texts, namely literary texts, practical papyri, and translations. Despite some common peculiarities, which allow us to identify the Koiné and to

distinguish it from the Classical language, a great deal of variation is found in the Koiné texts, depending on the register, style, and genre (see Horrocks 2010: 79–84). An instance of these differences is provided by the passive futures, which spread in the LXX, as I have shown, but not in the contemporary documentary papyri. According to Mayser (1906: 377–382) and Gignac (1981: 208) there were very few passive futures in the papyri of the Ptolemaic age. Scholars who argue for the increase in passive aorists and futures in Ptolemaic and Postptolemaic papyri provide examples of passive aorists only (see Mandilaras 1973: 146 and Gignac 2013: 409).

The difference in text type cannot be an explanation for the discrepancy between the LXX and the papyri. Even though the documentary papyri contain fiscal records, letters, testaments, etc., namely texts which typically do not make reference to the future, several future forms occur in documentary papyri. They are sigmatic and contracted futures, to a large extent, whereas only a few cases of suffixed futures are attested (cf. Mayser 1906: 356–358). This rarity is presumably due to the different language register, with respect to the LXX: low written and spoken-like register in the papyri vs. high written and literary register in the LXX. The suffixed futures were not used in the lower register of the language, but were abundant in the higher register. This illustrates the fact that the suffixed futures were not neutral with respect to language register and were presumably perceived by speakers as a “stamp” of written and literary language.

The sociolinguistic markedness of the suffixed futures in Postclassical Greek is evidenced not only by their rarity in the papyri, but also by their extraordinary productivity in the LXX and the NT. As is well known, the suffixed futures are not inherited; they were created on the model of the suffixed aorists in Posthomeric Greek and spread in the Classical language (cf. Tronci 2017). By using the suffixed futures, the translators of the Bible might have wanted to make reference to Classical Greek. They created an old-fashioned language, which was different from the everyday written language of that time. Because of the presence of such a large number of passive futures, the language of the LXX is also different from the Classical language. It appears to be a sort of hyper-Classical language, namely an artificial language, which was neither spoken nor written in any time.

3.2 The Hieratic Register

In his book on the language of the LXX, Léonas (2005: 238–249) uses the notion of “hieratic register” to describe some peculiarities of this language, namely lexical archaisms, the use of pleonasm, and the peculiar word order. According to him, this language was perceived as unusual by ancient readers as well, who

were aware of the register variation of the LXX with respect to both ordinary and literary languages of their time. Once the hieratic register of the language was created through the translation of the Bible, the later Greek-Jewish and Christian texts were shaped on this model, included the Gospels and the other texts of the NT. In my opinion, the productivity of synthetic futures, especially the passive ones, in the LXX can be explained as an instance of hieratic register. The translators of the Bible had recourse to these forms with the aim of giving an unusual and archaic shape to their language. The passive futures were perceived as Classical forms, because they started to be productive in Classical Greek and did not exist before, with a few exceptions.

Turning to the NT, the state of affairs of the future forms is even more problematic. The Gospels, the Acts of the Apostles, the Letters and Revelation were written in the 1st/2nd ct. AD, i.e. when passive futures were no longer used in the ordinary language. Because of this, the productivity of passive futures in the NT is more surprising than three centuries before, i.e. at the time of the translation of the Bible. The abundance of passive futures in the NT is a consequence of their productivity in the LXX, which was a model for the writers of the NT. Two explanations are possible: either they consciously used the hieratic register or they unconsciously reproduced it, by imitating the language of the LXX.

4 Concluding Remarks

This research has provided evidence of the productivity of synthetic futures, particularly the passive ones, in the LXX and the NT, against the scholarly consensus that synthetic futures tended to disappear in Hellenistic Greek and that future-referring periphrases gained in popularity. This result is interesting if compared with data provided by the documentary papyri, which provide evidence of the reduction in passive futures. This state of affairs may seem inconsistent, but it is not so. An explanation is possible from a sociolinguistic point of view. The language of the LXX is an artificial language, which mixed elements of diverse registers and diachronic levels (cf. Pralon 1988). The suffixed futures are, on the one hand, a stamp of Classical language and, on the other hand, gave an unusual colour to the language. They can be considered as a feature of hieratic language, in the terms of Léonas (2005).

The second result of this research concerns the middle inflection. In both the LXX and the NT, it lost its value as a voice marker in the future stems, but continued to exist in the *media tantum*. The two forms which are relevant as

voice markers are active inflection for the active voice and suffixes for the middle-passive voice.

The main conclusion is a methodological one and concerns the relationship between linguistic research and analysis of the texts. The issue of the diachronic changes which involved the future tense from Ancient Greek onwards can be successfully dealt with by combining a hypothesis on the language system and the search for the relevant forms in the texts. Besides, the analysis of the texts cannot merely concern the internal system. It must, rather, take into account the social and historical context, i.e. the registers, the genre of the text, the writer and the addressee. With respect to these parameters, every text is unique and requires to be investigated for itself as well as in relation with other texts, both contemporary and from earlier periods. My analysis provides only a piece of the puzzle, but hopefully it will be a starting point for new research on the issue of future forms in Greek.

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Abbreviations

Col.	Colossians
Deut.	Deuteronomy
Ezek.	Ezekiel
Exod.	Exodus
Gen.	Genesis
Hos.	Hosea
Isa.	Isaiah
Jdt.	Judith
Lev.	Leviticus
LXX	Septuagint
Matt.	Matthew
NT	New Testament
Num.	Numbers
Sir.	Ecclesiasticus (Sirach)
Rev.	Revelation
1 Pet.	1 Peter

The glosses follow Leipzig Glossing rules.³ Additionally, the following glosses have been adopted:

ACT	active
AOR	aorist
MID	middle voice
PRT	particle

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Brian D. Joseph

Greek Infinitive-Retreat versus Grammaticalization: An Assessment

Abstract: In the transition from Postclassical Greek into Medieval and Modern Greek, the Greek language underwent a major morphosyntactic change involving the replacement of infinitives by fully finite *να* (*na*)-clauses, marked for person and number of the subject. I argue here that under the definition of grammaticalization in Haspelmath (2004: 26) — ‘a diachronic change by which the parts of a constructional scheme come to have stronger internal dependencies’ — this development represents an instance of degrammaticalization, in that it involves a weakening and not a strengthening of the bonds between a controlling verb and its complement. In this way, it is argued to constitute another counterexample to the claim that grammatical change is unidirectional, always in the direction of greater grammaticalization (for Haspelmath: ‘stronger internal dependencies’). This degrammaticalization is shown to hold not only in general for the process of infinitival replacement but also for a particular case involving the Medieval Greek future tense formation with the verb $\theta\acute{\epsilon}\lambda\omega$ (*t^helō*) ‘want’.

Keywords: degrammaticalization, future tense, grammaticalization, Greek, infinitive, infinitive-loss

1 Introduction

It is well known that a significant characteristic of the Modern Greek verbal system and thus of the syntax of the language is that it has no infinitive. By “*infinitive*” here is meant a verbal form that from the perspective of morphosyntax lacks person and number marking and from the perspective of function is used in complementation and in various ways as an adjunct, e.g., in the expression of purpose.¹

¹ This definition is close to what is found in traditional accounts; the Oxford English Dictionary (s.v., www.oed.com, last accessed 25 August 2018), for instance, defines “*infinitive*” as “that form of a verb which expresses simply the notion of the verb without predicating it of any subject. . . . a substantive with certain verbal functions, esp. those of governing an object, and being qualified by an adverb,” and Haspelmath (2002: 271) calls it “a nonfinite form used for clausal complements.” It may be noted that several studies of the infinitive, e.g. Duffley (2016), Egan (2008), Los (2005), to name just a few, do not define the term per se, taking it as

Instead of such a form, Modern Greek uses fully finite verb forms, marked for person and number and generally also tense and aspect. This characteristic represents a divergence from the situation in earlier stages of the language, and turns out to be a contact-related feature that it shares with its neighboring languages in the Balkans, especially Albanian, Aromanian, Bulgarian, Macedonian, Romani, and Romanian.² This reshaping of the Greek verbal system as to both its morphology and its syntax represents a significant grammatical change in the language. As such, it is of great potential relevance to the study of grammatical change within the framework of grammaticalization theory, and indeed this development provides an important testing ground for various claims made within that general approach to language change.

In what follows, the angle on grammatical change afforded by the Greek infinitive is pursued, and the ways in which the loss and replacement of the Greek infinitive test grammaticalization are examined. In order for this investigation to be pursued properly, first some facts are provided about infinitives in general and about the Greek infinitive in particular, followed by some discussion of the specific aspects of grammaticalization theory that are at issue here.

2 Some Necessary Background on Infinitives in General and Infinitives in Greek

By way of laying the necessary foundations, let it first be noted that infinitives are handy grammatical elements. They have an interesting syntactic/semantic nature that makes them very useful. In particular, infinitives effect a “streamlining” of the syntax of complementation; while they can have overt subjects, they do not need to – they are analyzed as occurring with a phonologically null “PRO” subject in Government and Binding Theory (Chomsky 1981), for instance – but rather can gain their subject-reference from other nominals in the sentence.

understood what the forms are in English that deserve this label. Difficulties with developing a cross-linguistically suitable definition of *infinitive* are discussed in Joseph (2009: chap. 2), where a definition comparable to the one given here is adopted.

² See Joseph (2009) on the fate of the infinitive in the various Balkan languages, as well as Friedman & Joseph (Forthcoming 2020: ch. 7). Much of what is said here about Greek infinitival developments and grammaticalization could be replicated for the other Balkan languages, a point returned to briefly in footnote 15 and in §6. Still, no more is said here about the general Balkan situation, interesting though it may be.

Thus infinitives are dependent elements that generally do not stand alone, a property that becomes important in later discussion. There are constructions, such as prohibitions in some Romance languages, that occur with seemingly independent infinitives (e.g., Italian *non fumare!* ‘Do not smoke!’) and similarly (affirmative) infinitival commands in some Slavic languages (e.g., Russian *molčat* ‘shut up!’). However, such infinitives can be argued to be dependent elements, in prohibitions controlled by the negation marker and in positive commands dependent on an implicit higher controlling verb, so that they are not really stand-alone elements per se. This latter suggestion would work as well for the special, very likely literary-only, uses like the historical infinitives of Latin, where an infinitive is used in the place of a past-tense finite verb; that is, such infinitives could be seen as controlled by an understood higher verb, thus giving a type of implicit indirect discourse, as argued by Lakoff (1968). More generally, such infinitives could perhaps be subsumed under the rubric of “insubordination”, defined by Evans (2007: 367) as “conventionalized main clause use of what, on prima facie grounds, appear to be formally subordinate clauses”.³

Despite their utility, there are two key historical developments within Greek, as noted in §1, that affected the viability of the infinitive:

- the receding of the infinitive, as to both its syntax, i.e. its uses, and its morphology, i.e. the number of distinct forms it took, leading ultimately to its complete loss
- replacement of the infinitive by finite, i.e. person-and-number marked, verbs, generally introduced by the subjunctive mood marker Modern Greek *να* (*na*).

Although these two developments unfolded over several centuries, as indicated below, they can be illustrated by data such as the following from different versions of the same text. In particular, the Medieval Greek *Chronicle of Morea*, in its 14th–15th century Copenhagen manuscript version (H), shows an infinitive, in the passage in (1a), whereas the same line, (1b), from the 15th–16th century Paris version (P), shows a finite replacement for the infinitive, the same sort of construction as in the Modern Greek⁴ example in (1c):⁵

³ See also Evans & Watanabe 2016 for a full cross-linguistic view of insubordination.

⁴ I present all non-Modern Greek forms in both their Greek alphabetic form and an Ancient-Greek-based transliteration that is not reflective of the pronunciation at the time; see Horrocks (2010) for an overview of the facts of pronunciation at various stages of Greek historical phonology. Modern Greek forms are given in Greek orthography and a roughly phonemic transcription.

⁵ There is lexical replacement at work between the Medieval Greek of (1ab) and the Modern Greek of (1c), and some irrelevant differences of voice, but the root of the main verb ‘begin’ is the same (earlier ἀρχ- (*ark^h*), modern αρχ- (*arx-*)) across the eras.

- (1) a. (*Chronicle of Morea* 7118[H])
 ὁ ρῆγας ἄρξετον λαλ-εῖν
ho rēgas arxeton lal-ein
 DEF.NOM.SG king.NOM began.3SG speak-INF
 ‘The king began to speak’
- b. (*Chronicle of Morea* 7118[P])
 ὁ ρῆγας ἤρξεν νὰ λαλ-ῆ
ho rēgas ērxen na lal-ēi
 DEF.NOM.SG king.NOM began.3SG SBJV speaks-3SG
 ‘The king began to speak’ (literally: ‘The king began that he-speaks’)
- c. ο βασιλέας ἀρχισ-ε νὰ μιλά-ει
o vasileas arxis-e na mila-i
 DEF.NOM.SG king.NOM began-3SG SBJV speak-3SG
 ‘The king began to speak’ (literally: ‘The king began that he-speaks’)

These two developments, though generally presented as paired, are actually logically independent since there are other means by which the infinitive could be replaced. For instance, deverbal nouns can serve the function of infinitives, as happens occasionally in late Medieval/early Modern Greek, as in (2):⁶

- (2) (*Erotokritos* II.1316)⁷
 τὸ τρέξιμο ν’ ἀρχίσ-ουν
to treksimo n’ ark^his-oun
 DEF.NOM.SG running.NMLZ.N SBJV begin-3PL
 ‘They will begin to run’ (literally: “begin [the] running”)

Hence the linkage of retreat of the infinitive with the ascension of finite verbal complementation in Greek is significant, as other means of replacing the infinitive were available.

The loss of the infinitive in Greek has been noted by scholars for centuries;⁸ (relatively) recent work includes Burguière (1960) and Joseph (1978/1990, 2009).

⁶ This is admittedly somewhat ironic when stated this way, since infinitives, for Indo-European languages at least, derive from case forms of verbal nouns that have come to be embedded in the verbal system. These verbal nouns cited here are fully nominal as to their morphosyntax, appearing with full inflectional paradigms.

⁷ *Erotokritos* is an epic poetic romance written in the Cretan dialect in the early 1600s by Vitsentzos Kornaros.

⁸ The earliest relevant observation I know of comes in the grammar of contemporary demotic Greek written by Nikolaos Sophianos in the first half of 16th century (see Legrand (1874) and

The process unfolded over more than a millennium but clearly began in the Koiné Greek period, with signs evident particularly in New Testament Greek, where one can find both infinitival complements and finite complement clauses headed by ἵνα (*hina*), the source of the Modern Greek subjunctive marker να (*na*), co-occurring as conjoined elements:

(3) (1Corinthians 14:5)

θέλω δὲ πάντας ὑμᾶς λαλεῖν γλώσσαις,
t^helō de pantas hymas lalein glōssais
 want.1SG but all.ACC 1PL.ACC speak.INF tongues.DAT
 μᾶλλον δὲ ἵνα προφητεῦητε
mallon de hina prop^hēteuēte
 rather but that prophesy.2PL.SBJV
 ‘now I want you all to speak in tongues, but even more that you prophesy’

The loss of the infinitive spread through the lexicon, affecting some verbs and verb classes, defined both semantically and structurally,⁹ and some adjectival predicates earlier than others. For instance, in the New Testament and early Christian Greek, as Blass et al. (1961: §392) observe, the infinitive “is used with verbs meaning ‘to wish, strive, avoid, ask, summon, make, allow, permit, hinder, be able, have power [...] verbs meaning ‘to be able, know how to’, etc. are used only with the infinitive, as are those expressing obligation, custom, and the like”. Thus, such verbs as ἐπιθυμῶ (*epithymō*) ‘desire’, πειράζω (*peirazō*) ‘attempt’, and δύναμαι (*dynamai*) ‘be able’ all obligatorily occur with infinitives as their complements, as do ἄρχομαι (*ark^homai*) ‘begin’, τολμῶ (*tolmō*) ‘dare’, and μέλλω (*mellō*) ‘be about to’, which is used with an infinitive in a tense-like construction that “expresses imminence (like the future)” (Blass et al. 1961: §356). Some verbs are attested only with a finite ἵνα (*hina*)-complement, such as ἀγαλλιώ

the reprint edited by Papadopoulos (1977) for editions of this grammar). Sophianos lists under the category of “απαρέμφατα” (*aparemphata*), ‘infinitives’, the finite inflected forms νὰ γράψω, νὰ γράψεις etc. (*na grapsō, na grapseis*, etc.) ‘that I write’, ‘that you write’, etc., thus recognizing the demise of the infinitive and its functional replacement by finite forms.

9 The boundaries between syntax and semantics with these groups of verbs are not entirely clear, nor does it necessarily matter how the classes are constituted. For example, the observation below concerning same-subject verbs favoring an infinitive could be a matter of their syntax (e.g., verbs denoting an attempt require an infinitive with a “PRO” as subject) or of their semantics (e.g., the act of attempting typically focuses on an action that one does oneself, thus with a complement-verb subject understood as identical with the main-verb subject).

(*agalliō*) ‘rejoice’,¹⁰ whereas others, such as ζητῶ (*zētō*) ‘seek’ and ἐρωτῶ (*erōtō*) ‘ask’, occur optionally with an infinitive or with a finite complement headed by the subordinating conjunction ἵνα (*hina*). While same-subject contexts, those in which the main clause subject is identical to the complement clause subject, favor infinitives as the complement, infinitives are not a requirement in such a construction, as shown by examples from Koiné-era texts from a few centuries later than the New Testament itself:

(4) (*Acta Pilati* II.2.5 [4th ct. AD])

θέλουσιν οἱ Ἰουδαῖοι ἵνα φονεύουσιν αὐτόν
t^helousin hoi Ioudaioi hina p^honeuousin auton
 want.3PL DEF.NOM.PL Jews.NOM.PL that murder.3PL 3SG.ACC
 ‘The Jews want to murder him’

This same observation holds with predicates like ἄξιος (*axios*) ‘worthy’ and ἱκανός (*hikanos*) ‘sufficient’, which already in the New Testament occur with infinitives or with finite complements, as illustrated well by these parallel passages from the Gospels:

(5) (*Acts* 13:25)

οὗ οὐκ εἰμί ἄξιος τὸ ὑπόδημα τῶν ποδῶν λύσαι
hou ouk eimi axios to hypodēma tōn podōn ly-sai
 REL.GEN.SG NEG be.1SG worthy DEF sandal.ACC DEF feet.GEN loosen-INF
 ‘... whose sandal on his feet I am not worthy to loosen’

(6) (*John* 1:27)

οὗ οὐκ εἰμί ἄξιος ἵνα λύσω αὐτοῦ τὸν ἱμάντα τοῦ
hou ouk eimi axios hina lysō autou ton himanta tou
 whose not am worthy that loosen-1SG his DEF strap.ACC DEF
 ὑποδήματος
hypodēmatos
 sandal.GEN
 ‘... whose sandal-strap I am not worthy to loosen’

¹⁰ Admittedly, this particular verb occurs only once in the New Testament, but in that one instance, it has a finite complement.

There was also some expansion of the use of the infinitive, in particular in the expression of purpose with verbs of motion, though a finite verb with ἵνα “can again represent this infinitive” (Blass et al. 1961: §390).

An important observation about the infinitive-replacement process as it unfolded over centuries in Greek is that those verbs and predicates that obligatorily take the infinitive in New Testament Greek turn out to be the very ones that in Medieval Greek occur optionally with an infinitival complement or with a (i)να-complement. Such is the case, for instance, with *τολμῶ* (*tolmō*) ‘dare’, *δύναμαι* (*dynamai*) ‘be able’ and its more prevalent innovative lexical replacement *ἔμπορώ* (*ēmporō*), and *ἀρχάζω* (*ark^hazō*) ‘begin’, among others. These hangers-on, these last verbs to retain infinitives in Medieval Greek, are precisely those with which a complement infinitive constitutes a single event. That is, in a sentence with ‘be able’ governing an infinitive, there is no separate event of ability; rather the ability (as expressed in the main verb) and the action (as expressed in the infinitive) merge, as it were, to express a single event describing the subject’s ability to perform a particular action. Moreover, with those verbs that optionally governed infinitives in New Testament Greek, e.g., *ζητῶ* (*zētō*) ‘seek’, infinitives were no longer possible in Medieval Greek.

This parallelism in the classes of verbs grouped as to their control of infinitives suggests that there was an orderly progression to the realization in the lexicon of the replacement of infinitival complementation by finite complementation; that is, all verbs essentially reduced their infinitival usage by one degree, from optionally possible infinitives to no longer possible, and from obligatory infinitives to optionally possible.

This replacement process continued, in what may be viewed as an analogically driven diffusion through the lexicon, ultimately affecting all infinitive-controlling verbs in the lexicon for most of Greek. This last qualification is needed because the infinitive does remain in outlying dialects of Greek: the Pontic of Asia Minor (Sitaridou 2014) and the Grico and Grecanico of southern Italy (see most recently Baldissera 2012). The dialects that retain infinitives do so with a relatively small number of controlling verbs, e.g., *sozo* ‘can’ in Southern Italy, as in (7) from Bova (Pellegrini 1880, Rohlfs 1958):

- (7) *de sonno ciumiθi*
 NEG can.1SG sleep.INF
 ‘I can’t sleep’.

The verbs that retain the infinitive, just like the verbs that are the last to retain infinitival complementation in Medieval Greek, tend to be those with which an infinitive constitutes a single event.

Thus after several centuries of moribundity, by the 16th to 17th centuries, what may be considered early Modern Greek, the infinitive was highly restricted in use, and was effectively gone from the language in general as a verbal category, surviving with just a few controlling verbs. In its place were fully finite verb forms. This transition from nonfinite complementation with no specified subject to finite complementation necessarily with a specified subject indicated on the verb itself was thus a significant grammatical change, whether one focuses on the specifics of the transition with particular verbs or on the spread of the innovative finite constructions throughout the language and their ultimate generalization.

3 Remarks on Grammaticalization and Degrammaticalization

As a preliminary to the examination of how the infinitive-replacement developments challenge aspects of grammaticalization theory, a definition of “grammaticalization” must be adopted. This is not just a trivial exercise in semantic hair-splitting, but rather it constitutes an essential part of understanding just what is at issue. While it has become quite common to invoke Meillet (1912) and Kuryłowicz (1965) and to define grammaticalization in terms of movement from lexical to grammatical and/or from less grammatical to more grammatical,¹¹ I adopt here the particular formulation of what grammaticalization is that is proposed by Haspelmath (2004: 26): “A grammaticalization is a diachronic change by which the parts of a constructional schema come to have stronger internal dependencies”. Haspelmath’s definition thus takes grammaticalization to entail the *tightening* of bonds between elements within phrases and within words. This definition is fully consistent with the Meillet/Kuryłowicz approach in that Haspelmath’s “stronger internal dependency” is typical of grammatical material: an affix, for instance, is tightly bound to the stem or root it attaches to, and similarly, a clitic is typically bound to its host in some way, but with a

¹¹ Meillet (1912: 131) talks of grammaticalization in terms of “l’attribution du caractère grammatical à un mot jadis autonome”, while for Kuryłowicz (1965: 69), it involves “an increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status”.

greater degree of freedom than an affix. Thus the movement from clitic status to affixal status would represent a “tightening of bonds between elements”. Moreover, in line with increased interest in the emergence of constructions, akin in many ways to studies of grammaticalization,¹² the same can be said about words that come to be “frozen” into constructional schemata.

In a sense, then, this definition draws on what is known about grammatical boundaries – phrasal boundaries, word boundaries or morpheme boundaries, for instance – and thus gives a precise way of assessing the grammaticalization of any particular element in question. Understanding grammaticalization in terms of the establishment of a different kind of boundary thus replaces the vaguer criteria of the Meillet/Kuryłowicz approach of greater or lesser grammatical status with a criterion that is more readily measurable, via an appeal to boundaries. Moreover, it removes the need for a disjunct of “lexical to grammatical” or “less grammatical to more grammatical” that one gets from taking both Meillet and Kuryłowicz together, and generalizes well to constructional schemata. I proceed in what follows, therefore, with Haspelmath’s characterization as the operative notion for identifying grammaticalization.

Haspelmath’s definition of grammaticalization intersects in a very specific way with the question of whether there are cases of grammatical change in which movement occurs which is opposite to that seen in grammaticalization, what is best referred to as “degrammaticalization” (cf. Norde 2009). Some proponents of grammaticalization have taken the viewpoint that it is unidirectional, moving only in the direction of greater grammatical status for a given element or pattern. This is sometimes referred to as the “Unidirectionality Hypothesis” and is seen by some as a principle that is both absolute and inviolable; others admit that there are some instances of degrammaticalization but nonetheless dismiss it as statistically insignificant or only occurring under special circumstances or unsystematic ways.¹³

Haspelmath’s particular characterization of grammaticalization, even if not standard (though accepted by, e.g., Norde 2009, as among the commonly circulating definitions of grammaticalization), presents a highly testable way of considering the unidirectionality hypothesis. In particular, one can look for cases involving grammatical change that have at least some of the hallmarks of “grammaticalization”, e.g., shift in semantics towards broader (“bleached”)

12 For more on constructionalization – the diachronic emergence of constructions – see, *inter alia*, Bergs & Diewald (2008), Traugott & Trousdale (2013), and Barðdal et al. (2015).

13 See Joseph (2014) regarding statistics and degrammaticalization and the general issue of how to count an instance of grammaticalization, or degrammaticalization for that matter. See also §6 below.

more abstract meaning, wider range of use, and/or phonological reduction, and then see if they show movement towards tighter or looser internal dependencies/bonds, as measured for instance by assessing the nature of the boundary involved (as suggested in Joseph 2014). If any cases show looser internal dependencies after the change, then they would constitute counterexamples to the Unidirectionality Hypothesis and thereby extend the case for degrammaticalization being a real kind of change.

4 Haspelmathian (De-)grammaticalization versus Greek Infinitive-Retreat

The Greek infinitival developments provide precisely a case of degrammaticalization based on Haspelmath's definition, as the following subsections show.

4.1 Greek Infinitive-Retreat as Grammaticalization

The infinitive in Ancient Greek thus gives way to a finite complement marked with $\nu\alpha$ (*na*), the source of which is from the earlier final/purpose conjunction $\dot{\nu}\nu\alpha$ (*hina*) 'so that'. This mode of infinitival replacement, as opposed to the sporadic use of verbal nouns, shows two grammaticalization-like traits. First, there is the widening of the meaning of the marker $\nu\alpha$, a kind of bleaching that is characteristic of elements involved in grammaticalization. That is, $\nu\alpha$ (*na*) is not just a final/purpose conjunction, as its source $\dot{\nu}\nu\alpha$ (*hina*) was, but is a grammatical "connector" with an abstract function. Second, in some instances there is phonetic reduction of $\nu\alpha$. In particular, one finds $\nu\acute{\alpha}\sigma\alpha\iota$ ([náse]) from $\nu\alpha$ εἶσαι (*na íse*) 'that you be' even though /a/ does not usually contract with /i/; compare $\kappa\acute{\alpha}\lambda\acute{\alpha}$ εἶσαι (*kalá íse*) 'well you-are', which does not contract to $*\kappa\acute{\alpha}\lambda\acute{\alpha}\sigma\alpha\iota$ ([kaláse]) – rather, this becomes [kalájse]. The key element involved in the Greek retreat of the infinitive, the marker $\nu\alpha$ (*na*), thus shows some hallmark characteristics of grammaticalization.

4.2 How Infinitival Developments Show a Loosening of Internal Dependencies

Despite the result of the previous section, there are ways in which infinitival replacement in Greek shows traits of degrammaticalization. As seen in §2,

infinitives can be viewed as dependent elements, and such is the case for Greek. Greek infinitives generally did not stand on their own and did not determine a sentence by themselves; rather they occurred as complements to main verbs.

Moreover, they cohere semantically in terms of event structure with at least some verbs. Thus, with *μπορώ* (*mporō*) ‘can’, the ability to perform an act and the act itself do not represent distinct events, and such is the case also with *αρχάζω* (*ark^hazō*) ‘begin’, in that an action and the onset of that action are not distinct when viewed as events; rather carrying out the act implies that the ability was there, and any action necessarily has a beginning.

Furthermore, with some main verbs, as argued by Krapova & Cinque (2018), infinitives appear to have combined syntactically in such a way as to suggest a sort of fusion, in that the combination is essentially monoclausal; in particular, one finds Clitic Climbing in the Greek of Southern Italy with *sozo/sonno* ‘can’, as Krapova & Cinque (2018) note, offering these examples from Baldissera (2012) and Chatzikyriakidis (2010):

- (8) a. *sa sōzzane insultètsi*
 you.CL.ACC can.3PL.PST insult.INF
 ‘They could insult you’ (Baldissera 2012: 61)
- b. *To sotzi vorasi? Ne, sotzi*
 it.CL.ACC can.3SG buy.INF yes can.3SG
 ‘Can he buy it? Yes, he can’ (Chatzikyriakidis 2010, ex. (43))

Infinitival complementation is thus interpretable (as above in §2) as a kind of streamlining of multi-clausal syntax that tightens the dependencies between the main clause and the subordinate clause, in such a way that the clauses are semantically and even syntactically fused in some cases.

By contrast, *να* (*na*)-clauses can stand on their own and determine a sentence, in perfectly colloquial and ordinary usage, as in:¹⁴

- (9) a. *νάσαι καλά*
náse kalá
 SBJV.be.2SG well
 ‘may you be well; thank you’

¹⁴ See Ammann & van der Auwera 2004 on such uses in Balkan languages more generally, including Greek.

- b. να πληρώσω τώρα
na pliróso tóra
 SBJV pay.1SG now
 ‘May/should I pay now?’

These clauses, therefore, have some independence and integrity of their own, a property that infinitives did not. Admittedly, να-clauses fuse semantically with controlling verbs in the same way that infinitives do, but infinitives show syntactic cohesion with their governing verbs in ways that να-clauses do not. It is fair to say, therefore, that there is a looser grammatical relationship between main verbs and their complement να (*na*)-clauses.

In this regard, the shift in Greek from somewhat tightly cohesive infinitival complementation to less tightly cohesive finite complementation shows a development that can be construed as a degrammaticalization. That is, this diachronic development involves movement away from the tight bond constituted by the matrix-verb-plus-infinitive combination, whereby the infinitive does not stand on its own, to a looser bond of two separate elements (matrix-verb plus να (*na*)-finite-verb), where each element can in principle stand alone. Each element in the latter case has an integrity and an independence that the infinitive at least is lacking in the former case. In the replacement of the infinitive by finite complementation with a DMS-clause, there is thus a development in which, to give the opposite of Haspelmath’s characterization of grammaticalization, “the parts of a constructional schema come to have” weaker, i.e. looser, not “stronger internal dependencies”, therefore a degrammaticalization.¹⁵

¹⁵ Given that there are parallels across the Balkan languages to the Greek infinitive-retreat, it is worth considering if these parallels might represent a case of “contact-induced grammaticalization” (Heine & Kuteva 2005), with the same *processes* of grammaticalization being replicated across languages. Such processes would include the introduction of a modal marker (paralleling Greek να [*na*]), the semantic bleaching of this marker, its increased grammatical value, and so on. If, however, such is the case, despite the caveats voiced in, e.g., Joseph (2011: §6), then given the interpretation in §4.2, what is seen here in the Balkans is also equally “contact-induced *de*grammaticalization”.

5 A Further View on Grammaticalization – Back to the Future

The argument given in §4 about the relevance of the replacement of infinitival complements by fully finite complements in Greek for claims about unidirectionality that have been made under the rubric of grammaticalization theory might conceivably be countered by saying that the structural changes noted in §4 involve abstractions and generalizations over structural types, and do not involve changes in individual tokens of said structures, in individual constructions. That is to say, in this line of counter-argumentation, it is not that one structure (with infinitives) followed a degrammaticalizing pathway and directly turned into the other (with finite complementation), but rather that very *general* rearrangements of structural patterns occurred. In that way, the change would be viewed as a large-scale one of overall grammatical structure, rather like a shift from synthetic to analytic structure, and not really a development running counter to a very specific grammaticalization pathway.

While perhaps reasonable, this admittedly may not be the most compelling counter-interpretation possible.¹⁶ However, even if we were to grant it and give it some weight, there are other similar developments with the replacement of the infinitive that affect specific constructions along specific pathways of grammatical change. As such, they would seem to be impervious to this sort of counter-argumentation.

In particular, one development in the Greek future involves the reworking of an infinitival complement in a specific constructional context in the direction of yielding a structure with looser bonds between a governing element and the complement. In this way, it is a counter-directional grammatical development, one that goes specifically against the claim that grammaticalization always proceeds from lexical to grammatical or from less grammatical to more grammatical. “More” and “less” grammatical may be taken, as suggested above in §4, to mean, respectively, stronger and looser bonds between elements. Unidirectionality would mean movement only towards stronger bonds whereas a counter-directional development would show movement towards looser bonds.¹⁷

¹⁶ I say this largely because if a general shift in a language of synthetic to analytic structure were to be deemed a case of degrammaticalization, then the numerous instances of such shifts within Indo-European, e.g. in Romance and Slavic languages, and elsewhere would surely have struck down any principle of unidirectionality of grammatical development right from the start of interest in this notion.

¹⁷ See Joseph (2006) for some discussion of different interpretations of what unidirectionality could mean; the example here would be problematic under any interpretation of unidirectionality.

The relevant facts from the Greek future that bear on these claims are as follows. The Medieval Greek future tense formation consisting of the verb $t^h e l \bar{o}$ (θέλω) ‘want’ with an infinitive, e.g., $\theta \acute{\epsilon} \lambda \omega \gamma \rho \acute{\alpha} \varphi \epsilon \iota$ ($t^h e l \bar{o} \text{ } g r a p^h e i$) ‘I will be writing’, was reanalyzed in the 3rd person singular as consisting of two finite (i.e. person-marked) 3rd person forms paratactically combined. This reanalysis could happen because, due to the regular sound change of the loss of word-final $-n$, the infinitive came to converge with the 3rd person singular present indicative form;¹⁸ the reanalysis is evident from the occurrence of fully inflected non-3rd person singular forms. The three stages in these developments are shown in Figure 1:

Stage I

$\theta \acute{\epsilon} \lambda - \omega$ $\gamma \rho \acute{\alpha} \varphi - \epsilon \iota \nu$	\implies	$\theta \acute{\epsilon} \lambda - \omega$ $\gamma \rho \acute{\alpha} \varphi - \epsilon \iota$
$t^h e l - \bar{o}$ $g r a p^h - \epsilon \iota \nu$		$t^h e l - \bar{o}$ $g r a p^h - \epsilon \iota$
will-1SG write-INF	REGULAR SOUND	INF
	CHANGE	(cf. 3SG $\gamma \rho \acute{\alpha} \varphi \epsilon \iota$ ($g r a p^h e i$))
		↓
		↓

Stage II

$\theta \acute{\epsilon} \lambda - \epsilon \iota$ $\gamma \rho \acute{\alpha} \varphi - \epsilon \iota$	\implies	$\theta \acute{\epsilon} \lambda - \epsilon \iota$ $\gamma \rho \acute{\alpha} \varphi - \epsilon \iota$
$t^h e l - \epsilon \iota$ $g r a p^h - \epsilon \iota$		$t^h e l - \epsilon \iota$ $g r a p^h - \epsilon \iota$
will-3SG write-INF	REANALYSIS	will-3SG write-3SG
		↓
		↓

Stage III

$\theta \acute{\epsilon} \lambda - \epsilon \iota$: $\gamma \rho \acute{\alpha} \varphi - \epsilon \iota$::	$\theta \acute{\epsilon} \lambda - \omega$: X, X \implies $\gamma \rho \acute{\alpha} \varphi - \omega$
$t^h e l - \epsilon \iota$: $g r a p^h - \epsilon \iota$		$t^h e l - \bar{o}$: X $\quad g r a p^h - \bar{o}$
will-3SG write-3SG	ANALOGY	will-1SG write-1SG

Figure 1: Reanalysis of the Greek $\theta \acute{\epsilon} \lambda \omega$ ($t^h e l \bar{o}$) future.

¹⁸ By the time these developments occurred, $e i$ (< $\epsilon \iota$ >) was pronounced [i] in Greek (and ou (< ou >) was [u]); among the consonants, t^h (< θ >) and p^h (< φ >) were [θ] and [f], respectively, and g (< γ >) was [ɣ].

Thus a full paradigm became possible with a doubly-inflected future, with inflected θέλω (*thelō*) as a future auxiliary concatenated with a matching inflected form of a main verb, with no subordinating element, no particle να (*na*) or the like, connecting them; for instance, one can find in Medieval Greek all of the person-number forms given in (10):

(10) Doubly inflected paratactic future tense with θέλω (*t^helō*)

1SG	θέλω	γράφω	(<i>t^helō grap^hō</i>)
2	θέλεις	γράφεις	(<i>t^heieis grap^heis</i>)
3	θέλει	γράφει	(<i>t^heiei grap^hei</i>)
1PL	θέλομε	γράφομε	(<i>t^helome grap^home</i>)
2	θέλετε	γράφετε	(<i>t^helete grap^hete</i>)
3	θέλουν	γράφουν	(<i>t^heloun grap^houn</i>)

The relevance of these developments for the claim of unidirectionality should be clear. Since forms like γράφω, γράφεις (*grap^hō* ‘I write’, *grap^heis* ‘you write’), etc. in (10) can stand alone as present indicative forms and thus have considerable independence and integrity as verbal forms, the change shown here in Figure 2 takes a verbal construction in which there is a dependent element, an infinitive, that is tightly connected, bonded in a sense, to a governing element – the future auxiliary verb θέλω (*t^helō*) – and changes it into a looser construction, one that is paratactic instead of hypotactic. This loosening of the internal bonds, in which the bound dependent infinitive has become an independent finite form, is contrary to the dictates of the Unidirectionality Hypothesis, as it means that a construction with a tight bond, Haspelmath’s “strong internal dependency”, between its elements has turned into one with a looser bond, a weaker “internal dependency”.

6 Conclusion

The developments chronicled here with the infinitive in Greek therefore pose a significant challenge to claims of directionality in grammatical change, as embodied in the Unidirectionality Principle. It is important to note that while some accounts of unidirectionality in grammaticalization treat it as exceptionless, others recognize that there can be exceptions to it. Haspelmath (2004), for instance, acknowledges that there are eight (and only eight) known instances of degrammaticalization, i.e. of counter-directionality to the claim of one-way movement in grammatical change, and Heine (2003) notes there are exceptions but says they “are few compared to the large number of examples that confirm the hypothesis.” Joseph (2011, 2014, 2017) suggests other examples, and there

are yet others in the literature; it is in that spirit that the case of infinitive-retreat in Greek should be added to the record.

But there is more to say here. The replacement of the infinitive took place over some 1500 years, as documented here, and thus in a very real sense is not just one event, not just a single instance of finite forms substituting for an earlier infinitive. Even though similar pressures and influences, both internal and external, that led to the retreat of the infinitive were present throughout this millennium and a half period, and no doubt played a role at each step along the way to the ultimate demise of this verbal category, clearly different populations of speakers were involved. This means that the controlling-verb-by-controlling-verb replacement of infinitival syntax happened repeatedly over those 1500 years. Rather than this being a single case of degrammaticalization, then, it must be admitted that literally hundreds of instances of degrammaticalization occurred during that stretch of time, essentially one for every controlling verb that relinquished the tight control of an infinitive to the looser control of a finite complement. Thus for researchers interested in directionality of grammatical change, the Greek infinitive represents a bonanza of data that must be taken seriously as a counterweight to the claims of the preponderance of movement in the direction of greater grammatical status, tighter internal bonds, in Haspelmath's formulation. Moreover, if this analysis is multiplied across the several Balkan languages that show a similar replacement of the infinitive, the import and value of this development for our understanding of directionality in grammatical change are thus multiplied as well.

Abbreviations

The glosses follow Leipzig Glossing rules.¹⁹ Additionally, the following gloss has been adopted:

CL clitic status.

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Postclassical Greek and Treebanks for a Diachronic Analysis

Abstract: We show how a diachronic analysis based on an annotated corpus that includes texts from various Postclassical stages of Greek can open new perspectives in the examination of syntactic phenomena, such as backward control, as well as in the construction of a linguistic and philological profile of earlier texts. Sphrantzes' *Chronicle* (15th ct. AD) demonstrates an example of a text that reflects "parallel" grammars of a transitional period (Kroch 2001). We support this view through a diachronic examination of backward control in Sphrantzes as well as in Herodotus and the Gospels. The starting point of this case study is related to an apparent asymmetry: though there is a tendency for continuous constructions to increase from Herodotus to the New Testament, discontinuous conjunct participles, with the subject interfering in the participle clause, increase from Herodotus to the New Testament. This apparent asymmetry concerns examples of backward control. We connect the characteristics of backward control in Sphrantzes to general properties of the text, which presents evidence of an essentially modern syntax that is archaized in various ways (Horrocks 2010: 272). We use evidence from the presence of NPs in the dative case (an archaizing element) and the absence of verbs that show the middle-passive voice alternation (a modern element of the text) to argue in favor of this claim.

Keywords: treebanks, Postclassical Greek, backward control, syntactic change, parallel grammars, Sphrantzes

1 Introduction

Corpus linguistics combines linguistic theory with an empirical approach: especially in the case of diachronic studies, a linguistic examination begins with observation of available texts. However, it should also cover the missing parts – due to the lack of native speakers' intuitions – with an interpretation informed by theory. Hence, historical linguists are always reliant on a corpus, in one form or another, since there are no other data (no native speaker intuitions, no experimental data). Sometimes (in the best of cases), statistics from a corpus can give us something almost as good as speaker intuitions, and even negative evidence, if a phenomenon that could have occurred with a high

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frequency does not in fact occur in the corpus. For those reasons historical linguists have been pioneers in corpus linguistics (*Index Thomisticus*, started 1949; *Thesaurus Linguae Graecae*, released in the 1970s).

Diachronic examinations of various stages of Greek have demonstrated the following overall tendencies, through a comparison between the Classical Greek, the Hellenistic Koiné Greek and the Modern Greek periods (Joseph 2002): (a) agreement between Classical, Hellenistic Koiné and Modern Greek has been observed: this fact has been interpreted as continuity through various stages. For example, this could be the case with regard to the nominative case for subjects of finite verbs or with regard to pro-drop (availability of subject omission); (b) Hellenistic Koiné Greek has also appeared as a transitional stage – often with a new structure for the first time in this period. For example, this observation has been a typical part of analysis of the loss of the dative case.

An annotated corpus that can include texts from another stage(s) of the diachrony of Greek can easily offer a fourth “checkpoint” for the development of several phenomena in Greek. Various possibilities appear, then, if we include a text from another Postclassical period in our corpus study, for instance from late Byzantine Greek. A diachronic corpus study that includes the representation from a fourth stage can display (a) agreement between all stages; (b) agreement between the late Byzantine Greek text and Classical Greek (as well as Hellenistic Koiné Greek) but not between this text and Modern Greek; or (c) agreement between the late Byzantine Greek text and Modern Greek, but not between Classical Greek and the late Byzantine Greek text. Each possibility requires an explanation: Why is stability attested in all stages, or why does language change distinguish the late Byzantine Greek text from either Classical Greek or Modern Greek?

In the present paper, we show an example of a diachronic study that includes a fourth *annotated* “checkpoint.” The annotated text of Sphrantzes (15th century) can provide evidence on several phenomena that include change or stability and have been in the center of debates between several scholars. On the other hand, we demonstrate that this kind of diachronic analysis also has useful implications for the construction of the linguistic/philological profile of the relevant text as well. The main characteristics of the text, and in particular the contrast between archaizing and modern features can be clearly revealed through a diachronic examination.

In Section 2, we briefly present the Pragmatic Resources in Old Indo-European Languages (PROIEL) corpus, focusing on its Greek subpart and on difficulties of expanding an annotated corpus for the diachronic analysis of Greek. Section 3 describes the main characteristics of the late Byzantine Greek *Chronicle* of Sphrantzes (as an example of a diachronic expansion of the

corpus). We present some examples of a reflection of “parallel grammars” in a transitional period. In Section 4, we examine backward control in various stages of Greek. A diachronic analysis in this case is useful because of an observed asymmetry: even though the frequency of discontinuous infinitives, N[oun]P[hrase]s, Adv[erb]P[hrase]s and P[reposition]P[hrase]s drops from Herodotus to the New Testament, discontinuous conjunct participles, with the subject interfering in the participle clause, increase from Herodotus to the New Testament. The characteristics of backward control in Sphrantzes are affected by the general contrast of archaizing vs. modern rules in Sphrantzes. Section 5 supports this conclusion with some remarks on the contrast between archaizing datives and modern features of voice morphology in Sphrantzes. Section 6 summarizes the main findings of the study.

2 Postclassical Greek, the PROIEL Corpus and a Diachronic Analysis of Greek

The diachronic dimension of a syntactic phenomenon can be explored with an electronic annotated corpus with data from Late Medieval and Early Modern Greek. This additional subcorpus can provide us the means for a linguistic quantitative analysis that is based on quantified, replicable studies. The subcorpus of Sphrantzes contains 24,289 tagged words from the *Chronicle* of Sphrantzes of the 15th century AD (Late Medieval Greek). Its annotation was part of the first phase of expansion of the Greek part of the PROIEL corpus: the overall aim of the expansion is to include more Late Medieval and Early Modern Greek tagged texts to the corpus (*The Chronicle of Morea* [14th ct. AD; Late Medieval Greek] and *The Sacrifice of Abraham* and *Erotokritos* [16th–17th century; Early Modern Greek]). In total, the whole PROIEL corpus of old Indo-European languages [available at <http://foni.uio.no:3000> and <http://clarino.uib.no/iness>] consists of 593,465 words (January 2017), from several old Indo-European languages (see also <https://proiel.github.io/>, with the data from PROIEL’s sister projects, ISWOC and TOROT, the total word count is 928,185). Greek makes up about a third of the PROIEL corpus. However, most of the Greek data come from Herodotus and the New Testament. The goal of the PROIEL corpus is a many-layered manual annotation of all the texts, which includes morphological, syntactic, semantic (e.g., animacy) annotation as well as annotation of information structure. Unfortunately, it is not possible to have all layers in all texts at once. Morphology and syntax are at the core, whereas the information structure layer (where, for instance, null objects are annotated) is

added at a later stage and is only present for part of the corpus (not, for example, for the text of Sphrantzes).

As presented in Table 1, the PROIEL corpus contains various languages. The original corpus is the New Testament in Greek, Latin, Gothic, Classical Armenian and Old Church Slavic. Only Greek and Latin have any texts other than the New Testament. The subsequent expansions included the following texts: (i) Herodotus: book 1, last part of book 4, books 5–7; (ii) Sphrantzes: *Chronicon Minus* (complete 24,289 words); (iii) Several classical and postclassical Latin texts (*Caesar*, *Cicero*, *Peregrinatio Aetherae*). The long term goal of the PROIEL corpus is twofold: to expand coverage of diachronic coverage of Greek and Latin and to expand coverage of Indo-European branches (starting with Hittite, Vedic and Lithuanian). The diachronic coverage of Greek in the PROIEL corpus is related to the main aim of the present study, which concerns the challenges of expanding an annotated corpus for a diachronic analysis of Greek.

Table 1: Languages included in the PROIEL corpus and numbers of annotated words.

Languages included in the PROIEL corpus	Numbers of annotated words
Old Church Slavonic	71,531
Gothic	56,315
Greek	236,840
Latin	206,006
Classical Armenian	22,773

The PROIEL corpus is made available under a Creative Commons license (CC BY-NC-SA). This means that only editions that can be distributed freely can be used in the corpus. For classical texts, this issue does not constitute a real problem because an Oxford edition from the 1920s is still a reliable text. But, for many postclassical texts, no modern edition exists, or (as in the case of the *Chronicle of John Malalas*) only one modern edition (Thurn 2000) has been published and is copyrighted, whereas the previous edition is almost two hundred years old (Dindorf 1831).

A diachronic expansion of the PROIEL corpus does not meet important obstacles in terms of morphological annotation. Morphological annotation in the PROIEL corpus is relatively theory-neutral and unproblematic. Moreover, the featural content of morphemes is relatively stable. In the history of Greek, it is rarely the case that a morpheme changes its content so that it would be unclear

how to annotate it. Changes rather involve development of new morphemes or a shift from synthetic to analytic expression. These changes are unproblematic from the perspective of morphological annotation, although some category shifts can be problematic (e.g., the conjunction *[hí]na* ‘in order that’ which later develops into a particle). For instance, when does *(hí)na* shift from a complementizer to a particle? In some contexts, both annotations of *(hí)na* (as an early complementizer and as a modern particle) would be possible. But outside of such categorization issues, there is practically never doubts about the morphological annotation of later texts added to the PROIEL corpus.

3 The Example of Adding the *Chronicle* of Sphrantzes to a Diachronic Annotated Corpus of Greek

3.1 Characteristics of the *Chronicle* of Sphrantzes

The text of Sphrantzes (born 1401; died ca. 1477) has been considered to closely reflect the authentic spoken language of the period. We should note that there is an interesting contrast in his text between the direct speech passages (which demonstrate the non-learned language) and the narrative passages, which reflect the early form of the literary vernacular in prose texts. All passages appear to also be influenced by the simple language of international diplomatic contracts (Hinterberger 2006; Philippides & Hanak 2011).

Sphrantzes’ *Chronicle* appears in two forms: the short version (*Chronicon Minus*) and the large version (*Chronicon Maius*), which includes all parts of the *Chronicon Minus* with some additional information and few alternations. According to Falier-Papadopoulos (1935), only the *Chronicon Minus* can be Sphrantzes’ authentic work. The first English translation of Sphrantzes’ text was prepared by Marios Philippides (Philippides 1980). It includes the complete *Minor Chronicle* as well as the “siege-section” of the *Major Chronicle* and is based on the Grecu’s (1966) edition. Grecu’s edition provided us with the text for the PROIEL annotated subcorpus.

Sphrantzes’ text demonstrates an example of a text that reflects the “parallel” grammars (Kroch 2001) of a transitional period. Horrocks (2010: 272), for instance, describes this period of the history of Greek as a period with “an essentially modern syntax that was archaized in various ways.” Demotic/vernacular features evidence a modern system of grammar; e.g., there are many cases of *ná*-subjunctive

in Sphrantzes' text.¹ The text of Sphrantzes has been characterized – similar to the texts of Doukas, for instance – as representing a more popularizing, colloquial Greek (Browning 1978), with the use of nominative absolute participles, inflected participles, infinitives introduced with *hóti* and with infinitives introduced with *hína*.² On the other hand, there is still productive use of participles and infinitives (in particular, of infinitives that follow a neuter article and appear as objects of prepositions), as well as of the dative case (Hinterberger 2006).

3.2 The Period of the Chronicle of Sphrantzes

The main changes in the period of Sphrantzes are related to the status of infinitives – which influence control constructions, too – as well as morphological cases and word order. VS becomes the main unmarked word order. This change is probably connected to the tendency of clitics to be immediately to the left of the main verb and to the optional preposing of the verb with the clitic in the case of presence of a conjunction (Horrocks 1990). In Medieval Greek, the tendency for a VS order is also dominant in case of absence of clitics or absence of a conjunction. Moreover, the functions of the dative can be expressed through a bare accusative in the case of temporal phrases or indirect objects and through a genitive or a PP in the case of indirect objects (Humbert 1930; Trapp 1965; Gianollo, this volume).

In late middle ages, there is a clear tendency to replace the infinitive: with control verbs (e.g. 'try', 'want'), the infinitive is replaced by the *na*-subjunctive construction; with modal and aspectual verbs (verbs with the meaning "to stop, to begin, to finish"), infinitives appear nominalized after an article or are replaced by the *na*-subjunctive. We should notice that, as a parallel development, in late Byzantine period, *t^hélō* 'will' is used instead of other Future-related auxiliaries. In the 14th century, the infinitive with *t^hélō* can be used for the Future tense, whereas the reduced form of *t^hélō* gradually becomes a particle (Horrocks 2010: 228–230). In Late Medieval Greek, the most productive

¹ Other examples of demotic features include the use of the new form of copula *éni*, paratactic style and demotic words (*tsánkra* 'bow', *épiasa* 'I caught', *skotónō* 'I kill', *ekeitómēn* 'I was lying').

² Popularizing Greek is also reflected in the frequent confusion between the PPs *en* with an NP in the dative and *eis* with an NP in the accusative, and between local adverbs of motion and rest.

Future periphrasis is formed with *t^hélō* ‘want’ combined with the Present or Aorist infinitive; see the example in (1).

(1) (Sphrantzes 7.4)

θέλω	γενεῖν	καλὰ καὶ	θέλομεν	φάγειν	καὶ
t^hélō	geneîn	kalà kaì	t^hélomen	phageîn	kaì
want.1SG	become.INF.AOR	well and	want.1PL	eat.INF.AOR	and
πιεῖν	ὁμοῦ				
pieîn	homou̇				
drink.INF.AOR	together				

‘I shall get well, and we shall eat and drink together.’
 (Holton & Manolessou 2010: 551)³

On the other hand, the archaizing deviations (starting from the Late Byzantine period) also mainly concern infinitival complements or, in general, morphology and agreement patterns of Classical Greek.

The chronicles of this period reflect a middle-to-popular writing and demonstrate a new written standard that emerges following the change of the Greek Koiné language of the late middle ages into a standard language for educated registers. Again, the characteristics of the chronicles of this period present a clear contrast between (a) the Ancient Greek inflected participles, the accusative and infinitive constructions and the dative for the indirect object and the instrument, and (b) new tendencies, for instance, for the pronoun placement and the word order (Horrocks 2010: 226–228).

If we compare Sphrantzes to other chronicles of the early and middle Byzantine period, we can reach the following conclusions for the basic linguistic features of our study: All of the chronicles combine archaized features of the Ancient Greek model with some non-classical features. For instance, the early text of Theophanes the Confessor (ca. 760–818 AD) (copied or paraphrased from an earlier book) contains examples of agreement of adjunct participles following Ancient Greek rules (as well as examples of nominative absolute constructions), of accusative and infinitive constructions and of hyperbaton. The non-classical features concern the meanings of the preposition *en* when it selects a dative noun (‘goal of movement’ and temporal meaning). The 14th-century *Chronicle of the Morea*, written by a Greek-speaking Frank, also includes characteristics of the non-learned language (in contrast to the romances), such as the use of subjunctive introduced with *ná* with Future and modal readings, or the use of infinitives only in nominalized adjuncts (where the infinitive follows a definite article) or with modals, and not after control verbs.

Other registers of the same late Byzantine period also show more modern features, such as subject oriented participles (for instance, in Maximos Planoudes, ca. 1255–1305). In romances of the 14th–15th centuries (for instance, in *Kallimachos and Chrysorrhoe*), there is productive use of inflected participles (following the Ancient Greek model) as well as replacement of infinitives with *ná*-subjunctives except after control verbs (Horrocks 2010: 343–344).

In Section 4, we examine backward control in a diachronic perspective. An observed asymmetry makes a diachronic approach that includes Postclassical texts useful for the case of backward control. Even though the frequency of discontinuous infinitives, NPs, AdvPs and PPs drops from Herodotus to the New Testament, discontinuous conjunct participles, with the subject interfering in the participle clause, increase from Herodotus to the New Testament. We will provide a diachronic analysis of discontinuous elements, including data from the late Byzantine Greek *Chronicle* of Sphrantzes. We will show that the discontinuity is apparent because it concerns examples of backward control in all examined stages of the Greek diachrony. Moreover, the particular characteristics of the *Chronicle* of Sphrantzes are related to the contrast between archaizing and modern elements in this text.

4 Backward control in Greek and what a diachronic annotated corpus can offer

4.1 Backward control in various stages of Greek

Several studies have shown that there are languages that appear to allow backward control: in (2b) (in contrast to 2a), the controller is expressed overtly in the *embedded clause* and controls an empty position in the matrix clause (Polinsky & Potsdam 2002, 2006; Potsdam 2009).

- (2) a. Kim_i hopes [$_i$ to be singing]. (forward control)
 b. $__i$ hopes [Kim_i to be singing]. (backward control)

Backward control is an exceptional case, in terms of linguistic theory, in that a lower element in the structure controls a higher element. Backward control has been considered to exist in Nakh-Daghestanian languages, Northwest Caucasian, Malagasy and Korean, according to Polinsky & Potsdam (2002). The example in (3) presents relevant data from Tsez (Nakh-Daghestanian, Russia, where the controlled position ($_i$) is actually in the matrix clause:

(3) (Polinsky & Potsdam 2002: 247)

____i [kid-bā_i ziya b-išra] y-/*b- oqsi
 2.ABS girl.2.ERG cow.3.ABS 3-feed.INF 2/3.begin-PST.EVID
 ‘The girl began to feed the cow.’

On the other hand, the rarity of backward control has also been a cause of criticism against such analyses, e.g. by Landau (2007). According to Landau, Tsez has only two verbs that allow backward control; in other languages, the number of verbs is not very large either (not more than five); between them one finds aspectuals, which also have a raising analysis. Landau’s other criticism derives from the observation that the subject chain with backward control in Tsez requires the existence of another exceptional phenomenon: the subject chain bears two cases, ergative and absolutive.

However, data from two stages of Greek, Ancient and Modern Greek, as well as data from Latin (Haug 2011) and Romanian (Alboiu 2007) present counterarguments to Landau’s criticism. Data from Ancient Greek, New Testament Greek (Haug 2011, 2017) and Modern Greek (Spyropoulos 2007, Alexiadou et al. 2010) include a large number of verbs that allow backward control, which, in these cases, does not require the exceptional phenomenon of multiple case assignment.

The starting point of the present case study is related to an interesting diachronic aspect revealed in the examination of backward control constructions and discontinuous constituents:³ Even though the frequency of discontinuous infinitives, NPs, AdvPs and PPs drops from Herodotus to the New Testament, discontinuous conjunct participles, with the subject interfering in the participle clause, *increase* from Herodotus to the New Testament (Haug 2017; see also below for more details).⁴ These opposite-direction data provide evidence against a similar analysis of discontinuity of e.g. infinitives and NPs, on the one hand, and discontinuity of conjunct participle clauses (where the subject of the participle is expressed in the matrix clause and not in the participle clause), on

³ We follow Haug (2017) and consider that a constituent is displaced and its phrase is discontinuous, whenever the constituent is separated from its head by an element that is not a co-argument of that head.

⁴ Factors of variation (for instance, genre or style) probably are significant when we compare data from the text of Herodotus to data from the New Testament and Sphrantzes, but only in the case that the underlying structures are different as well; otherwise, it is difficult to see how variation can account for dissimilarities between participles and other constituents with regard to (dis)continuity.

the other hand. According to Haug (2017), the contrast between the frequency of discontinuous infinitives, NPs, AdvPs and PPs and the frequency of “discontinuous” conjunct participles from Herodotus to the New Testament does not reflect an asymmetry in the development of discontinuity. On the contrary, discontinuity with conjunct participles is only apparent and is in reality a backward control structure: the subject is “sandwiched” in the participle clause (between the participle and its object) and no other elements can be found in this position (see the example in 4).

(4) (Mark 2:5)

<i>καὶ</i>	<i>ιδῶν</i>	<u>ὁ</u>	<i>Ἰησοῦς</i>	<i>τὴν</i>	<i>πίστιν</i>	<i>αὐτῶν</i>
<i>καὶ</i>	<i>ιδὼν</i>	<u>ho</u>	<i>Ἰησοῦς</i>	<i>tên</i>	<i>pístin</i>	<i>autôn</i>
and	see.PTCP.NOM	DEF.NOM	Jesus.NOM	DEF.ACC	faith.ACC	3PL.GEN
<i>λέγει</i>	<i>τῷ</i>	<i>παραλυτικῷ</i>				
<i>légei</i>	<i>tôi</i>	<i>paralytikôi</i>				
say.3SG	DEF.DAT	paralytic.DAT				

‘Seeing their faith, Jesus said to the paralytic.’

In Ancient Greek, control always involves non-finite structures, whereas control is related to finite structures in Modern Greek. Moreover, Ancient Greek backward control is found in adjunct control⁵ in contrast to the Modern Greek complement control data. Participles in Ancient Greek can be used as free adjuncts of two types: absolute participles, whose subject does not need to be coreferent with an argument of the matrix clause, and conjunct participles, whose subject needs to be coreferent with an argument of the matrix clause. Absolute participles and their subjects bear genitive case, and there is no question of control. On the other hand, there should be agreement between the case of the conjunct participles with their subjects. The subject of the participle can be controlled by the subject of the matrix clause – and, in this case, it bears nominative case – or other elements of the matrix clause. Haug (2011) shows that Ancient Greek as well as New Testament Greek allow backward control with conjoined participles. According to Haug’s analysis, the shared subject in (5) appears in the participle clause and so (5) is not a case of a discontinuous (headless) VP.

⁵ For a relevant case of adjunct backward control in Assamese, see Haddad (2011).

(5) (Matthew 1:24)

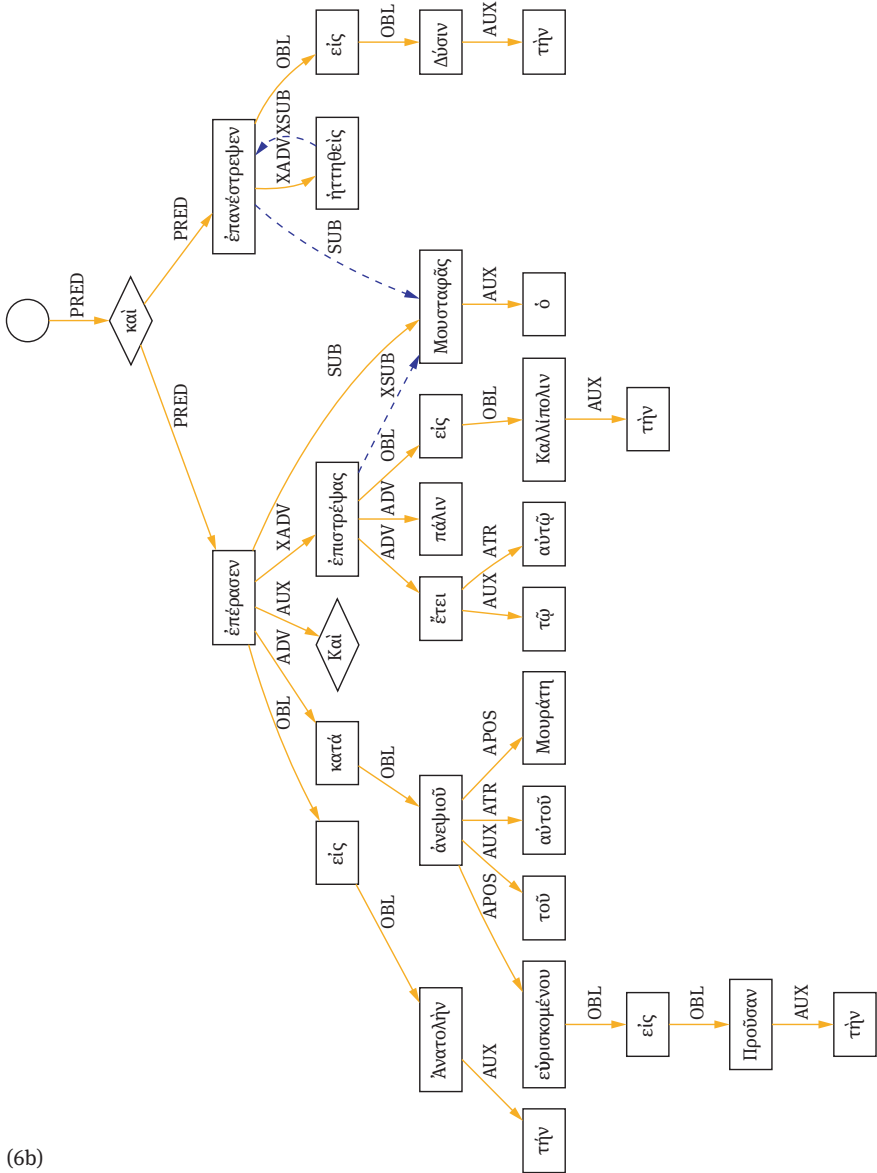
<i>ἐγερθεῖς</i>	<i>δὲ Ἰωσήφ</i>	<i>ἀπὸ τοῦ</i>	<i>ὕπνου</i>
<i>egert^heis</i>	<i>dè Iōsèph</i>	<i>apò tou</i>	<i>hýnrou</i>
wake.up.PFV.PTCP.NOM	PRT Joseph.NOM	from DEF.GEN	sleep.GEN
<i>ἐποίησεν [...]</i>			
<i>epoíēsen [...]</i>			
do.AOR.3SG			
‘When Joseph woke up from sleep, he did [...].’			

The main argument for analyzing *ho Iōsèph* as a subject of the participle clause is that only the subject of the participle clause *can* intervene in this position; if it occurs here *qua* a matrix constituent that has scrambled into the participle clause, there would be no explanation of why other matrix constituents cannot do the same thing. For further details of the argument, we refer the reader to Haug (2017).

A corpus study of Sphrantzes reveals similar examples with participles. In examples (6a, b) and (7a, b), the shared subject appears in the participle clause. For instance, in (6a) the shared subject appears between the participle and a PP that is selected by the participle. In (6b) and (7b) we provide the PROIEL annotation for these cases.

(6) a. (Sphrantzes 9.3.6)

<i>Καὶ πάλιν ἐπιστρέψας</i>	<i>ὁ</i>	<i>Μουσταφᾶς</i>	<i>εἰς</i>
<i>Kaì pálin epistrépsas</i>	<i>ho</i>	<i>Moustaphás</i>	<i>eis</i>
and again return.PTCP.NOM	DEF.NOM	Moustafas.NOM	to
<i>τὴν Καλλίπολιν τῷ αὐτῷ ἔτει ἐπέρασεν</i>	<i>εἰς</i>		
<i>tèn Kallípolin tōi autōi étei epérasen</i>	<i>eis</i>		
DEF.ACC Kallipoli.ACC	DEF.DAT same.DAT	year.DAT	cross-over.3SG
<i>τὴν Ἀνατολὴν</i>			
<i>tèn Anatolēn</i>			
DEF.ACC Anatolia.ACC			
‘And Moustafas returned to Kallipoli in the same year and crossed over to Asia Minor.’			

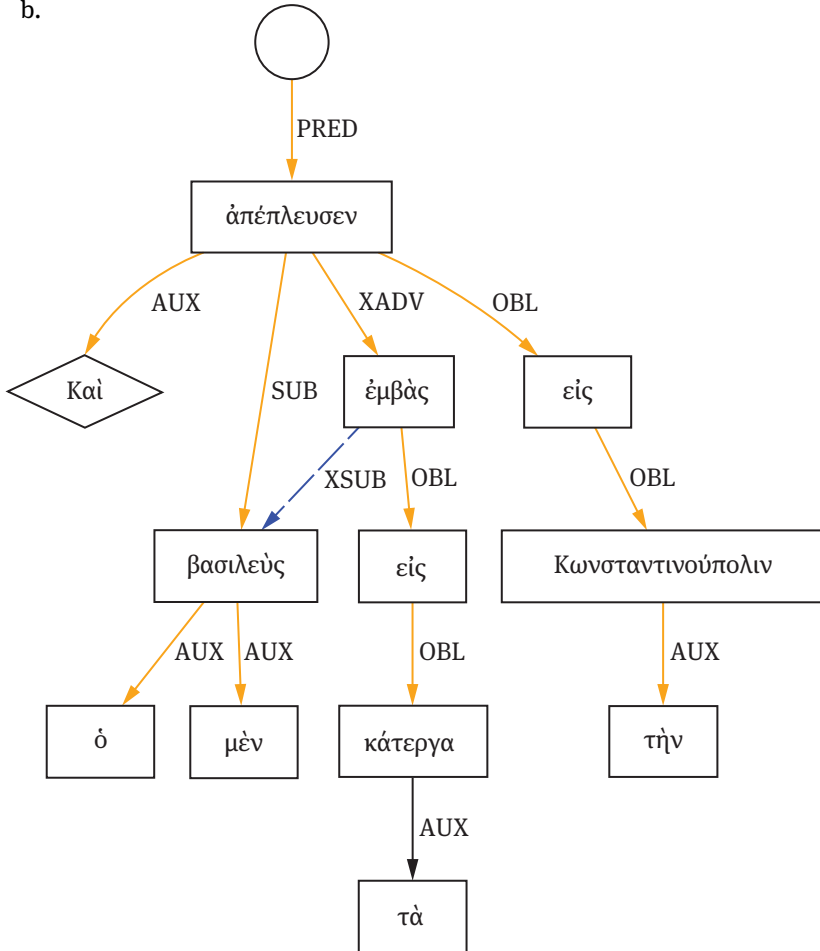


(6b)

(7) a. (Sphrantzes 16.9.11)

Καὶ ὁ μὲν βασιλεὺς ἐμβὰς εἰς τὰ
 Καὶ ho mèn basileùs embàs eis tà
 and DEF.NOM PRT king.NOM enter.PTCP.NOM to DEF.ACC
 κάτεργα ἀπέπλευσεν εἰς τὴν Κωνσταντινούπολιν
 káterga apépleusen eis tēn Kōnstantinoúpolin
 vessels.ACC sailed.3SG to DEF.ACC Constantinople.ACC
 ‘After entering the vessel, the emperor sailed to Constantinople.’

(7) b.



Without native speakers, there is only one way to test the hypothesis of the possibility of backward control analysis against discontinuity (i.e., to show that the subject indeed appears in the participle clause and does not belong to the matrix clause) and that is to use a treebank, a corpus with syntactic annotation, including crucially annotation for control constructions. The PROIEL corpus (see Table 2 for PROIEL annotated texts and numbers of words included in the present study) satisfies these requirements (Haug & Jøhndal 2008; Haug et al. 2009). Moreover, the dependency structures of the PROIEL corpus can automatically be transformed into phrase structures through an algorithm (Haug 2012). This enables the calculation of frequencies of discontinuities. Statistical tests can show whether the results from the different subcorpora – which are of different sizes – are significant or not.

Table 2: PROIEL (Greek subcorpus) annotated texts and numbers of words.

Author-Text	Number of words analyzed in corpus	Number of words total
<i>Herodotus</i>	12,421	185,097
<i>Gospels (New Testament)</i>	64,519	64,519
<i>Sphrantzes</i>	24,289	24,289

The comparison of these results with the data from the 15th century text of Sphrantzes can add one more aspect in the diachronic dimension of the analysis. A significant change has already been observed in earlier studies: New Testament Greek has a preference for fixed structures and moves away from discontinuous constituency, if compared with Herodotus' text (another text included in the Greek part of the PROIEL corpus – see below). On the other hand, it is significant that there is no difference in the frequency of backward control constructions in these two texts. According to Haug (2011, 2017), the contrast between the development of discontinuous constituency and the development of backward control constructions is an argument against considering these constructions as typical discontinuities, because one would otherwise have to assume that participle clauses show a very different behavior from other constituents when it comes to the licensing of discontinuities.

In Table 3, we show how Sphrantzes' data compare to the data from Haug (2017) on Herodotus and the Gospels. It should be stressed that the numbers are not directly comparable as it is not possible to distinguish between

Table 3: Discontinuities in lexical categories in a diachronic perspective.

	Herodotus		Gospels		Sphrantzes	
	(no-)operator-induced discontinuities	continuities (84.72%)	(no-)operator-induced discontinuities	continuities (87.27%)	(no-)operator-induced discontinuities	continuities (91.07%)
AdjP	22 (15.28%)	122 (84.72%)	49 (12.73%)	336 (87.27%)	25 (8.93%)	255 (91.07%)
AdvP	14 (23.73%)	45 (76.27%)	14 (5.91%)	223 (94.09%)	9 (8.65%)	95 (91.35%)
NP	165 (15.12%)	926 (84.88%)	223 (4.13%)	5171 (95.87%)	93 (11.10%)	745 (88.90%)
PP	22 (3.04%)	702 (96.96%)	19 (0.43%)	4422 (99.57%)	24 (3.23%)	720 (96.77%)

operator-induced discontinuities⁶ and other discontinuities in the Sphrantzes material currently (at the time of performing the corpus study). This does not matter much, however, given the low overall frequency of operator discontinuities (as shown in Haug 2017 for Herodotus and the New Testament). The data demonstrate that Sphrantzes generally reflects the decline of discontinuity and the rise of fixed orders only in the case of Adj[ective]P[hrase]s. On the other hand, Sphrantzes follows the opposed direction and a significant higher percentage of discontinuity is evidenced with AdvPs and NPs than in the Gospels. The number of discontinuous NPs is much higher than in the Gospels and approaches that of Herodotus. It is possible that this tendency reflects a false archaism for stylistic purposes, although further research is needed to corroborate this.

The data in Table 4 from Herodotus and the New Testament show no examples of discontinuity in the finite domains (I[inflection]P[hrase] (=main finite clause) and C[omplementizer]P[hrase] (=subordinate finite clauses, introduced with a complementizer)). In Sphrantzes, finite clauses (both CP and IP) do not seem to resist discontinuity in the same way.⁷ However, on closer inspection, almost all of the discontinuities involve the coordinator *kai* ‘and’, which is well known to pose problems to annotators.⁸ On the other hand, both infinitives and participles (except for absolute constructions that are continuous in Herodotus and the New Testament) allow for discontinuities. But only infinitives follow the general diachronic tendency of the decline of discontinuity. Complement participles are not attested in Sphrantzes, whereas only Sphrantzes includes a few examples of discontinuity with absolute participles (but only seven examples). With regard to conjunct participles, they permit discontinuities if our analysis assumes that the common subject belongs to the matrix clause, but if we accept the alternative view that the subject belongs to the participle clause, then five examples of discontinuities remain in the data of Herodotus. These five examples contain long clauses/heavy arguments, which cannot disfavor the claim that conjunct participles are continuous. This means that conjunct participles can only be interrupted by the subject of the matrix clause and the participle. This generalization can be easily explained if we accept the backward control hypothesis, according to which the subject belongs to the participle clause, and, therefore, the discontinuity in conjunct participles is only

6 An operator-induced discontinuity is the result of a displacement to an operator position in the left periphery of the clause; for instance, this is the case of interrogatives and relatives.

7 We should note, though, that the results with respect to discontinuity in Sphrantzes are not statistically significant for the comparison between CPs and IPs ($\chi^2=.904$, $p=.396$).

8 Sentences typically include many instances of *kai* ‘and’, which may lead to false discontinuities if the annotator is not careful.

Table 4: Discontinuities in clausal categories in a diachronic perspective.

	Herodotus		Gospels		Sphrantzes	
	(no-)operator-induced discontinuities	continuities (%)	(no-)operator-induced discontinuities	continuities (%)	(no-)operator-induced discontinuities	continuities (%)
CP (subordinate finite clauses, introduced with a complementizer)	1 (0.48%)	209 (99.52%)	7 (0.50%)	1381 (99.50%)	9 (2.93%)	298 (97.07%)
IP (main finite clauses)	11 (0.92%)	1185 (99.08%)	33 (0.33%)	9861 (99.67%)	39 (4.23%)	905 (95.87%)
Infinitives	109 (24.17%)	342 (75.83%)	108 (13.40%)	698 (86.60%)	17 (10.90%)	139 (89.10%)
Complement participles	11 (20.75%)	42 (79.25%)	9 (4.27%)	202 (95.73%)	0	0
Absolute participles	0 (0%)	91 (100%)	0 (0%)	167 (100%)	7 (3.43%)	197 (96.57%)
Conjunct participles (excluding subject)	21 (3.92%)	515 (96.08%)	50 (3.82%)	1258 (96.18%)	11 (5.05%)	207 (94.95%)
Conjunct participles (including subject)	5 (0.93%)	531 (99.07%)	0 (0%)	1308 (100%)	0 (0%)	207 (100%)

apparent. On this point, the data from Sphrantzes conform precisely to the picture in Herodotus and the Gospels.

A second way to exclude the alternative possibility of discontinuities instead of applying a backward analysis is to compare control infinitives to conjunct participles (see the comparison in Table 5). The hypothesis is that if there is no backward control with participles and participles behaving similarly to infinitives to form domains where discontinuities are freely permitted, then conjunct participles should be discontinuous in a similar degree as control infinitives. In addition, the data show that the type of the intervening elements is different in the case of conjunct participles than in the case of control infinitives: In control infinitives, the infinitive clause can be interrupted not only by the subject but also by the governing verb. In conjunct participles, only the subject causes discontinuity cases, except for examples with heavy elements. As observed in Haug (2017), the difference between conjunct participles and control infinitives is statistically significant in both Herodotus and the Gospels. The same is true in Sphrantzes ($\chi^2=6.179$, $p<.05$ [two-sided Fisher's exact test], with an effect size of $\varphi=.142$, which is a small effect size).

4.2 Backward Control and Change in Participles

We have seen that Ancient Greek backward control (demonstrated in the example in 8) – similar to Modern Greek (see below) backward control – is not a marginal construction, is not restricted only to some verbs, and is not related to multiple case assignment. The subject of the participle is also the subject of the main verb and is located between elements of the participle clause (represented in 9). In Ancient Greek, the controller is assigned its case in the matrix clause even though it is structurally in the embedded clause – in contrast to backward control with languages with multiple case assignment (Tsez, for instance).

- (8) (Herodotus 1.2.3)

<i>πέμπσαντα</i>	<i>δὲ</i>	<i>τὸν</i>	<i>Κόλχων</i>	<i>βασιλέα</i>	<i>ἔς</i>	<i>τὴν</i>
<i>pémpsanta</i>	<i>dè</i>	<i>tòn</i>	<i>Kólkhōn</i>	<i>basiléa</i>	<i>es</i>	<i>tēn</i>
send.PTCP.ACC	PRT	DEF.ACC	Colchus.GEN	king.ACC	to	DEF.ACC
<i>Ἑλλάδα</i>	<i>κήρυκα</i>	<i>αἰτέειν</i>				
<i>helláda</i>	<i>kéryka</i>	<i>aitéein</i>				
Greece.ACC	legate.ACC	ask.INF.PRS				

‘[They say that] the king of Colchus, sending a legate to Greece, asked. . . .’

- (9) [S_{matrix} [S_{ptcp} V_{ptcp} . . . NP_i . . .] . . . _____i V_{matrix} . . .]

Table 5: Discontinuities in control infinitives and conjunct participles in a diachronic perspective.

	Herodotus		Gospels		Sphrantzes	
	(no-)operator-induced discontinuities	continuities (96.08%)	(no-)operator-induced discontinuities	continuities (96.18%)	(no-)operator-induced discontinuities	continuities (94.95%)
Conjunct participles	21 (3.92%)	515 (96.08%)	50 (3.82%)	1258 (96.18%)	11 (5.05%)	207 (94.95%)
Control infinitives	35 (31.25%)	77 (68.75%)	50 (12.95%)	336 (87.05%)	14 (13.08%)	93 (86.92%)

The phenomenon under examination is significant in terms of diachronic development because it is affected by a significant change: Inflected active participles of Ancient Greek changed into uninflected active gerunds, whereas the passive participles changed into adjectives.⁹ If we compare the Ancient Greek (and the New Testament) model of participles to the Modern Greek one, we can easily recognize that the participles in Ancient Greek show agreement (case, gender and number), voice and tense, in contrast to the modern “participles”, which are formed as an indeclinable gerund. The addition of Sphrantzes to the diachronic discussion is of significance, since the non-agreeing forms of the participle (*-ontas* forms) first appear in the late Medieval Greek texts.

In Table 6 (all data – except for Sphrantzes – are based on Manolessou 2005), it appears that, in early Medieval Greek texts, the *-onta* forms are neuter nominative or accusative singular nouns and have an attributive function, whereas in late Medieval texts, the *-onta* forms mainly have an adverbial function. Table 6 also includes the relevant data from Sphrantzes: Sphrantzes’ data seem more symmetrical in this respect: the *-onta* forms can appear with an attributive, on the one hand, or complement and adverbial, on the other hand, function, without a significant difference. Table 7 includes more data on all inflected participles in Sphrantzes and their role. Inflected participles in the text of Sphrantzes are very frequent with an adverbial function (with or without coreference of a participle’s subject with an element of the matrix clause).

Sphrantzes, however, also uses *ná*-subjunctives (or *hína*-subjunctives) instead of participles. Even though *ná* is mainly a grammatical element (represented as “AUX[iliary]” in the dependency annotated corpus), *hína*-subjunctives can have various functions. Table 8 demonstrates that, in most of the cases, *hína*-subjunctives have an adverbial function; *hína*-subjunctives can also be used as complements productively.

Moreover, according to Jannaris (1968: 505ff), Wolf (1911: 56) and Cheila-Markopoulou (2003), among others, starting with early Medieval Greek texts, participles can also be used instead of a finite verb, and, in some cases, they can be coordinated with a finite verb. See the examples in (10a-b). As Cheila-Markopoulou (2003) correctly states, it is not the case that this construction

⁹ Manolessou (2005) sees this change as a split of a “mixed” category (participle), which included both verbal and nominal features, to a verbal category (active gerund) and a nominal one (passive participle). On participles as verbal complements of aspectual verbs, see Lavidas & Drachman (2012). Aspectual verbs could take either both infinitive and participle complements or only participle complements in Ancient Greek. In Late Byzantine Greek, participles have mainly an adverbial function – they can be used as verbal complements only very rarely, and their complement use is lost in Early Modern Greek.

Table 6: -onta forms and their functions in a diachronic perspective (all data taken from Manolissou (2005), except for the data from the text of Sphrantzes).

Texts	Century	Attributive -onta forms	Complement -onta forms	Adverbial -onta forms
<i>Malalas</i>	6th	15	2	4
<i>Leontios of Neapolis</i>	6th	4	0	2
<i>Chronicon Paschale</i>	5th	3	0	0
<i>Vita Epiphanii</i>	6th	3	0	0
<i>Apocalypses Apocryphae</i>	2th–6th	5	1	0
<i>Funerary inscriptions</i>	5th–7th	Formulaic	–	–
<i>Digenis Akritis E</i>	12th	0	2	5
<i>Chronicle of Morea (6000vv.)</i>	14th	0	9	45
<i>War of Troy (4000vv.)</i>	14th	0	2	17
<i>Velthandros</i>	14th	0	3	7
<i>Livistros</i>	14th–15th	0	0	2
<i>Machairas (40pp)</i>	15th	2	0	49
<i>Sphrantzes</i>	15th	Attributive: 8 (In addition: Subject [nominalized]: 3; Appositive [nominalized]: 4)	Complement: 8 (With coreference of the participle's subject ["xobj"]: 6/8; Object-nominalized: 1/8; Oblique: 1/8)	Adverbial: 4 (With coreference of participle's subject ["xadv"]: 3/4)

Table 7: Inflected participles and their functions in Sphrantzes.

Inflected participles: 838	
<i>Attributive</i>	116/838
<i>Complement</i>	2/838
<i>Adverbial</i>	720/838
	403
	317
	Without any coreference
	[adv]
	With coreference of participle's subject with the subj of the main verb or the obj of the main verb or an element of the matrix clause [xadv] – The subjects can be null subjects

Table 8: *ná/hína* in Sphrantzes and their functions according to the annotated corpus.

216 <i>ná</i> -subjunctives	118 <i>hína</i> -subjunctives
216/216 AUX (auxiliaries: “[. . .] modal particles [. . .]. The intuition behind the relation Aux is that it serves to mark off ‘grammatical words’ as opposed to ‘lexical words’”; Haug 2010: 24)	73/118 ADV (adverbials: “adverbial expressions can take various forms: adverbs, preposition phrases, nouns (in oblique cases), participles, gerunds, etc”; Haug 2010: 18)
	40/118 COMP (complements: “The subjunction is related to the matrix clause via COMP if it is a complement clause”; Haug 2010: 36)
	2/118 APOS (appositions: “elements which serve to further elaborate on a nominal referent, without restricting the reference”; Haug 2010: 26)
	3/118 AUX (auxiliaries)

is attested only in vernacular or non-prepared texts. One can find these constructions in Polybius or Malalas or in the later Sphrantzes (Cheila-Markopoulou following Kavčič (2001)). For instance, Malalas, who uses this construction, is an author who follows the Ancient Greek model with regard to participles in several cases. Cheila-Markopoulou notices that, in all examples, the participle is subject-oriented, following the tendency of this period. The participles under discussion can have other arguments (for instance, objects) as well. A corpus study of Sphrantzes also reveals similar characteristics of this text. See the examples in (11a–b).

- (10) a. (*Vita Eriphanii* 100B; Jannaris 1968: 505)

Δεξάμενος οὖν βασιλεὺς τὰ γράμματα παρὰ
deksámēnos oûn basileûs tà grámmata parà
 receive.PTCP.MID.NOM PRT king.NOM DEF.ACC letters.ACC from
 Ἐπιφανίου καὶ ἐποίησεν τύπον τοιοῦτον
 Eriphaníou kaī epoíēsen týpon toioûton
 Epithanios and made.3SG form.ACC that.ACC
 ‘The king received the letters of Eriphanios and made this form.’

- b. (SB III 6262 [Bilabel, Friedrich. 1926. *Sammelbuch griechischer Urkunden aus Ägypten, Dritter Band*. Berlin & Leipzig], 2–3, 3rd ct. AD; Mandilaras [1973: 372]: P.Lond.Inv. No. 1575, 2–3)

Πρὸ μὲν πάντων τὸ προσκύνημά σου ποιῶ καθ’
 prò mèn pántōn tò proskýnēmá sou poiō kat^h’
 of PRT all.GEN DEF.ACC worship.ACC 2SG.GEN make.1SG by
 ἐκάστην ἡμέραν καὶ εὐχόμενος, ἵνα σε ἀπολάβω [...]
 hekástēn hēméran kaī eukhómēnos, hína se apolábō [...]
 every day and pray.PTCP.NOM.SG that 2SG.ACC receive.1SG.F
 ‘I worship you more than anybody else every day and pray to receive you [...].’

- (11) a. (Sphrantzes 3.1)

Ἄφ’ οὗ δὴ β-ου ἔτους μέχρι καὶ τοῦ κα-ου
 Aph’ hoû dē ib-ou étous mékhri kaī toû ka-ou
 from REL.GEN PRT 12-GEN year.GEN until and DEF.GEN 21-GEN
 πολλῶν γενομένων ἀναγκαίων καὶ
 pollôn genoménōn anankaíōn kaī
 many.GEN occurred.PTCP.GEN.PL necessary.GEN.PL and
 μνήμης ἀξίων,
 mnémēs aksíōn
 memory.GEN.SG valuable

‘Between 6912 and 6921 [September 1403 and September 1413], many memorable events occurred.

- b. (Sphrantzes 27.1.0)

Καὶ τῷ νδ-ω ἔτει Δεκεμβρίῳ μηνὶ πρὸς
 Kaī tōi nd-ōi étei Dekembriōi mēni pròs
 and DEF.DAT 54-DAT year.DAT December.DAT month.DAT toward
 τέλος, ἐλθόντος μου εἰς τὸν Μορέαν
 télos, el^hóntos mou eis tòn Moréan
 end come.PTCP.GEN.SG 1SG.GEN to DEF.ACC Morea
 ‘And at the end of December 6954 [1445], I sailed to the Morea.’

As for the stage of development (12th–15th century) that corresponds to the period of Sphrantzes, Manolessou observes that the *-onta* forms are used for all cases and genders, but, from the 14th century, *-ontas*, which is closer to an adverbial suffix, replaces *-onta*. Both *-onta* and *-ontas* coexist throughout this stage. The annotated corpus of Sphrantzes can offer a first quantitative analysis of this parameter; see Table 9.¹⁰ It is evident that the *-onta* form is more productive and used in more contexts than the *-ontas* form. Both are used frequently with an attributive function and as control complements. In addition, the *-onta* form also has a frequent usage as a controlled adjunct and as a subject (as a nominalized form).

Table 9: *-ontas* vs. *-onta* forms in Sphrantzes and their functions (according to the PROIEL annotated corpus).

V-ontas forms: 12	V-onta forms: 27
ATR (attribute): 4 (33.33%)	ATR (attribute): 8 (29.63%)
OBJ (object) (nominalized form): 4 (33.33%)	XOBJ (control complement): 6 (22.22%)
XOBJ (control complement): 2 (16.67%)	APOS (apposition) (nominalized form): 4 (14.81%)
SUB (subject) (nominalized form): 1 (8.33%)	XADV (controlled adjunct): 3 (11.11%)
APOS (apposition) (nominalized form): 1 (8.33%)	SUB (subject) (nominalized form): 3 (11.11%)
	ADV (adverbial): 1 (3.70%)
	OBJ (object) (nominalized form): 1 (3.70%)
	OBL (oblique): 1 (3.70%)

It is of significance for the aims of our study that, according to Manolessou, this period demonstrates both usage of the Ancient Greek participle forms together with the new gerund forms. The frequencies depend on the register. As the case suffix of the gerund disappears, the type of absolute participles also disappears. However, the gerund has a similar function to the absolute type when used with a non-coreferential subject (see the example in (12)).¹¹

¹⁰ According to Manolessou (2005: 251), “The forms with and without [-s] coexist in texts of the period, but distributional data are lacking.” Moreover, Manolessou argues that the main function of the participle in this stage is adverbial, and this form of the participle can be called a gerund, which demonstrates only verbal characteristics.

¹¹ After the end of this stage (in post-Byzantine Greek), new gerunds lose their tense as well, and they can be formed only from Present stems. They can be used only as adverbials (as in Modern Greek) and cannot appear in an argument position. For Modern Greek gerunds, see, among others, Tsimpli (2000), Sitaridou & Haidou (2002) and Tsokoglou & Kleidi (2002).

(12) (Chronicle of Morea 1048; Manolesou 2005: 253)

<i>διαβόντα</i>	<i>γὰρ</i>	<i>ἑνας</i>	<i>καίρος,</i>	<i>εὔρυσεν</i>
<i>diabónta</i>	<i>gar</i>	<i>énas</i>	<i>kairós,</i>	<i>egýrisen</i>
having-passed	PRT	INDF.NOM	time.NOM.SG	returned.3SG
<i>εκεῖνος</i>				
<i>ekeínos</i>				
that-person.NOM				

‘Some time having passed, he returned.’

Manolesou’s explanation of the change is based on the features of control with subjects of participles:¹² the peripheral adverbial position of the new adverbial participles/gerunds causes difficulties for the required control between the matrix constituent and the participle/gerund. For Manolesou, the tendency of increase in absolute participles is toward an unmarked and simpler option, which limits the agreement relationship between the participle and the matrix clause. Accordingly, in the first stage, there is an agreement requirement for adverbial participles; in the second stage, absolute participles increase because there is no agreement requirement with the matrix clause. In the last stage, the participle is independent from the matrix clause and is a non-finite fixed (non-agreeing) verbal element without any requirement for agreement.

4.3 Backward Control and Later Greek

In the case of Greek, the evidence on backward control derives from both an early (New Testament Greek) and a late (Modern Greek) phase of Greek, which makes the discussion of diachrony significant. An important difference should be discussed with regard to backward control and the various languages under examination: Modern Greek lacks infinitives, and the question of backward control concerns the null subject of the *na*-subjunctive,¹³ in contrast to New

¹² See also Manolesou’s (2005: 273) remark on the lack of corpus studies regarding the characteristics of the development of participles/gerunds:

“Works treating Ancient/Greek participles [...] do not provide the kind of quantitative information that would be helpful to the present investigation. Also, large-scale computerised tagging of AG texts does not exist, and for later texts nothing is at all available, with the exception of the New Testament.”

¹³ On the various analyses of *na* (complementizer, subjunctive mood marker) see, among many others, Philippaki-Warbuton & Veloudis (1984), Rivero (1994) and Roussou (2009, 2010).

Testament Greek or the text of Sphrantzes, which include infinitives. Moreover, as seen above, Sphrantzes demonstrates an interesting contrast between infinitives and their replacement, *na*-subjunctives.

Joseph (2002) analyzes control structures with finite structures of the New Testament as a transitional stage between the Ancient Greek and the Modern Greek type. The main question for Joseph (2002) is whether the empty subject in these cases is a controlled empty element – that occurs with a finite verb – or a *pro* (a null pronoun with ordinary anaphoric reference) – because Greek of the New Testament was a pro-drop language. On the other hand, according to Joseph, the historical development with control in Hellenistic Greek, and especially with regard to the new finite complement structures, shows that control is related to lexical semantics. For Joseph, control is an “inherently semantic notion” – mainly related to lexical semantics. This means that, according to this perspective, only a broad sense of control can be seen in these cases, and only in the form of a *pro* (not the controlled subject PRO) in the complement clause: with non-subjects, an overt coreferent pronominal is present (13a); the pro-drop of the subject of the lower clause is available (13b); and, in the case of emphasis, an overt subject pronoun can appear in the complement clause (which is expected on the pro-drop analysis) (13c).

(13) a. (Colossians 4:17)

Βλέπε τὴν διακονίαν ἣν παρέλαβες ἐν κυρίῳ, ἵνα
Blépe tēn diakonían hēn parélabes en kyriōi, hina
 see.IMP DEF.ACC ministry.ACC REL.ACC received.2SG in lord.DAT COMP
αὐτὴν πληροῖς
autēn plēroîs.
 3SG.ACC fulfill.2SG

‘See to it that you complete the work which you have received in the Lord.’

b. (Matthew 25:24)

ἔγνων σε ὅτι σκληρὸς εἶ ἄνθρωπος
égnōn se hótī sklēròs eî ánthrōpos
 knew.1SG 2SG.ACC COMP hard.NOM be.2SG man.NOM

‘I knew that you are a hard man.’

c. (Acts 3:10)

ἐπεγίνωσκον δὲ οὗτος ἦν ὁ πρὸς τὴν
epegínōskon dē hoútōs ên ho pròs tēn
 knew.3PL PRT this.NOM was.3SG DEF.NOM for DEF.ACC

ἐλεημοσύνην καθήμενος
eleēmosýnēn kat^hēmenos
 alms.ACC sitting.NOM
 ‘And they knew him to be the one that sat and asked alms.’
 (Joseph 2002: 11–12)

With regard to Modern Greek control, two types of verbs can be distinguished: verbs with obligatory control and verbs with non-obligatory control; according to Alexiadou et al. (2010), all verbs with obligatory control also allow backward control (see the example in 14).¹⁴

- (14) (Alexiadou et al. 2010: 96)
- | | | | | | |
|------------|------------------|-------------|------------|------------------|-------------|
| (O | Γιάννης) | έμαθε | (o | Γιάννης) | να παίξει |
| (O | Janis) | emathe | (o | Janis) | na pezi |
| DEF.NOM | Janis.NOM | learned.3SG | DEF.NOM | Janis.NOM | NA play.3SG |
| (o | Γιάννης) | κιθάρα | (o | Γιάννης) | |
| (o | Janis) | kithara | (o | Janis) | |
| DEF.NOM | Janis.NOM | guitar.ACC | DEF.NOM | Janis.NOM | |
- ‘Janis learned to play the guitar.’

Evidence in favor of a backward control analysis for these verbs derives from the fact that the position of the subject of the *na*-subjunctive may precede objects of the *na*-subjunctive, whereas the subject may also precede embedded VP-modifiers (see the example in 15).¹⁵

14 Another type of *na*-subjunctives allows disjoint reference besides coreference: this type of *na*-subjunctives is selected by *prospatho* ‘try’ and *kataferno* ‘manage’ (Terzi 1992; Roussou 2009; Spyropoulos & Philippaki-Warburton 2001). Aspectual verbs (with a meaning of “start-stop-continue”) have been analyzed as ambiguous between control (Roussou 2009) and raising (Alexiadou & Anagnostopoulou 1999).

15 Philippaki & Katsimali (1999) and Spyropoulos (2007) have considered NP-intensifiers/modifiers that are licensed in the lower clause (see the example in i) as evidence that the subject in the lower clause is *pro*.

- (i)
- | | | | | | | | |
|------------|------------------|----------|--------------|------------|------------------|--------------|------------|
| (O | Γιάννης) | ξέρει | να κολυμπάει | (o | Γιάννης) | μόνος | του |
| (O | Janis) | kseri | na kolimbai | (o | Janis) | monos | tu |
| DEF.NOM | Janis.NOM | know.3SG | NA swim.3SG | DEF.NOM | Janis.NOM | alone.NOM | 3SG.GEN |
- ‘John knows how to swim by himself.’

See also above: Joseph (2002) on Hellenistic Greek and an analysis of *pro* in similar cases.

(15) (Alexiadou et al. 2010: 98)

ξέχασε να ξεβγάλει ο Γιάννης το πουκάμισο
ksehase na ksevgali o Janis to pukamiso
 forgot.3SG NA rinse.3SG DEF.NOM Janis.NOM DEF.ACC shirt.ACC
τέσσερις φορές
teseris fores
 four times

‘John forgot to rinse the shirt four times (*four rinsings/forgettings*).’

Moreover, Alexiadou et al. (2010) reject a rightward scrambling hypothesis (which would mean that the subject belongs to the higher clause and that it surfaces to the right of the embedded verb) on the basis of evidence from negative concord (see 16a-c).

(16) a. (Alexiadou et al. 2010: 100)

Ο Πέτρος διέταξε να μην απολυθεί κανείς
O Petros dietakse na min apolithi kanis
 DEF.NOM Petros.NOM ordered.3SG NA NEG fire.PASS.3SG nobody.NOM
 ‘Peter ordered that nobody was fired’

b. Ο Πέτρος δεν διέταξε να απολυθεί κανείς
O Petros den dietakse na apolithi kanis
 DEF.NOM Petros.NOM NEG ordered.3SG NA fire.PASS.3SG nobody.NOM
 ‘Peter did not order that anybody was fired’

c. ***Κανείς** διέταξε να **μην** απολυθεί ο Πέτρος
 ***Kanis** dietakse na **min** apolithi o Petros
 nobody.NOM ordered.3SG NA NEG fire.PASS.3SG DEF.NOM Petros.NOM
 ‘Nobody dared not to eat cheese’

According to this analysis, there is a difference between forward control sentences with a low negation (16c) and backward control sentences with a low negation (17).

(17) (Alexiadou et al. 2010: 100)

%**Τόλμησε** να **μην** φάει **κανείς** το τυρί
 %**Tolmise** na **min** fai **kanis** to tiri
 dared.3SG NA NEG eat.3SG nobody.NOM DEF.ACC cheese.ACC

Backward control in Modern Greek is optional – in contrast to Tsez (where it is obligatory with the very few verbs that allow for it), for instance. There is also a significant difference between Modern Greek and Tsez in terms of case: The

matrix argument in Modern Greek bears the nominative, in the case of backward control with embedded quirky dative (i.e., with an argument that carries a morphological genitive case).

Alexiadou et al. (2010) also examine a list of characteristics that appear in languages that permit backward control (Modern Greek and Romanian) but not in languages that do not allow backward control (Modern English): Languages that allow backward control also allow: (a) subjunctives in obligatory control, but no infinitives – which holds true for Modern Greek but not for Romanian (which has infinitives with raising verbs; however, Bulgarian, for instance, lacks infinitives with obligatory control and also lacks backward control); (b) pro-drop; (c) VSO without movement of the subjects (VP-internal subjects); (d) clitic doubling; and (e) V-movement to check the subject requirement (the EPP-requirement). Properties (b)–(e) have been analyzed by Alexiadou & Anagnostopoulou (1998, 2001) as reflecting the availability of clitic doubling for agreement-associate relationships (with movement of the clitic/agreement without pied piping – in contrast to long distance Agree).

As seen above, the New Testament shows backward control with infinitives and Sphrantzes with both infinitives and subjunctives. Table 10 includes data on infinitives in the New Testament and Sphrantzes, their functions as complements, objects or adverbials and the cases where there is a coreference between their subjects and elements of the matrix clause. The data present similar tendencies of the frequencies of functions for the infinitives; there is only a significant drop of the adverbial function of the infinitive without coreference (See also Appendix 1, which presents the results of a corpus study on verbs that select an infinitive, or *hína-/ná*-subjunctive in Sphrantzes).

Table 10: Infinitives in the New Testament and Sphrantzes, their functions and coreference of their subjects (only data on control complements, nominalized objects, controlled adjuncts).

	<i>Infinitives (all functions)</i>	Functions of infinitives: control complements, nominalized objects, controlled adjuncts	
New Testament	2283 infinitives	1856 infinitives	COMP (complement): 581/1856 (31.30%) XOBJ (control complement): 1012/1856 (54.53%) vs. OBJ (nominalized object): 14/1856 (0.75%) XADV (controlled adjunct): 249/1856 (13.42%)
Sphrantzes	226 infinitives	185 infinitives	COMP: 55/185 (29.73%) XOBJ (control complement): 115/185 (62.16%) vs. OBJ (nominalized object): 3/185 (1.62%) XADV (controlled adjunct): 12/185 (6.49%)

With regard to features (b–e), VSO is the new unmarked word order for the New Testament (see Lavidas (2015), among others), and both the New Testament and Sphrantzes show a similar behavior with regard to clitic doubling, pro-drop and EPP as Modern Greek.

As shown above, it is evident that backward control in Sphrantzes is affected by the general contrast of archaizing vs. modern rules in Sphrantzes. In the following section, we support this conclusion with some remarks on the contrast between archaizing and modern features from other areas of grammar: We discuss the contrast between archaizing datives and modern features of voice morphology in Sphrantzes.

4.4 How is Backward Control Connected to Other Characteristics of the *Chronicle* of Sphrantzes?

Further relevant case studies on the contrast between archaizing vs. popularizing features can confirm the conclusions drawn based on backward control, as well as reveal other aspects of the linguistic characteristics of the text. Again, such case studies are only possible through a diachronic analysis, which stress the symmetrical or asymmetrical developments in texts from various stages. We will present some remarks on the contrast between two other case studies based on the text of Sphrantzes and the PROIEL corpus. The contrast concerns the objecthood as related to the morphological case, on the one hand, and the voice morphology, on the other. For a correlation between changes in different areas (case or voice or word order), see Lavidas (2015). We will demonstrate evidence on the conclusion that Sphrantzes' *Chronicle* is a popularizing Greek text with an essentially modern syntax that is archaized in various ways.¹⁶

The dative case is one of the ways in which the text of Sphrantzes is archaized. Table 11 shows data on the presence of the dative as selected by verbs in Sphrantzes, in the earlier Koiné Greek text of the New Testament and in the earlier text of Herodotus (in the part that is annotated for the PROIEL corpus) (an example from Sphrantzes is provided in 18).¹⁷ Objects in the dative case are still

¹⁶ According to Horrocks (2010: 272), already in the late Byzantine period, a constant clause structure is available in the middle-style texts, which demonstrate archaizing deviations (for instance, Ancient Greek agreement patterns or infinitival complements), but which can be described as “an essentially modern syntax that is archaized in various ways.”

¹⁷ We should note that there is a statistically significant difference between the presence of objects in the dative case in Sphrantzes and Herodotus ($\chi^2 = 59.558, p < .05$ [two-sided Fisher's exact test], with an effect size of $\phi = .102$, which is a small effect size), as well as between the

Table 11: Frequency of datives vs. other cases to mark objects in a diachronic perspective.

Texts	Objects		
	in the dative case	in the genitive case	in the accusative case
<i>Sphrantzes</i>	15.14% (106/700)	5.86% (41/700)	79% (553/700)
<i>New Testament</i>	32.66% (2679/8202)	4.71% (386/8202)	62.63% (5137/8202)
<i>Herodotus</i>	29.01% (1466/5053)	8.55% (432/5053)	62.44% (3155/5053)

productively used, even though there is a significant increase in the use of objects in the accusative case in contrast to the data of the New Testament and Herodotus. See also Appendix 2 for a list of verbs that select an NP in the dative in Sphrantzes.

(18) (Sphrantzes 8.10)

δέδωκεν ἐξουσίαν ὁ ἅγιος βασιλεὺς

dédōken eksousían ho hágios basileús

give.3SG.PRF authority.ACC DEF.NOM saint.NOM king.NOM

τῷ υἱῷ αὐτοῦ

tōi hyiōi hautou

DEF.DAT son.DAT 3SG.GEN

‘The saint king offered the authority to his son.’

On the other hand, with regard to the voice morphology,¹⁸ the text of Sphrantzes appears to follow modern characteristics. Our case study here concerns only an aspect of voice morphology: the case of voice alternation between passive and middle Aorist (and Future in a degree). Ancient Greek has a system of three voices, an active voice and two non-active voices, i.e. middle and passive, which are distinguished only in the Aorist and Future. For the verbs that could appear with both non-active morphologies, several analyses have been proposed. For instance, verbs that alternate between the passive Aorist and the middle sigmatic Aorist in Homer were mainly psych-verbs or verbs of motion, and, according to Allan (2003), they could express semantic features of different classes: for instance, motion with the passive morphology and reflexive features with the sigmatic middle morphology.¹⁹

presence of objects in the genitive case in Sphrantzes and Herodotus ($\chi^2 = 5.906$, $p < .05$ [two-sided Fisher’s exact test], with an effect size of $\varphi = .032$, which is again a small effect size).

18 On the relation between datives and voice, see Gianollo & Lavidas (2014), among others.

19 See Kulikov & Lavidas (2017) for a comparative analysis on Vedic and Greek.

Our corpus study examines the voice morphology of all 3rd-person singular indicative verbs (to restrict the various parameters involved) in the different stages of Ancient Greek, Koiné Greek and Late Byzantine/Medieval Greek (Sphrantzes). Hence, Sphrantzes' text can broaden the diachronic examination of voice morphology (see Kulikov & Lavidas (2017) on Homeric and Classical Greek). In parallel, such a corpus study can reveal more details on the philological–linguistic profile of the text of Sphrantzes.

According to the results of the corpus study, Ancient Greek data (Herodotus) include nine verbs that are attested in both non-active voices (middle and passive), most of them with an (anti-)causative interpretation. The stage of Koiné Greek is a period of expansion of the passive morphology: for example, dependents or intransitives that bear middle morphology in the Aorist or Future in Ancient Greek appear with passive morphology in the period of Koiné Greek. For instance, the passive Future and Aorist forms in (19a, b) are used instead of middle forms in the Roman papyri (Chatzidakis 1975 [1892]: 193–200).

- (19) a. (PMich. [=The Michigan Papyri, Ann Arbor: University of Michigan Press, 1931–] 486.7; 2nd ct. AD)

ἡσθάνθη
ēist^hánt^hēn

feel.PASS.AOR.1SG

- b. (PMich. 497.15; 2nd ct. AD)

ἐλυπήθη
elypēt^hē

grieve.PASS.AOR.3SG

Moreover, there is an obvious decrease in the class of verbs that show the middle-passive voice alternation in the Aorist. These verbs do not show a common syntactic/semantic characteristic and do not form a unified verb class but rather indicate a morpho-phonological class of polysyllabic verbs. Tables 12a-b show a clear decrease in the number of lemmas that can appear with middle and passive voice morphology in the Aorist in the different periods. In the New Testament (Gospels), five verbs or 5.81% of all verbs that are attested in the middle voice can appear in both voices in the Aorist as opposed to nine verbs or 10.11% of all verbs that are attested in the middle voice in Herodotus. Our corpus study can also show that the text of Sphrantzes still uses verbs that prefer the middle voice morphology in the Aorist – but no verbs can appear with both middle and passive voice in the Aorist. Similar remarks hold for the case of middle and passive Future. There is a clear decrease in Koiné Greek – and no

Table 12a: Lemmas that can appear with two non-active voice morphologies in the Aorist tense in a diachronic perspective.

Periods (Texts)	Lemmas that can appear with two non-active voice morphologies (Middle & Passive Aorist)
<i>Ancient Greek (Herodotus)</i>	9 [both in middle and passive Aorist] / 89 [middle verbs] [10.11%] / 84 [passive verbs] [10.71%]
<i>Koiné Greek (New Testament)</i>	5 [both in middle and passive Aorist] / 86 [middle verbs] [5.81%] / 168 [passive verbs] [2.98%]
<i>Late Byzantine Greek (Sphrantzes)</i>	0 [both in middle and passive Aorist] / 19 [middle verbs] / 51 [passive verbs]

Table 12b: Lemmas that can appear with two non-active voice morphologies in the Future tense in a diachronic perspective.

Periods (Texts)	Lemmas that can appear with two non-active voice morphologies (Middle & Passive Future)
<i>Ancient Greek (Herodotus)</i>	1 [both in middle and passive Future] / 24 [middle verbs] [4.16%] / 3 [passive verbs] [33.33%]
<i>Koiné Greek (New Testament)</i>	1 [both in middle and passive Future] / 48 [middle verbs] [2.08%] / 71 [passive verbs] [1.41%]
<i>Late Byzantine Greek (Sphrantzes)</i>	0 [both in middle and passive Future] / 3 [middle verbs] / 1 [passive verbs]

verb appears with both passive and middle voice morphology in Sphrantzes, which reflects a modern characteristic with respect to the voice morphology.

Only four cases of synthetic Future verbs are attested in Sphrantzes: three of them in the middle and one of them in the passive (see the examples in 20a, b–21). However, if we take a closer look at these examples, the Future middles are the copula ‘be’/‘become’, whereas the Future passive consists of the imitation (repetition) of the biblical text of the Septuagint. On the other hand, Sphrantzes shows no examples of passive (or middle) Future subjunctives – in contrast to the tendency of hypercorrection and the presence of a “new” passive Future subjunctive that has been attributed to Byzantine Greek (Nicholas 2008). Few problematic cases concern possible Future or Aorist subjunctive actives in Sphrantzes; these forms bear the endings *-an/-ōsan* and are, again, probably Aorist subjunctives.

(20) Sphrantzes: examples of synthetic Future middle

a. (Sphrantzes 38.9)

εἰ δ' οὖν, μάχη μέσον αὐτῶν ἔσται.
ei d' oûn, mákhē méson autôn éstai.
 if PRT PRT fight in-the-middle 3PL.GEN be.FUT.IND.MID.3SG
 'If, then, there is a fight among them.'

b. (Sphrantzes 41.1)

καὶ γενήσεται συμβίβασις μέσον
kaì genésetai symbíbasis méson
 and happen.FUT.IND.MID.3SG reconciliation.NOM in-the-middle
ὑμῶν ἀγάπης
hymôn agápēs
 2PL.GEN love.GEN
 'And reconciliation will appear, and love between you all.'

(21) Sphrantzes: example of a synthetic Future passive [But, in reality, it repeats the passage from the Septuagint: Psalms 29: 6].

(Sphrantzes 8.8)

„Ἐσπέρας *αὐλισθήσεται* κλαυθμὸς”
 “*hespéras aulist^hésetai* klaut^hmós”
 evening.GEN lodge.FUT.IND.PASS.3SG sorrow.NOM
 'Weeping may tarry for the night.'

5 Conclusions

An annotated corpus that includes texts from various Postclassical stages of the diachrony of Greek can offer insights into the analysis of syntactic phenomena, such as backward control, as well as quantitative evidence on the linguistic and philological profile of texts. In the case of Sphrantzes, which has been used as an example in the present study, a contrast between modern and archaizing features is revealed through a diachronic examination. We demonstrated this type of diachronic approach through a major case study that concerns backward control and through minor case studies that also support the main view of the contrast between archaizing and modern elements (or parallel grammars) in Sphrantzes.

Our starting point was an apparent diachronic asymmetry, which has its source in examples of backward control: Even though the frequency of discontinuous infinitives, NPs, AdvPs and PPs drops from Herodotus to the New Testament, discontinuous conjunct participles, with the subject interfering in

the participle clause, increase from Herodotus to the New Testament. This discontinuity is only apparent and in fact instantiates backward control with participles, a phenomenon that is present in both texts. We have shown that Sphrantzes also maintains the levels of discontinuity that we observe in the Gospels for the categories AdjP, AdvP and PP, whereas the number of discontinuous NPs is much higher than in the Gospels. We have argued that this reflects a false archaism for stylistic purposes. The difference between conjunct participles and control infinitives is statistically significant in Herodotus, in the Gospels and in Sphrantzes, which also provides evidence in favor of an apparent discontinuity due to the backward control examples.

We also supported our conclusion on the contrast between popularizing and archaizing features in Sphrantzes through a diachronic analysis of the dative case and non-active voice morphology. Sphrantzes' *Chronicle* appeared again to be a popularizing Greek text with a modern syntax (with regard to voice morphology) that is archaized through the presence of datives.

Appendix 1 Verbs that Select Infinitive or *ná-/hína*-subjunctive in Sphrantzes

a. Verbs that Govern Infinitives.

Sphrantzes

16 match types, 19 matches

Occurrences	Lemma
3	<i>εἰμί eimí</i> 'be'
2	<i>ἐθέλω et^h élō</i> 'want'
1	<i>νοέω noéō</i> 'understand'
1	<i>ἐπιβοάω epiboáō</i> 'cry out'
1	<i>μέλλω méllō</i> 'be about to'
1	<i>λέγω légō</i> 'say'
1	<i>μανθάνω mant^h ánō</i> 'learn'
1	<i>παραχωρέω parakhōréō</i> 'leave, concede'
1	<i>γράφω gráphō</i> 'write'
1	<i>νομίζω nomízō</i> 'believe'
1	<i>οἶδα oída</i> 'know'
1	<i>ὀφείλω orheílō</i> 'owe'
1	<i>ἐτοιμάζω hetoimázō</i> 'prepare'
1	<i>δοξάζω doksázō</i> 'praise'

1	<i>ὑποπεύω hypopteúō</i> ‘suspect, guess’
1	<i>σώζω sōízō</i> ‘save’

b. Verbs that Govern *hína*-subjunctives.

Sphrantzes

24 match types, 34 matches

Occurrences	Lemma
3	<i>ὀρίζω horízō</i> ‘determine’
3	<i>βουλεύω bouleúō</i> ‘decide’
3	<i>ζητέω zētēō</i> ‘seek’
2	<i>ἵστημι hístēmi</i> ‘cause to stand’
2	<i>μέλλω méllō</i> ‘be about to’
2	<i>εἶμι eimí</i> ‘be’
2	<i>δέω déō</i> ‘ask’
1	<i>δοκέω dokéō</i> ‘think’
1	<i>σπουδάζω spoudázō</i> ‘hurry’
1	<i>δεῖ deí</i> ‘be necessary’
1	<i>ἐκδέχομαι ekdékhomai</i> ‘wait’
1	<i>τυγχάνω tynkhánō</i> ‘happen to be at’
1	<i>νομίζω nomízō</i> ‘believe’
1	<i>ἐθέλω et^héló</i> ‘want’
1	<i>φαίνω phaínō</i> ‘appear, shine’
1	<i>ἐνεργέω energéō</i> ‘be effective, act’
1	<i>παραχωρέω parakhōréō</i> ‘concede’
1	<i>ὑπάγω hypágō</i> ‘go away’
1	<i>τάσσω tássō</i> ‘arrange’
1	<i>γυρεύω gyreúō</i> ‘search’
1	<i>τολμάω tolmáō</i> ‘be courageous’
1	<i>ἀφίημι arhíēmi</i> ‘leave’
1	<i>συμβιβάζω symbibázō</i> ‘agree, unite’
1	<i>ποιέω poiéō</i> ‘make’

c. Verbs that Govern *ná*-subjunctives.

Sphrantzes

27 match types, 38 matches

Occurrences	Lemma
4	<i>ἢμπορώ ēmporō</i> ‘be able’
3	<i>ἔχω ékhō</i> ‘have’
2	<i>λέγω légō</i> ‘say’
2	<i>τυγχάνω tynkhánō</i> ‘happen to be at’
2	<i>ἐθέλω et^héló</i> ‘want’
2	<i>ζητέω zētēō</i> ‘seek’
2	<i>ἀγαπάω agarápō</i> ‘love’
2	<i>ἀφίημι arhíēmi</i> ‘leave’
1	<i>ἀπομένω apoménō</i> ‘stay, wait for’
1	<i>ξέρω ksérō</i> ‘know’

1	ἀναγκάζω <i>anankázō</i> ‘force’
1	ἀγροικῶ <i>agroikō</i> ‘listen’
1	γίγνομαι <i>gígnomai</i> ‘become’
1	συγχωρῶ <i>synkhōrēō</i> ‘concede’
1	βουλεύω <i>bouleúō</i> ‘decide’
1	εἰμί <i>eimí</i> ‘be’
1	δύναμαι <i>dýnamai</i> ‘be able’
1	ὑπάγω <i>hypágō</i> ‘go away’
1	φαίνω <i>pháinō</i> ‘appear, shine’
1	οἶδα <i>oída</i> ‘know’
1	χρεωστῆναι <i>khreōstēnāi</i> ‘to be in debt’
1	ἐνδίδωμι <i>endídōmi</i> ‘give in’
1	εὐδοκῶ <i>eudokēō</i> ‘take pleasure in’
1	σώζω <i>sōízō</i> ‘save’
1	ποιέω <i>poiēō</i> ‘make’
1	εὐρίσκω <i>heurískō</i> ‘find’
1	ἵστημι <i>hístēmi</i> ‘cause to stand’

Appendix 2 Indicative List of Verbs that Productively Select Objects in the Dative Case in Sphrantzes

Frequent Verbs (Lemmas) + Datives [Indicative list]

Sphrantzes

ὀρίζω *horízō* ‘determine’ [9 occurrences]
 δίδωμι *dídōmi* ‘give’ [17 occurrences]
 λέγω *légō* ‘say’ [11 occurrences]
 συντυγχάνω *syntykhánō* ‘fall in with’
 συναντῶ *synantō* ‘meet with’
 παραδίδωμι *paradídōmi* ‘hand over to another’

Abbreviations

The glosses follow Leipzig Glossing rules.²⁰ Additionally, the following glosses have been adopted:

²⁰ <https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf>

AOR	ao rist
EVID	evidential
MID	middle voice
NA	subjunctive particle <i>na</i>
PRT	particle

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Section II: **Sociolinguistic Aspects and Variation**

Marina Benedetti

The Perfect Paradigm in Theodosius' Κανόνες: Diathetically Indifferent and Diathetically Non-Indifferent Forms

Abstract: Theodosius' Κανόνες εισαγωγικοί περί κλίσεως ὀνομάτων καὶ ῥημάτων 'Elementary rules on the inflection of nouns and verbs' (4th ct. AD) is a school work devoted to the teaching of nominal and verbal inflections. Besides full paradigms, this work provides a complex set of synchronic rules for declensions and conjugations, thus producing an impressive amount of otherwise unattested, bizarre and even impossible forms.

Partly owing to this inclusiveness, the Κανόνες – which for many centuries have played a remarkable role in the teaching of Greek – do not enjoy a very high reputation today. However, at closer inspection they may prove of some interest, as they offer a clue for reconsidering aspects of Ancient Greek from an unusual perspective – “through ancient Greek eyes”, so to speak.

A case study is offered in this paper, focusing on the treatment of the perfect, and on the intersection between morphological and “functional” criteria in the constitution of the system reported in the Κανόνες, which opposes an active, a middle and a passive perfect (e.g. *tétup^ha*, *tétupa*, *tétummai*, from *túptō* ‘strike’). This seemingly bizarre and obscure tripartite system is here interpreted in the light of a double opposition: between *diathetically indifferent* forms (i.e. hosting both active and passive functions, hence “middle”, according to ancient grammarians) and *diathetically non-indifferent* ones; then, among the latter, between “active” and “passive” forms. The Κανόνες thus highlight and project onto a purely synchronic and highly artificial system the effects of crucial developments of the perfect in Greek.

Keywords: Greek perfect, voice, middle, ancient grammatical tradition, Theodosius Alexandrinus

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1 Verbal Paradigms in Theodosius' Κανόνες

For many centuries, since the 4th/5th century AD and until at least the Renaissance, the teaching of Greek nominal and verbal paradigms was largely based upon Theodosius' Κανόνες εἰσαγωγικοὶ περὶ κλίσεως ὀνομάτων καὶ ῥημάτων (*Kanónes eisagōgikoi perì klíseōs onomatōn kai hrēmātōn*) 'Elementary rules on the inflection of nouns and verbs' (probably composed between the end of the 4th and the beginning of the 5th century; edited in Hilgard 1889–94) and on works depending on this, such as the extensive commentary of Choeroboscus (8th–9th ct. AD) (*inter alia*, Hunger 1978; Wouters 1988: 30 Kaster 1997: 366; Dickey 2007: 83, 2015: 478; Pagani 2015: 830; Matthaios 2015: 267).

The most striking feature of this very influential work is its aim at exhaustivity, with the inclusion of an impressive amount of inflected forms, many of which otherwise unattested, bizarre or even impossible (cf. Weems 1981: 166; Luiselli 1999: 78; Dickey 2007: 83; Van Elst 2011: 413). In the section devoted to verb inflection, the overabundance of unlikely forms is at least partly due to the selection of a single lexeme, *túptō* 'to hit', as the exemplar verb for a complete paradigm (according to a common practice); additional examples are further provided from many different verbs. *Túptō* appears thus combined with the most disparate inflections. Confining ourselves to the 1st person singular of the indicative we are faced with the following forms:

Table 1: 1st person singular of the indicative of *túptō*.

1. Present:	<i>túptō</i> (active) / <i>túptomai</i> (middle+ passive)
2. Imperfect:	<i>étupton</i> (active) / <i>etuptómēn</i> '(middle+ passive)
3. 1st Aorist:	<i>étupsa</i> (active) / <i>etupsámēn</i> (middle) / <i>etúp^ht^hēn</i> (passive)
4. 2nd Aorist:	<i>étupon</i> (active) / <i>etupómēn</i> (middle) / <i>etúpēn</i> (passive)
5. 1st Future:	<i>túpsō</i> (active) / <i>túpsomai</i> (middle) / <i>tup^hēsomai</i> (passive)
6. 2nd Future:	<i>tupō</i> (active) / <i>tupoūmai</i> (middle) / <i>tupēsomai</i> (passive)
7. Perfect:	<i>tétup^ha</i> (active) / <i>tétupa</i> (middle) / <i>tétummai</i> (passive)
8. Pluperfect:	<i>etetúp^hein</i> (active) / <i>etetúpein</i> (middle) / <i>etetúmmēn</i> (passive)

Besides actually documented forms (*étupsa*, *étupon*, *túpsō* etc.) we encounter a lot of *hapaxes* (such as *tupō*, *tétup^ha*, or *etetúp^hein*). In principle, of course, it cannot be excluded that some of the forms quoted by Theodosius might have occurred in literary texts which have not survived up to the

present time. But – besides the fact that this hypothesis could not apply to all cases¹ – the assumption that all the forms quoted by Theodosius must have occurred in a literary corpus would disregard the general character and purpose of this work. The selection of a single verb lexeme to be inflected in all forms fulfilled the “didactic purpose of setting out the grammar of the language without at this stage burdening the teacher and the learner with a heavy lexical load” (Robins 1993: 112), according to a very widespread teaching practice. Moreover, learners were expected not only to identify and interpret forms which they might find in their readings, but also to acquire an active competence in the imitation of classical Greek (cf. Wouters 1988: 80; Van Elst 2011: 413). So, the philological concern of conforming to textual evidence was entirely alien to the spirit of the *Καθόνες*; the textual evidence was merely the background for extracting correct predictions regarding all possible forms, which the learner could then identify but also produce by applying the rules developed by Theodosius. For example, the perfect *tétup^ha* ‘I have struck’ – otherwise unattested, as far as we know – is not simply quoted in the *Καθόνες*, but is presented as the outcome of a general rule also producing *léleip^ha* ‘I have left’ (: *leípō* ‘leave’), *lélek^ha* ‘I have said’ (: *légō* ‘say’). None of these is attested in literary usage.

Not surprisingly, this work is not very popular in modern scholarship, with some notable exceptions: as observed by Valerie van Elst, “Theodosius does merit our attention, not only because of his significant influence upon Byzantine teachers of Greek, but also because his *Καθόνες* deserve to be studied in their own right” (Van Elst 2011: 405).

This paper focusses on the paradigm of the synthetic perfect, and more specifically on the interaction between the perfect and the voice system. In section 2, Theodosius’ account of the perfect paradigm is described, in its formal and functional/semantic aspects, with specific reference to the interrelation of perfect and voice. In section 3, Theodosius’ pattern is subjected to a double test, that of historical comparative linguistics on the one hand and that of textual evidence on the other. In section 4, some general conclusions are drawn.

¹ E.g. in the case of the future *tupō*, which actually appears ill-formed according to modern views on this morphological class (“contracted” future, or, in Theodosius’ terminology, “perispomenic”).

2 The Inflection of the Perfect

2.1 A Tripartite Paradigm

In Theodosius' pattern all tense forms – with the exception of present and imperfect – display different inflections for the 'active', the 'passive', and the 'middle' voice² (*enérgeia*, *pát^hos*, *mesótēs*); cf. Table 1.

The effort of building a complete tripartite paradigm – through massive recourse to analogy – leads to solutions which may appear bizarre to modern eyes (on the practice, widespread in grammatical teaching, of “filling the gaps in the inflectional series for the sake of completeness and regularity” cf. Luiselli 1999: 78).

In some cases, the pattern proposed by Theodosius might superficially appear to be consistent with modern classifications, as in the case of the tripartite aorist paradigm reported in Table 1. However, of course, similar coincidences do not imply similar understanding of the voice system³ (on this cf. § 2.3).

In the case of the perfect, the tripartite pattern proposed by Theodosius is not even superficially compatible with modern understanding, in particular with regard to the assumed formal distinction between 'active' and 'middle' perfects (like *tétup^ha* and *tétupa* respectively, cf. Table 1). In the inflection of the perfect, the diathesis distinctions are today commonly stated in terms of the set of endings, and this leads to the assumption of a bipartite paradigm, based on the contrast between the ending *-a* (active) and the ending *-mai* (mediopassive); cf. Chantraine 1927; Schwyzer 1939: 662; Rix 1976: 255, among many others.⁴

2 In this paper, the terms *diathesis* and *voice* are used contrastively: *diathesis* refers to the functional aspect, *voice* to the formal aspect of the relevant phenomena. Following Kulikov (2011 : 370 f.), *diathesis* can be defined as “a pattern of mapping of semantic arguments onto syntactic functions (grammatical relations)” [we can add : assigning prominence to a specific argument – the so-called “grammatical subject”] and voice as “a regular encoding of diathesis through verbal morphology”. The two aspects are strictly interrelated, of course.

3 In order to avoid misunderstandings, the terms *active*, *passive*, and *middle* will be inserted within single quotation marks ('active', etc.) when they translate the terminology of Greek grammarians (*enérgeia*, etc.), which only superficially corresponds to modern terminology.

4 It may be appropriate here to summarize some basic aspects of the perfect morphology, as it is presented in modern descriptions. The Ancient Greek perfect was formed by combining the perfect stem (characterized by reduplication) with specific endings. Besides the reduplication, the perfect stem may show the simple verb root (so-called “root” perfects), a modification of the final root consonant (i.e. the substitution of a stem final nonaspirate stop by the corresponding aspirate, so-called “aspirated” perfect) or a *-k*-affix (“kappatic” perfect). The endings fall into two classes: the so-called “active” endings, which are exclusive of the perfect (*-a* for the 1st Pers. Sing., etc.) and the so-called “mediopassive” endings, identical with the

In this respect, modern scholars agree with the opinions held, according to Theodosius, by the ‘older grammarians’ (οἱ ἀρχαιότεροι τῶν γραμματικῶν *hoi arkhaioteroi tōn grammatikōn*): they assumed a bipartite paradigm for the perfect, based upon the two sets of endings, *-a* and *-mai*, and did not distinguish a specific class of middle perfects, ‘ascribing the middle perfects and pluperfects to the active paradigm, because they were almost homophonous with the active perfects and pluperfects’; Hilgard 1889–94: 49, 19 ss.).

As far as I know, the idea of a tripartite perfect paradigm (‘active’/ ‘middle’ / ‘passive’) is not attested before the Κανόνες, neither in grammatical treatises nor in surviving conjugation tables, composed at least since the 2nd ct. AD. Particularly remarkable is the absence of ‘middle’ perfects in the very rich conjugation lists of the Chester Beatty codex Ac 1499 (Wouters 1988), which provide extensive ‘middle’ paradigms (inflected for all finite and not finite moods) only for the aorist and future but not for the perfect (and pluperfect) nor for the present.

It is thus not unreasonable to suppose that the constitution of a formal opposition between ‘active’ and ‘middle’ perfects was a relatively later acquisition within the branch of the grammatical practice devoted to the setting up of verbal paradigms.

2.2 ‘Active’, ‘middle’, ‘passive’ Perfects: The Forms (voices)

In the Κανόνες, the voice distinctions in the perfect paradigm involve a twofold kind of contrast, in the endings on the one hand and the predesinential element on the other.

The contrast in the endings (*-mai* vs *-a*) opposes ‘passive’ perfects (with *-mai*, the same ending of passive presents) to both ‘active’ and ‘middle’ ones (with *-a*).

The contrast in the predesinential element opposes ‘active’ to ‘middle’ perfects (under identity of the endings). As observed above, the formal distinction between ‘active’ and ‘middle’ perfects is the most striking and original aspect of Theodosius’ pattern, if considered from modern perspectives (cf. fn. 4).

In order to better define the formal difference between ‘active’ and ‘middle’ perfects, more data have to be taken into account than those of Table 1.

Besides *tétupa* (from *túptō* ‘strike’), other instances of ‘middle’ perfects are *léloga* (from *légō* ‘say’), *kékora* (from *keirō* ‘shear’), *kékopa* (from *kóptō* ‘smite’),

“mediopassive” endings of the present system (*-mai* for the 1st Pers. Sing., etc.). Similar patterns can be observed in the participial system: the so-called “active” perfect participle shows a dedicated suffix, whereas the so-called “mediopassive” perfect participle displays the same suffix occurring in the present system. For a survey (including references to the ablaut patterns) cf. Kümmel 2014.

pépoit^ha (from *peít^hō* ‘persuade’), *tétoma* (from *témnō* ‘cut’), *pép^hrada* (from *p^hrázō* ‘show’), etc.

Besides *tétup^ha* (from *túptō* ‘strike’), other instances of ‘active’ perfects are *léleip^ha* (from *leībō* ‘pour’), *lélek^ha* (from *légō* ‘say’), *pépeika* (from *peít^hō* ‘persuade’), *kékarka* (from *keírō* ‘shear’), *pép^hraka* (from *p^hrázō* ‘show’), *pepoiéka* (from *poiéō* ‘make’), etc.

Theodosius, as we said, does not simply quote these forms, but provides synchronic rules for generating them starting from other forms of the paradigm. So, depending on the present form, his pattern predicts the stem-final element of the ‘middle’ perfect, whereas in the case of the ‘active’ perfect, the stem-final element is predicted on the basis of the penultimate element of the future. Moreover, Theodosius provides rules for reduplication and for -o-ablaut (on the latter, cf. Benedetti 2019). The main correspondence rules given by Theodosius are summarized in the following tables (where just one out of the many examples for each rule is quoted):

Table 2: Prediction on the penultimate element of the ‘middle’ perfect based on corresponding presents.

present: stem-final consonant(s)	‘middle’ perfect: stem-final consonant
one consonant (<i>súmp^hōnon</i>) (<i>peít^hō</i>)	same consonant (<i>pépoit^ha</i>)
two consonants (<i>súmp^hōna</i>) (<i>kóptō</i>)	the same consonant of the verbal noun (<i>kékopa</i> : noun <i>kopē</i>)
two unchangeable consonants (<i>ametábola</i>) (<i>témnō</i>)	the first of the two consonants (<i>tétoma</i>)
<i>z, ss</i> (<i>p^hrázō, pléssō</i>)	– if the future has <i>s</i> , the perfect has <i>d</i> (<i>pép^hrada</i> : fut. <i>p^hrásō</i>) – if the future has <i>ks</i> , the perfect has <i>g</i> (<i>péplēga</i> : fut. <i>pléksō</i>)

Table 3: Prediction on the penultimate element of the ‘active’ perfect based on corresponding futures.

future: stem-final consonant(s)	‘active’ perfect: stem-final consonant(s)
<i>s</i> (<i>peísō</i>)	<i>k</i> (<i>pépeika</i>)
<i>ps</i> (<i>leípsō</i>)	<i>ph</i> (<i>léleip^ha</i>)
<i>ks</i> (<i>léksō</i>)	<i>kh</i> (<i>lélek^ha</i>)
unchangeable cons. (<i>ametábola</i> : <i>r, l, m, n</i>) (<i>keírō</i>)	unchangeable cons. + <i>k</i> (<i>kékarka</i>)

The morphophonological patterns illustrated in the preceding tables allow a precise characterization of the different form classes, as shown in Table 4 (where, for simplicity, the stem forms are indicated with modern labels): Theodosius' 'middle' perfects correspond to root (unaspirated) stem, whereas Theodosius' 'active' perfects include both aspirated and kappatic stems.

Table 4: The three voices of the perfect.

'middle'	'active'	'passive'
↓	↓	↓
-a endings root stem	-a endings aspirated / kappatic stem	-mai endings

2.3 'Active', 'middle', passive' Perfects: Forms and Functions (voices and diatheses)

What is the functional correlate – if any – of the formal distinction sketched above? This issue involves, obviously, a preliminary question: which concept of “‘active’, ‘middle’, ‘passive’” lies behind Theodosius' pattern? Are the labels *enérgeia*, *pát^hos*, *mesótēs* comparable – at least to a certain extent – to the modern labels *active*, *passive*, *middle*, notwithstanding the chronological and cultural distance? The terminological continuity is, of course, patent: all the modern terms just mentioned are ultimately loan translations from the Greek ones (*active* and *passive* through the intermediary of Latin). Moreover, some relevant “conceptual” continuity (the expression is borrowed from Fuchs 2001) has to be assumed: as is well known, the development of Western linguistics has been deeply influenced by the Greek(-Latin) grammar. But, of course, the profound gap between ancient and modern metalinguistic labels / concepts cannot be underestimated.

In modern terms, the *active* / *passive* contrast is related, roughly speaking, to the mapping of the semantic roles *agent* and *patient* respectively onto the grammatical subject (whereby the active voice is closely related to transitivity; for a definition of voice and diathesis cf. fn. 2). On this basis, and for the present purpose, we can maintain that the *enérgeia* / *pát^hos* pair was conceived by Greek grammarians in a way which does not appear too distant – *mutatis mutandis* – from the *active* / *passive* pair as it is understood today.

On the contrary, the notion of *mesótēs* is hardly compatible, semantically / functionally speaking, with our modern *middle*. Modern scholarship assigns the Greek middle a wide range of meanings, most of which may be subsumed under the notion of subject-affectedness: in the middle voice the subject is physically or psychologically affected by the event. This determines a close affinity between the middle and the passive, which actually converge in some paradigms of the Greek verb (hence called *mediopassive*; for a synthesis, Allan 2014a; 2014b).

Instead, the *mesótēs* of the Greek grammarians was not associated with any specific meaning / function; it was rather conceived as being middle between active and passive. The representation of the *mesótēs* has been the object of a great variety of different hypotheses, both in ancient and in modern scholarship.⁵ According to a widespread understanding, the ‘middle’ of ancient grammarians includes forms which may be used both in an active and in a passive sense, i.e. which are underspecified for voice.

Thus, if we try to match forms and functions according to Theodosius’ pattern, we see that the perfect system includes forms which are diathetically neutral, underspecified (hence belonging to the *mesótēs* ‘middle’) and forms which are diathetically oriented (further distinguished into *enérgeia* ‘active’ and *pát^hos* ‘passive’).

The joint consideration of forms and functions leads to the picture in Table 5, a revised version of Table 4, which clearly defines the relationship between voices and diatheses.

Table 5: Voices and diatheses in the perfect.

diathetically underspecified	diathetically oriented	
<i>mesótēs</i> ‘middle’	<i>enérgeia</i> ‘active’	<i>pát^hos</i> ‘passive’
↓	↓	↓
-a endings root stem	-a endings aspirated / kappatic stem	-mai endings

5 Cf. Lambert 1978; Rijksbaron 1986; Andersen 1994; Pantiglioni 1998; Boehm 2001; Signes Codoñer 2014, 2016; Benedetti 2012, 2014 with further references.

3 Testing Theodosius' Pattern

3.1 Putting Theodosius' Pattern to The Test of Historical Comparative Linguistics

Theodosius' pattern is not superficially compatible with modern classifications. As mentioned above, the distinctions in the perfect paradigm are today usually stated in terms of the endings alone, thus producing a bipartite paradigm: active (ending *-a*) / mediopassive (ending *-mai*).

However, the existence of a non-straightforward and very particular correlation between endings and diathesis, specifically in the perfect system, has been repeatedly highlighted in modern scholarship. Two main issues are summarily sketched below, under the points (A) and (B) respectively.⁶

- (A) According to a widespread – though not uncontroversial – reconstruction, the perfect system did not originally host voice contrasts, i.e. it did not encode diathetic oppositions, unlike the present and the aorist system. There was a single set of personal endings, underspecified for diathesis, which developed into the *-a* personal endings of historical Greek (similar remarks apply to the participle forms in *-ός / -υία / -ός*). Among the forms with *a*-endings (and the corresponding participles), those with a root stem represent a residual, archaic class, whose underspecification for diathesis is still discernible in textual evidence: such forms actually occur both in constructions which may be labelled as *active* (thus corresponding to the active inflection of the present) and constructions which may be labelled as *passive-like* or *detransitivized* (thus corresponding to the mediopassive inflection of the present); e.g. Schwyzer 1950: 227; Hoffmann 1976: 590; Kümmel 2000.
- (B) The underspecification for diathesis represented an archaism, a marked condition within a language system generally encoding diathesis through verbal

⁶ We follow here a widespread – though not unanimously accepted – prehistoric reconstruction, which is compatible above all with the findings from Greek and Indo-Iranian. Cf., *inter alia*, Watkins (1969: 131); Di Giovine (1996: 235); Kümmel (2000: 54). The original set of perfect endings, in turn, shows close affinities with the endings reconstructed for the middle voice, and this raises much-debated issues concerning the reconstruction of the verbal system of the parent language (cf., among others, Kuryłowicz 1964: 58; Cowgill 1979: 26; Sihler 1995: 442; Jasanoff 2003: 43; Clackson 2007: 148). Not surprisingly, then, the qualification of *a*-perfects as “middle” by ancient Greek grammarians has awoken the interest of modern scholars, such as Kuryłowicz (on this, cf. Benedetti 2016).

inflection (voice). The tendency to align the perfect to the dominating pattern led to the introduction of diathesis markers also in the perfect in two different ways:

- b.i.* the constitution of a set of endings, shaped on the (medio)passive endings of the present tense (an innovation shared by Greek and Indo-Iranian) (cf. fn. 6);
- b.ii.* in Greek, the creation of active, transitive stem markers, such as *-k* or the aspiration of the stem final consonant (essentially in Attic), thus assigning voice distinctions to the stem.⁷

Theodosius' pattern is not at all inconsistent with this reconstruction.

In the first place, the qualification of root perfects with *a*-endings as 'middle',⁸ captures a real archaic feature of these forms, as presented under point (A) above.

Secondly, Theodosius ascribes relevance to the stem form, particularly in the opposition between active and middle perfect. In contrast to root stems, both aspirated and kappatic stems are diathetically oriented towards the 'active' pole. This claim is consistent with what has been observed under *b.ii.* above. Interestingly, aspirated and kappatic stems are here treated as morphophonological variants, whose distribution can be predicted on the basis of purely morphophonemic rules (cf. Table 3).

3.2 Putting Theodosius' Pattern to The Test of Textual Data

Theodosius was not concerned with philological data, as we observed in section 1. Nevertheless, it is not difficult to find, in the literary texts, instances which very well fit into Theodosius' pattern. So, a form such as *diép^ht^hora* ('middle', according to Theodosius), from *diap^ht^heírō* 'ruin', actually shows up both in a passive-like (intransitive) and in an active (transitive) use, thus perfectly illustrating the nature of the *mesótēs*. Contrast (1a) and (1b):

- (1) a. (Hom. Il. 15.128⁹)
- | | | | |
|------------------|---------------------------|------------|--|
| μαινόμενε | φρένας | ἦλὲ | διέφθορας |
| <i>mainómene</i> | <i>p^hrénas</i> | <i>ēlè</i> | <i>diép^ht^horas</i> |

⁷ The kappatic forms represent the productive type (cf. Rix 1976: 220); on the aspirated cf. Sturm (2012).

⁸ A *topos* in the Greek tradition at least since the doctrine of Apollonius Dyscolus (2nd ct. AD).

⁹ Ancient texts are quoted according to the abbreviations of LSJ.

madman.VOC.SG mind.ACC.PL crazy.VOC.SG ruin.PRF.2.SG

'You madman, deranged in mind, **you are doomed!**'

b. (E. *Hipp.* 1014–1015)

ἐπεὶ τοὶ τὰς φρένας διέφθορεν
epéi toi tās phrénas diéph^ht^horen
 since certainly DEF.ACC.PL mind.ACC.PL ruin.PRF.3SG

θνητῶν ὅσοισιν ἀνδάνει μοναρχία
t^hnētōn hósoisin handánei monarkhía

mortal.GEN.PL REL.DAT.PL like.PRS.3SG monarchy.NOM.SG

'Since kingly power **has corrupted** the minds of all those who love it.'

On the other hand, perfect forms of the same verb, such as *diéph^ht^harka* and *diéph^ht^harmai* ('active' and, respectively, 'passive' according to Theodosius) are in fact diathetically oriented, the former being used only transitively (cf. (2)) and the latter only intransitively (cf. (3)):

(2) (E. *Med.* 226–227)

ἐμοὶ δ' ἄελπτον πρᾶγμα προσπεσὼν
emoi d' áelpton prágma prospesōn
 1SG.DAT however unexpected.NOM.SG matter.NOM.SG fall.PTCP.NOM.SG

τόδε ψυχὴν διέφθαρκ'(ε)
tóde psuk^hēn diéph^ht^hark(e)

this.NOM.SG life.ACC.SG ruin.PRF.3SG

'In my case, however, this sudden blow that has struck me **has destroyed** my life'

(3) (E. *Hipp.* 375–376)

ἤδη ποτ' ἄλλως νυκτὸς ἐν μακρῷ χρόνῳ
ēde pot' állōs nuktōs en makrōi k^hrónōi
 now at length otherwise night.GEN.SG in long.DAT.SG time.DAT.SG

θνητῶν ἐφρόντισ ἧ διέφθαρται βίος
t^hnētōn ephrōntis hēi diéph^ht^hartai bíos

mortal.GEN.PL reflect.AOR.1SG which_way ruin.PRF.3SG life.NOM.SG

'I have pondered before now in other circumstances in the night's long watches how it is that the lives of mortals **have been ruined.**'

However, in view of their being underspecified for voice (hence 'middle' in the sense of Apollonius and Theodosius), root perfects lend themselves to polarization processes in both directions, depending on the style of the author, on the different periods or on the linguistic model.

As we can see, in the couple of passages from Aristophanes in (4) and (5), the diathetic contrast between *peplégēi* ‘has beaten’ and *peplégmet^ha* ‘we have been beaten’ is marked by the endings, the stem being equal (the root stem *peplég-*):

(4) (Ar. Av. 1350)

ὃς	ἄν	πεπλήγη	τὸν	πατέρα	νεοττός	ὦν
<i>hòs</i>	<i>àn</i>	<i>peplégēi</i>	<i>tòn</i>	<i>patéra</i>	<i>neottòs</i>	<i>ón</i>
who.	MODAL.	beat_up.PRF.3SG	DEF.	father.	chick.	be.PTCP.
NOM.SG	PRT	SBJV.3SG	ACC.SG	ACC.SG	NOM.SG	NOM.SG

‘(he) who’s **beaten up** his father while still a chick’

(5) (Ar. Ra. 1214)

οἴμοι	πεπλήγμεθ’	αὔθις	ὑπὸ	τῆς	ληκύθου
<i>oímōi</i>	<i>peplégmet^h</i>	<i>aút^his</i>	<i>hypò</i>	<i>tês</i>	<i>lêkút^hou</i>
ouch	strike.PRF.1PL	again	by	DEF.GEN.SG	oil_bottle.GEN.SG

‘Ouch, **we’re struck** again by that oil bottle!’

By contrast, in the passages in (6) and (7) – from later texts – the diathetic opposition between the participles *peplēk^hós* ‘having beaten’ and *peplēgós* ‘having been beaten’ is marked by the stem form (aspirated versus root), the ending being equal.

(6) (J. AJ 4.277)

ταὐτὸν	παθόντος	τοῦ	πεπληχότος
<i>tautòn</i>	<i>pat^hóntos</i>	<i>toû</i>	<i>peplēk^hótos</i>
the-same.ACC.SG	suffer.AOR.PTCP.GEN.SG	DEF.GEN.SG	strike.PRF.PTCP.GEN.SG

‘the one **who has done the striking** suffering the same’

(7) (Plu. Nic. 10.6)

ἄχει	καὶ	θαύματι	πεπληγός
<i>ák^hei</i>	<i>kaì</i>	<i>t^haúmati</i>	<i>peplēgós</i>
distress.DAT.SG	and	wonder.DAT.SG	strike.PRF.PTCP.GEN.SG

‘**struck** with distress and wonder’

As has been observed (*inter alia*, Crellin 2016: 68; 137), the investigation of the individual verb lexemes reveals that root perfects sometimes display what is called “labile transitivity” (i.e. formal coincidence of active and passive in the same verb form) whereas they sometimes characterize the intransitive element within the

so-called causative alternation (as opposed to a transitive kappatic or aspirated stem). Both phenomena, far from representing irregularities or inconsistencies, are easily accounted for in view of the indeterminacy for diathesis of this class.

4 Some Concluding Remarks

Theodosius' Κανόνες represent an extremely impressive and original attempt at a systematization of Greek paradigms.

A very remarkable aspect is the rigorous formulation of paradigms in terms of synchronic rules, based on a set of implicative patterns (observe, for example, in Table 3, the assumption of the future stem as the basis for deriving the stem form of active perfects). Interestingly, many forms generated by Theodosius' rules – even when they do not occur elsewhere in the extant literature – might appear well-formed to us. Although being based exclusively on synchronic alternations, they largely conform to what might be expected by historical linguists.

In their effort to look beyond what is actually found in texts and to detect patterns of morphological creativity (albeit an artificial one), the Κανόνες witness the emergence of an approach which may be labelled (anachronistically) as purely linguistic, i.e. not restrained by philological evidence, nor by philosophical speculations, but rather dependent on a theory of language, essentially founded on analogy.

In building up this highly symmetrical system, the Byzantine tradition, which finds in Theodosius an influential exponent, faces with unquestionable skill – though, of course, at a merely empirical level – issues which are intensively debated in contemporary morphological theory (see, e.g., the discussion on the so-called *Paradigm Cell Filling Problem* in Ackerman et al. 2009; see also Garrett 2008, among many others).

From the point of view of historical linguistics, the most deplorable aspect of the Κανόνες is the total absence of any historical perspective, in a broad sense: chronological and dialectal variations are levelled, and the sum of all forms is projected into an achronic state, a sort of “Hypergreek” which does not correspond to any real language variety.

Nevertheless, as the specific case investigated has shown, despite its artificiality and its overgeneralizations, Theodosius captures something of the real situation in the development of the Greek language. Works like this one offer a unique opportunity of reconsidering aspects of the Greek language from an unusual perspective, namely, “through the eyes” of Byzantine scholars.

Abbreviations

The glosses follow Leipzig Glossing rules.¹⁰ Additionally, the following glosses have been adopted:

AOR	aoist
PRT	particle
MODAL	modal particle

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Carla Bruno

Forms of the Directive Speech Act: Evidence from Early Ptolemaic Papyri

Abstract: In early Hellenistic Greek, a wider range of strategies was available than in the Classical period to express directive speech acts, in which the addresser typically tries to induce the addressee to take a particular action. During this period, besides imperatives, other patterns – more focused on the pragmatic context – become routine, such as performative utterances, by which the addresser makes the interaction dynamics of the speech act explicit, as well as indirect implicatures, by which its illocutionary force is softened. Morpho-syntactic variation also contributes to modulating the speech act. Finally, regularities in the phrasing, related to both the author’s profile and the context of use (also in terms of epistolary type), emerge.

Keywords: language of papyri, epistolary formularies, directive speech acts, mitigation strategies

1 Introduction

Documentary papyri provide a unique resource for reconstructing aspects of the interactional dynamics within Greek-Egyptian society. Private letters can be considered acts of verbal interaction in concrete speech situations, in which, unlike face-to face exchanges, the two interlocutors, i.e. the addresser and the addressee, are not co-present. They are pieces of “mediated interaction” (cf. Thompson 1995: 82–4), where the letter is the medium by means of which distant interactants meet across space and time.

In this view, this study aims at identifying – within the private correspondence of Ptolemaic papyri – some of the linguistic strategies available for the sender in directive interaction situations, in which, typically, the addresser tries to induce the addressee to take a particular action (cf. Searle 1969).

The class encompasses a wide range of speech acts – such as orders, requests, pleas or advice – that threaten the recipient’s need not to be interfered with (i.e. their negative face, cf. Brown & Levinson 1987: 71). Directives can therefore vary in their linguistic expression according to the degree of mitigation of the act, which corresponds to the addresser’s possible wish (or need) to preserve the interpersonal relation with the addressee. Politeness consequently plays a

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crucial role in their linguistic expression: directives are complex interactions in which language conveys identity tensions between the interlocutors, whose social status as well as their mutual relationship are crucial for understanding their linguistic choices.

However, the context in which the correspondents interact cannot always be easily recovered from historical documents, which are often isolated instances, sometimes transmitted in a very fragmentary form. In this regard, the use of a “homogeneous subset of data” (cf. Herring et al. 2000: 4) can minimize the risks of an incomplete range of data and allow generalizations in restricted domains.

This paper is accordingly based on the examination of a small corpus of papyri basically taken from White (1986), which can be considered as a “structured representative corpus for the purposes of linguistic analysis” (Porter & O’Donnell 2010: 294). It includes a wide diversity both of epistolary types (i.e. letters of recommendation, family letters, petitions) and of producers’ profiles, who were sampled according to gender, social status, education and ethnicity (cf. White 1986: 3). The letters of the early Ptolemaic period – about fifty documents from the third and the second centuries BC – were particularly scrutinized, singling out some of the most recurrent strategies in directive contexts, which, because of the volume of correspondence in use at all levels for the administration of Hellenistic Egypt, are very common. These patterns will be discussed in the following sections. The translations of the passages are mostly taken from White (1986) – except for P.Cair.Zen. I 59021 (in 12) and PSI V 538 (in 3), which are not included in this collection. All of them are provided with literal rephrasings of the original text when necessary. Emphasis is added to those items relevant to the discussion.

In the end, what emerges is a picture where, besides the imperative (Section 2.1), other strategies – more sensitive to the socio-pragmatic context – are used, such as performative utterances with *déomai* ‘beg’ or *hiketeúō* ‘beseech’ (Section 2.2), and mitigating formulae (Section 2.3) featuring either the *kalōs* ‘well’ plus *poiēō* ‘do’ collocation, or verbs derived from *k^háris* ‘favour’. Moreover, morpho-syntactic variation, for example of the grammatical person (Section 2.4), contributes to modulating the illocutionary force of the speech act. Section 3 then provides a summary of the patterns singled out, which can differ remarkably in distribution and degree of conventionalization, and focuses on some regularities in the phrasing according to both the author’s profile and the context of use as well as the epistolary type (on the latter point, see Logozzo 2015, where the expression of requests is explored in terms of its relationship with other features of the epistolary formulary).

2 Forms of Directive Acts in Ptolemaic Papyri

2.1 Directive Imperatives

The imperative mood is by far the most common directive strategy encountered within the selection of letters investigated. Commonly expressed in the second person, it is the most overt appeal to the recipient across languages worldwide, where it is generally acknowledged as the unmarked directive strategy (cf. Aikhenvald 2010 in a typological perspective, and Risselada 1993 on Latin data). This has also been argued by Denizot (2011), and assumed by Dickey (2016a), for Classical Greek, where “regardless of the identity of the addressee or the magnitude of the request, speakers’ normal tendency is to use the bare, unsoftened imperative” (Dickey 2016a: 239).

The passages in (1)–(3) show its use in diverse circumstances: the order of an officer to his subordinate in (1); a recommendation in (2), where Sostratos addresses Zenon, *dioikētēs*’ secretary, in a friendly tone; the report of the misconduct of a colleague to a superior in (3), where Demetrios, head of the Alexandrian mint, appeals to Apollonios, finance minister.

(1) (P.Hib. I 43, 2–9; 261–60 BC)

σύνταξον	μετρήσ[αι]		τὸ σήσαμον	τὸ ἐμ Πέλαι	
<i>súntakson</i>	<i>metrésai</i>		<i>tò sésamon</i>	<i>tò em Pélai</i>	
order.AOR.IMP.2SG	measure.AOR.INF	DEF	sesame	DEF in Pela	
Πρωτομάχῳ	\ καὶ τῷ	σιτολόγ[ωι,]	οὐ γὰρ ἔστιν		
<i>Prōtomák^hōi</i>	<i>kai tōi</i>	<i>sitológōi</i>	<i>ou gār éstin</i>		
Protomarchos	CONJ	DEF <i>sitologos</i>	NEG	CONJ	is
ἐν τῇ πόλει	σήσαμον.	ἵνα οὖν		μηθὲν	ὑστερήι
<i>en tēi pólei</i>	<i>sésamon</i>	<i>hína oûn</i>		<i>mē^hen</i>	<i>husterēi</i>
in	DEF city	sesame	CONJ	CONJ	no decrease.PRS.SBJV.3SG
τὰ ἐ[λ]αιουργία		φρόντισον	ἵνα μὴ	αἰτίας	
<i>tà elaiourgía</i>		<i>p^hróntison</i>	<i>hína mē</i>	<i>aitías</i>	
DEF oil.production		take.care.AOR.IMP.2SG	CONJ	NEG blame	
ἔχης		καὶ τοῦ[ς]	ἐ[λ]αιουργοὺς	ἀπόσ-	τειλόν μοι.
<i>hék^hēis</i>		<i>kai tous</i>	<i>elaiourgoús</i>	<i>apósteilón</i>	<i>moi</i>
have.PRS.SBJV.2SG	CONJ	DEF	oil.producers	send.AOR.IMP.2SG	1SG.DAT

‘Command that the sesame which is at Pela be measured out to Protomarchos and to the *sitológos* (‘grain/seed officer’), because there is no sesame in the city. **Take care** therefore that the oil manufacture not fall behind, lest you be blamed; and **send** the oilmakers to me.’ (White 1986: no. 3)

- (2) (P.Mich. I 6, 3–4; 257 BC)

ἐὰν δ' ἀρὰ μὴ κατα- | [λάβηι ἐκεῖνον παρ' ὑμῖν,
eàn d' arà mè katalábēi ekeînon par' humîn
 PRT PRT PRT NEG find.AOR.SBJV.3SG DEM at 2PL.DAT
 ἐπιστολάς παρὰ τῶν φίλων λαβέ πρός αὐτόν.
epistolàs parà tôn p^hilōn labè pròs autōn
 letters from DEF friends get.AOR.IMP.2SG to DEM

'And if he does not [come upon the latter in your company,] **get** [letters of introduction] to him (i.e. Kleoniskos) from his friends.' (White 1986: no. 11)

- (3) (P.Cair.Zen. I 59021, 46–50; 258 BC)

περὶ μὲν | γάρ τινων ὡς ἡμῖν χρῶνται οὐ καλῶς |
perî mèn gár tinōn hōs hemîn k^hrōntai ou kalōs
 about PRT CONJ some CONJ 1PL.DAT treat.PRS.IND.3PL NEG well
 εἶεν γράφειν, ἀλλ' ὡς ἂν παραγένῃ
eîen gráph^hein all' hōs ân paragénēi
 be.PRS.OPT.3PL write.PRS.INF CONJ CONJ PRT come.AOR.SBJV.2SG
 ἀ- | κοῦσεῖ[ς -ca.?-] γρά- | ψον μοι περὶ τούτων ἵνα
akou̓seis grápson moi perî toutōn hína
 hear.FUT.IND.2SG write.AOR.IMP.2SG 1SG.DAT about DEM CONJ
 οὕτω ποιῶ.
hoútō poiō
 ADV do.PRS.SBJV.1SG

'It is not proper for me to say in writing how some people are treating me, but as soon as you are back you will hear . . . **Write** to me on these matters that I may follow your instructions.' (Austin 1981: no. 238)

Accordingly, imperatives occur both in asymmetrical interactions from high to low as in (1), from low to high as in (3), and in symmetrical interactions, as in (2), an excerpt from a letter of recommendation. The latter, among the epistolary genres, typifies the interaction between high status equals, since “the correspondence itself assumes that writer and recipient had enough status to benefit the person recommended” (White 1986: 194).

The imperative can further involve variable degrees of illocutionary force, ranging from orders, as in (1), which excludes the addressee's lack of compliance, to less binding requests, as in (2). It can also convey milder recommendations, like (4) and (5), where, respectively, Mnasistratos, *oikonómos* of the Arsinoite nome, addresses Zenon asking for support because he is ill, and the soldier Esthlades requests his parents to take care of the family.

- (4) (P.Col. III 10, 3–4; 257 BC)

σὺ δὲ ἐπιμέλειαν ἔχε ἡμῶν καὶ ἐπίστελλέ
 sù dè epiméleian ék^he hēmōn kaì epístellé
 2SG.NOM PRT care have.PRS.IMP.2SG 1PL.GEN CONJ send.PRS.IMP.2SG
 μοι ἄν τί σοι βουλή γινέ- | [σθαι].
 moi án tí soi boulḗ ginést^hai
 1SG.DAT PRT some 2SG.DAT will become.PRS.INF
 ‘**[Be considerate]** of us (me) and send to me regarding whatever you
 should want.’ (White 1986: no. 14)

- (5) (P.Dryton 36, 12–14; 130 BC)

ἐπισκοποῦ δ[ἐ] καὶ τὰς ἀδελφὰς καὶ Πέλοπα |
 episkopou dè kaì tàs adelph^hàs kaì Pélopa |
 look.after.PRS.IMP.2SG PRT CONJ DEF sisters CONJ Pelops
 καὶ Στάχυν καὶ Σεναθῦριν.
 kaì Sták^hun kaì Senat^húrin
 CONJ Stakhys CONJ Senathyris
 ‘In addition, **look after** my sisters and Pelops and Stachys and Senathyris.’
 (White 1986: no. 43)

As shown in (5), the form is common also in familiar letters, where there is a greater intimacy between the correspondents. In the passage in (6), taken from the correspondence between two brothers, Apollonios writes to Ptolemaios, the elder, expressing his concern about some family business because of a certain Menedemos (cf. line 6).

- (6) (UPZ I 68, 4–6; 152 BC)

ἀπόστιλόν μοι ἐπισ- | τόλιον ἔχων\τα/ Πολυδεύκην ταχῶς
 aróstilon moi epistolion ék^hōnta Poludeúkēn tak^hū
 send.AOR.IMP.2SG 1SG.DAT letter having Polydeukes quickly
 καὶ ἢ ἕτερον θέλις λέγειν, λέγε. ἐγὼ
 kaì ē héteron t^hélis légein lége egō
 CONJ CONJ other want.PRS.IND.2SG say.PRS.INF send.PRS.IMP.2SG 1SG.NOM
 γὰρ ἐνύπνια | ὀρώ πονηρά, βλέπω Μενέδημον
 gār enýpnia horō ponerá blépō Menédemon
 CONJ dreams see.PRS.IND.1SG bad see.PRS.IND.1SG Menedemos
 κατατρέχοντά με. δ[ιασάφ]η[σόν] μοι τὰ περὶ
 katatrek^hontá me diasáph^hēsón moi tà perì
 chasing 1SG.ACC explain.AOR.IMP.2SG 1SG.DAT DEF about

Ἀπολλώνιον

Apollónion

Apollonios

‘**Send** me a letter quickly by means of Polydeukes, [...] and if you have anything else you want to say, **say** it. For I have a bad dream, (in which) I see Menedemos chasing me. **Make clear** to me exactly how the affairs of Apollonios [...] are going’ (White 1986: no. 41)

In this extensive use, imperatives behave as a “neutral” directive strategy (cf. Palmer 1986: 29–30), by which the speaker merely presents an event within the addressee’s scope of action. Their illocutionary force can then be specified by other co-occurring expressions, which can soften or strengthen the utterance. For instance, unlike (1), in which the sender expresses himself through a series of categorical imperatives (*súntakson* ‘order’, *p^hróntison* ‘take care’, *apósteilon* ‘send’), in (2), the fulfilment of the request (*epistolàs* ... *labé* ‘get letters’) is subjected to the circumstances of the conditional sentence *eàn* ... *mè katalábē ekeínon* ‘if he does not meet him’, which mitigates its force. Thus, despite their overt relation to the directive act, imperatives apparently lack a corresponding specification of their illocutionary force: their wide-ranging use results from their basic implicitness about the socio-pragmatic environment (as pointed out in Risselada 1993: 111, on the imperative in Latin). The co-text can thus be crucial in determining the degree of directiveness of the utterance, as in (7), where the imperative *súntakson* ‘order’ (line 5) marks Dromon’s request to Zenon to purchase some honey for him.

(7) (P.Cair.Zen. III 59426, 3–7; 260–50 BC)

καθότι μοι	ἔγραψας	τὴν	πᾶσαν	ἐπι-	μέλειαν	ποιούμαι
<i>kat^hóti</i> moi	<i>égrapsas</i>	<i>tēn</i>	<i>pâsan</i>	<i>epiméleian</i>	<i>poiouúmai</i>	
CONJ	1SG.DAT	write.AOR.IND.2SG	DEF	all	care	do.PRS.IND.1SG
ὅπως ἂν	μηθεῖς	ἐνοχλήῃ	τοὺς	παρὰ	σοῦ.	ὡς δ’
<i>hópōs</i> <i>àn</i>	<i>mē^heis</i>	<i>enok^hlēi</i>	<i>toús</i>	<i>parà</i>	<i>soú</i>	<i>hōs d’</i>
CONJ	PRT	no-one	bother.PRS.SUBJV.3SG	DEF	from	2SG.GEN
CONJ	PRT	no-one	bother.PRS.SUBJV.3SG	DEF	from	2SG.GEN
CONJ	PRT	no-one	bother.PRS.SUBJV.3SG	DEF	from	2SG.GEN
ἂν ἀναπλέης	ὑγιαίνων,	σύνταξόν	τινι	τῶν		
<i>àn</i> <i>anaplēēs</i>	<i>ugiáinōn</i>	<i>súntaksón</i>	<i>tini</i>	<i>tōn</i>		
PRT	sail.up.PRS.SBJV.2SG	being.healthy	order.AOR.IMP.2SG	some	DEF	
παρὰ σοῦ	ἀγοράσαι	μέλιτος	Ἄττικοῦ	κοτύλην·	χρεῖαν	γὰρ
<i>parà</i> <i>soú</i>	<i>agorásai</i>	<i>mélitos</i>	<i>Attikoú</i>	<i>kotúlēn</i>	<i>khreían</i>	<i>gār</i>
from	2SG.GEN	buy.AOR.INF	honey	Attic	kotyle	need
from	2SG.GEN	buy.AOR.INF	honey	Attic	kotyle	need
from	2SG.GEN	buy.AOR.INF	honey	Attic	kotyle	need
ἔχω	πρὸς	τοὺς	ὀφθαλμοὺς	κατὰ	πρόσταγμα	
<i>ék^hō</i>	<i>pròs</i>	<i>toús</i>	<i>op^ht^halmoús</i>	<i>katà</i>	<i>próstagma</i>	
have.PRS.IND.1SG	to	DEF	eyes	according	command	
have.PRS.IND.1SG	to	DEF	eyes	according	command	
have.PRS.IND.1SG	to	DEF	eyes	according	command	

τοῦ θεοῦ.

toû t^heoû

DEF god.GEN.SG

‘and just as you wrote I am taking every care that no one bothers your people. Whenever you sail up river in good health, **order** one of your people to buy a kotyle of Attic honey; for I require it for my eyes according to the directive of the god.’ (White 1986: no. 26)

In accordance with the interaction pattern involved by the exchange of favours between equals, Dromon introduces his request after reminding Zenon of the care taken of his affairs. As in (2), a surrounding conditional sentence (*hōs ... an ... anaplēēis* ‘whenever you sail up river’) mitigates the directiveness of the imperative, while the statement of necessity immediately following (*k^hreían ... él^hō* ‘I need’), due to the plain reference to the urgency of the request, could strengthen its force (on the degree of politeness of pressing requests, see Dickey 2016b). Then, the reference to the god – maybe a healer, a priest of Sarapis (cf. Perilli 2009) – conceals the role of the sender as the prompter of the request.

Similarly, in (8), an extract from the correspondence between Zenon and Hierokles, the director of a wrestling-school in Alexandria, the force of *apósteilon* ‘send’ (line 7) depends on the surrounding co-text, where the collocation expressing urgency, *hóti ták^hos* ‘as soon as possible’ (line 8), is followed by a repairing appeal to the positive face of the recipient, whose influence is recalled (*sù eikanōs eî* ‘you are able’, line 7).

(8) (P.Cair.Zen. I 59060, 7–11; 257 BC)

ἀπ[όστειλον] | δ\ἐ/ αὐτῶι ἐγλουστρίδα **ὅτι τάχος**, καὶ μάλιστα
apósteilon *dè autōi egloustrída hóti ták^hos kaì málista*

send.AOR.IMP.2SG PRT DEF swimsuit CONJ speed CONJ ADV

μὲν ἔστω τὸ δέρμα αἴγειον, εἰ δὲ μέ, [μόσχειον] |
mèn éstō tò derma aigeion ei dè mé mósk^heion

PRT be.PRS.IMP.3SG DEF skin of.goatskin CONJ PRT NEG of.calfskin

λεπτόν, καὶ χιτῶνα καὶ ἱμάτιον καὶ τὸ στρωμάτιον καὶ
leptón kaì k^hitōna kaì imátion kaì tò strōmátion kaì

thin CONJ tunic CONJ cloak CONJ DEF mattress CONJ

περίστρωμα καὶ προσ[κεφάλαια] | καὶ τὸ μέλι. ἔγραψας
perístrowma kaì proskep^hálaia kaì tò méli égrapsas

bed.covering CONJ pillow CONJ DEF honey write.AOR.IND.2SG

δέ μοι θαυμάζεις εἰ μὴ κατέχω ὅτι
dé moi t^hauμάzeis ei mē katék^hō hōti
 PRT 1SG.DAT wonder.PRS.IND.2SG CONJ NEG understand.PRS.IND.1SG CONJ
 τούτοις πᾶσι τέλος ἀκ[ολουθεῖ]. | ἐπίσταμαι, ἀλλὰ σὺ
τούτοις pāsi télos akolout^heī epístamai allā su
 DEM all tax go.with.PRS.IND.3SG know. PRS.IND.1SG CONJ you
 εἰκάνος εἶ διοικῶν ἵνα ἀποσταλῆι ὡς ἀσφαλέστατα.
eikanòs eī dioikōn hína apostalēi hos asp^haléstata
 able are managing CONJ be.sent.AOR.SBJV.3SG CONJ safest
 ‘Send a bathing apron to him **most quickly**, and if at all possible, let it
 be of goatskin, or, if not possible, of thin sheepskin, and a tunic and
 cloak, and the mattress, bedcovering [pillows] and honey. You wrote to
 me that you were surprised that I did not realize that there is a tax on all
 these things. I know it, but **you are well able** to manage that it be sent
 with the greatest possible security.’ (White 1986: no. 15)

2.2 The Act of Asking: Performatives at Work

Directive imperatives tend to be avoided only in petitions, which, among the epistolary types, encode the sender’s appeal to an influential recipient for reparation of the wrongs suffered. They are obvious instances of asymmetric interactions, where the sender marks his request by verbs such as *déomai* ‘beg’, *hiketeúō* ‘beseech’ or *aksióō* ‘require’, plainly referring to the speech act subtype. This is exemplified by the passages in (9) and (10), both taken from the entreaty addressed by Simale, an upper-class Greek woman, to Zenon.

(9) (P.Col. III 6, 6–8; 257 BC)

εὐπρεπ[ή]ς **δέομαι** οὖν σου | καὶ **ἵκετεύω**
euprepēs déomai oûn sou kai hiketeúō
 rightly beg.PRS.IND.1SG CONJ 2SG.GEN CONJ beseech.PRS.IND.1SG
 ἐπιστροφῆν ποιήσασθαι περὶ τούτων καὶ ἀναγγεῖλαι
epistrop^hēn poíēsast^hai perì toutōn kai anaggeílai
 care do.AOR.INF about DEM CONJ inform.AOR.INF
 Ἀπολλωνίωι ὃν [τινα] | τρόπον μου ὑβρίζομενον τὸ παιδίον
Apollōnīōi hōn tina trōpon mou hubrizōmenon tò paidíon
 Apollonios REL some manner 1SG.GEN mistreated DEF son
 διατετέληκεν ὑπ’ Ὀλυμπιχοῦ
diatetélēken hyp’ Olimpik^hoû
 continue.PRF.IND.3SG by Olympichos

‘Accordingly, therefore, **I request** and **entreat** you to bring about a correction of these things and to report to Apollonios in what manner my boy has been so thoroughly mistreated by Olympichos’ (White 1986: no. 10)

(10) (P.Col. III 6, 12–13; 257 BC)

ἀξιῶ	οὖν	σε	ἅμα	δὲ	καὶ	δέομαι	εἷ	τι
<i>aksiō</i>	<i>oûn</i>	<i>se</i>	<i>háma</i>	<i>dè</i>	<i>kaì</i>	<i>déomai</i>	<i>eí</i>	<i>tí</i>
request.PRS.1SG	CONJ	2SG.ACC	ADV	PRT	CONJ	beg.PRS.1SG	CONJ	some
συντε[λεῖν τέ-] ταχε			Ἀπολλώνιος	αὐτῶι	ὀψώνιον			
<i>sunteleîn</i>	<i>tétak^he</i>			<i>Apollōnios</i>	<i>autōi</i>	<i>opsōnion</i>		
pay.PRS.INF	order.PRF.IND.3SG			Apollonios	DEM	salary		
ἀποδοθῆναί	μοι.							
<i>apodot^hēnaí</i>	<i>moi</i>							
be.given.AOR.INF	1SG.DAT							

‘Therefore, **I request** and **entreat** you in the light of that if Apollonios has ordered to pay him anything else (still outstanding), his wages be paid to me.’ (White 1986: no. 10)

Depending on the textual format of the petition, senders exploit, instead of the imperative, a specific directive strategy, which makes their illocutionary intention explicit. In the Classical stage, similar forms were also available, but, as pointed out by Dickey (2016a: 246), they introduce very urgent and emotionally heightened requests, whereas in papyri they represent “the standard way of making certain requests” and conventionally mark the object of the entreaty. Only *aksiōō* ‘require’ is occasionally documented beyond petitions, as shown by (11):

(11) (P.Cair.Zen. I 59015, 30–2; 259–8 BC)

γεγράφαμεν	οὐ	ἀξιοῦντες		τῆμ	πᾶσαν	ἐπιμέλειαν	ποιήσασθαι	
<i>gegráph^hamen</i>	<i>ou</i>	<i>aksiōúntes</i>		<i>tēm</i>	<i>pâsan</i>	<i>epiméleian</i>	<i>poiésast^hai</i>	
wrote.1PL	NEG	requesting		DEF	all	care	do.AOR.INF	
ὅπως	ἂν	συλληφθῶσιν						
<i>hōpōs</i>	<i>ân</i>	<i>sullēp^ht^hōsin</i>						
CONJ	PRT	be.caught.AOR.IND.3PL						

‘Therefore, we wrote **requesting** that all effort be made that they be handed over’ (White 1986: no. 29)

On the other hand, a couple of directive imperatives are also encountered in petitions. They are shown in (12) and (13), which are both taken from documents written in a non-Greek environment, i.e. the entreaty to Apollonios of Demetrios and Petechonsis, two Arab leaders, whose names (since the former is

Greek, the latter is Egyptian) may suggest familiarity with local customs (cf. Rostovcev 1922: 179), and the petition of Senchons, an Egyptian widow, appealing to Zenon for the recovery of her donkey.

- (12) (PSI V 538, 5–6; 3rd ct. BC)

καὶ	περὶ		τοῦ	ὀψωνίου	σύνταξον	ὅπως	ἂν	ἔμμηνον
<i>kaì</i>	<i>perì</i>		<i>toû</i>	<i>opsōniou</i>	<i>súntakson</i>	<i>hōrōs</i>	<i>an</i>	<i>émμηnon</i>
CONJ	about	DEF	salary	order.AOR.IMP.2SG	CONJ	PRT	monthly	
ἀποδιδῶται			ἡμῖν	ἐπιμελῶς.				
<i>apodidōtai</i>			<i>hēmîn</i>	<i>epimelōs</i>				
be.paid.PRS.SBJV.3SG			1PL.DAT	duly				

‘And, about the wage, order that it must be paid to us duly each month.’

- (13) (P.Mich. I 29, 4–5; 256 BC)

ἴ	σοι	δοκεῖ,	συντάξαι	ἀποδο[ῦ-]		ναὶ	αὐτήν
<i>í</i>	<i>soi</i>	<i>dokeî</i>	<i>suntáksai</i>	<i>apodouñai</i>		<i>autēn</i>	
CONJ	2SG.DAT	seem.PRS.3SG	order.AOR.INF	give.AOR.INF		DEM	

‘If it pleases you **command** (him) to return her to you’ (White 1986: no. 20)

In particular, in (13) editors generally suggest reading as *súntakson* the graphic string <συνταξαι> <suntaksai> – generally taken as an infinitive – which marks her request (cf. White 1986: 46). However, Senchons’ words could be here open to other readings: <συνταξαι> <suntaksai> could be interpreted as a middle imperative (i.e. *súntaksai*) instead of the active or as an infinitive (i.e. *suntáksai*) lacking its main verb. The latter interpretation is particularly suggested by the comparison with similar passages, such as (14), another excerpt from the Zenon archive, where *suntáksai* occurs as the infinitive complement of *déomai* ‘beg’. Note that (13) and (14) both contain the parenthetical conditional phrase ‘if you agree’, which softens the request “by pointing out that the addressee does not have to comply and indicates deference to his opinion” (Dickey 2016b: 242).

- (14) (P.Col. IV 66, 19–20; 256–5 BC)

δέομαι	οὖν	σου	\	εἴ	σοι	δοκεῖ /	συντάξαι
<i>déomai</i>	<i>oûn</i>	<i>sou</i>		<i>eí</i>	<i>soi</i>	<i>dokeî</i>	<i>suntáksai</i>
beg.PRS.1SG	CONJ	2SG.GEN	CONJ	2SG.DAT	seem.PRS.3SG	order.AOR.INF	
αὐτοῖς	ὅπως	τὰ	ὀφειλόμενα		κομίσωμαι		
<i>autoîs</i>	<i>hōrōs</i>	<i>tà</i>	<i>op^heilōmena</i>		<i>komísōmai</i>		
DEM	CONJ	DEF	due		receive.AOR.SBJV.1SG		

‘Wherefore, **I entreat** you, if it seems acceptable to you, to instruct them I am to receive what it is still lacking’ (White 1986: no. 22)

Accordingly, in (12) and (13), the use of the imperative instead of the expected performative verbs could – like other spelling and morpho-syntactical deviances of these texts – be due to the poor language skills of a non-native Greek speaker. For Senchons’ petition, there are, on the other hand, also some paleographic aspects that trace the document back to a non-Greek (i.e. demotic) community, such as the use of the brush, which was common among Egyptian scribes in the early Ptolemaic period (cf. Clarysse 1993).

However, imperatives are not completely banned from petitions: they are excluded from introducing a request (and particularly the object of the entreaty), but they can occur under different circumstances. Let us consider (15), for instance, taken from the closing lines of Simale’s petition, where they occur twice.

(15) (P.Col. III 6, 13–15; 257 BC)

γίνωσκε	δέ, ὡς ἄν	τάχιστα	αὐτόν ὁ	θεός
<i>gínōske</i>	<i>dé hōs ἄn</i>	<i>ták^hista</i>	<i>autōn ho t^heōs</i>	
know.PRS.IMP.2SG	PRT CONJ PRT	most.quickly	DEM DEF	god
ἀφῆ,	καταστήσω	αὐτόν	πρὸς ὑμᾶς	ἵνα καί
<i>aph^hēi</i>	<i>katatésōi</i>	<i>autōn</i>	<i>pros humās hína kaí</i>	
release.AOR.SBJV.3SG	bring.AOR.SBJV.1SG	DEM	to 2PL.ACC	CONJ CONJ
σε ἴδω	ὑπὲρ τῶν λοιπῶν.	τὰ δὲ	λοιπὰ	
<i>se idé</i>	<i>hypèr tōn loipōn.</i>	<i>tà dè loipà</i>		
2SG.ACC	see.AOR.SBJV.1SG	about DEF rest	DEF PRT rest	
πυνθάνου	τοῦ φέροντός σοι	τὰ	γράμματα.	
<i>punt^hánou</i>	<i>toû p^hérontós soi</i>	<i>tà</i>	<i>grámmata</i>	
learn.PRS.IMP.2SG	DEF bringing 2SG.DAT	DEF	letter	

‘Be aware that as soon as the god releases him (of sickness), I will bring him back to you in order that I may also see you about other matters. The rest (i.e., anything else that remains) **learn** rest from who carries the letter to you.’ (White 1986: no. 10)

In fact, the two forms – *gínōske* ‘know’ (line 13) and *punt^hánou* ‘learn’ (line 15) – have a different illocutionary force, and only the latter involves a sender’s directive intention. Simale is an upper-class Greek woman, whose family enjoys privileges, such as the regular allotment of oil mentioned in the letter (cf. White 1986: 33). Because of her status, she does not completely conform to the standard interaction patterns of a petition and addresses Zenon with an imperative. Correspondingly, in the opening greetings, she avoids putting her name after the recipient, as was usual in this textual form.

Conversely, *gínōske* ‘know’ (line 13) has mainly a discursive function and conventionally conveys “the desire of the author that the audience knows something” (Porter & Pitt 2013: 43). The imperative is not uncommon for such disclosure formulae, which are often exploited by senders to introduce the topic of the letter or in the transition to new thematic units, as shown in (16) and (17).

- (16) (P.Mich. I 10, 11–12; 257 BC)

γἰνωσκε δὲ ὑπὸ | τῶν χειμῶνων κατενεγχθέντας εἰς
gínōske δὲ *hypò tōn k^heimōnōn katenegk^ht^héntas eis*
 know.PRS.IMP.2SG PRT by DEF storms driven into
 Πάταρα
Pátara
 Patara

‘**Know** that they were driven into Patara by the storms’ (White 1986: no. 12)

- (17) (UPZ I 70, 14–17; 152–1 BC)

γίνωσ\κε/ ὅτι πιάσεται | ὁ δραπέ[τ]ης μὴ ἀφῖναι |
gínōske *hóti pirásetai ho drapétēa mē aph^hínai*
 know.PRS.IMP.2SG CONJ try.FUT.3SG DEF runaway NEG release.PRS.INF
 ἡμᾶς ἐπὶ τῶν τόπων | ἵναι
hēmās epì tōn tópon ínai
 1PL.ACC in DEF places be.PRS.INF

‘**Know** that the runaway will try to hinder us from staying in these parts’ (White 1986: no. 42)

Besides commands and requests, imperatives are also cross-linguistically widespread in highly conventionalized speech formulae, such as greetings or farewells (cf. Aikhenvald 2010). In the letter, for instance, a basic discursive function is apparently involved by the standard closures *érrōso* (lit. ‘be healthy!’) and *eutúk^hei* (lit. ‘be fortunate!’), which mark the end of the sender’s conversational turn.

2.3 Indirect Directives: Routinized Mitigators

In general, the language of papyri displays, besides imperatives, a set of recurrent alternative directive markers that are increasingly sensitive to pragmatic features. These markers can be traced back to diverse strategies that already existed in Classical language, but with a lower degree of conventionalization (cf. Dickey 2016a). In petitions, for instance, performatives, overtly referring to the

nature of the speech act (i.e. the entreaty), make the sender's negotiating position within the exchange with the recipient explicit. Other – less direct – strategies are elsewhere preferred, which aim to conceal or repair the speech act threat to the recipient's freedom of action.

2.3.1 Making the Right Choice

The most common strategy is the collocation with *kalōs* 'well' and *poiēō* 'do', whose mitigating effect basically rests on the sender's positive evaluation of the recipient's compliance by means of an appeal to their positive face (i.e. their need to be appreciated). Its use is exemplified by the passages in (18)–(20).

(18) (P.Mich. I 48, 3–4; 251 BC)

καλῶς οὖν **ποιήσεις** ἀγοράσας ἡμῖν καὶ ἀποστείλας
kalōs oûn poiēseis agorásas hēmîn kai aposteílas
 well CONJ do.FUT.IND.2SG buy.AOR.PTCP 1PL.DAT CONJ send.AOR.PTCP

εἰς | Πτολεμαίδα

eis Ptolemaída

into Ptolemais

'Therefore, please (litt. '**you will do well**') buy them for us and send them to Ptolemais' (White 1986: no. 25)

(19) (PSI V 502, 29; 257 BC)

καλῶς ἄν οὖν **ποιήσῃς** μηδεμίαν ἡμῶν καταγινώσκων
kalōs ân oûn poiēsais mēdemían hēmôn kataginōskōn
 well PRT CONJ do.AOR.OPT.2SG no 1PL.GEN charge.PRS.PTCP

ὀλιγωρίαν

oligōrían

negligence

'Therefore **you would do well** not to lay any charge of negligence against us (me)' (White 1986, no. 18)

(20) (PSI V 502, 2; 257 BC)

καλῶς ἄν **ποιοῖς** μνημονεύων ἡμῶν
kalōs ân poiōis mnēmoneúōn hēmôn
 well PRT do.PRS.OPT.2SG remember.PRS.PTCP 1PL.GEN

'**You would do well** to keep us (me) in mind' (White 1986: no. 18)

As the passages in (18)–(20) show, the mitigating value of the collocation is heightened by the interaction with other morphosyntactic properties of the structure. For instance, the main verb (*ποιέω* ‘do’) tends to be modally marked: it mostly occurs as an optative combined with the conditional particle *άν* (cf. 19 and 20) or as a future (cf. 18), the “most modal” among tenses (cf. Palmer 1986: 209–210), which is particularly common in later documents (cf. 21), probably as a consequence of the diachronic decline of the optative. Accordingly, its use in a high-to-low interaction such as (18), addressed from Apollonios to Zenon, which dates back to the mid-third century, may involve a particular illocutionary force.

(21) (P.Tebt. I 19, 10–13; 114 BC)

σὺ δὲ | **ὀρθῶς ποιήσεις** τὸ προσάγγελμα μὴ ἐλατ- | τώσας
sù dè ort^hôs poiéseis tò prosággelma mē elattósas
 2SG.NOM PRT rightly do.FUT.2SG DEF report NEG decrease.AOR.PTCP
 παρὰ τὸ πρῶτον ὅπως εὐπροσωπῶμεν |
parà tò prôton hórôs euprosôrhômen
 at DEF first CONJ make.good.impression.PRS.SBJV.1PL
 ‘**You will act correctly** in not decreasing the report from the first one, in order that we may make a good showing’ (White 1986: no. 49)

Variations of the adverb are also possible. The use of *ort^hôs* ‘rightly’, which is shown in (21), is also encountered in earlier documents: in the Zenon archive, it has been acknowledged as an “idiosyncratic feature” of the language of the finance minister Apollonios (cf. Nachtergaele 2015: 316), who employs the collocation – inflected in the past – to convey appreciation for the compliance of his stewards (cf. 22).

(22) (P.Ryl. IV 560, 2–4; 256 BC)

ὀρθῶς | **ἐποίησας** ἀποστείλας τὸν ἐρέβινθον | εἰς Μέμφιν.
ort^hôs epoiēsas aposteilas tôn erébinth'on eis Mémph^hin
 rightly do.AOR.2SG send.AOR.PTCP DEF chickpea into Memphis
 ‘**You did right** in having sent the chickpeas to Memphis.’ (White 1986: no. 21)

The repertoire of variation embodied by the formula – both in the adverb alternation and the verb form inflection – reveals the user’s awareness of the compositionality of its parts. An increased degree of idiomatization was conversely found by Leiwo (2010) in the later letters from Mons Claudianus, where inconsistencies appear in the choice of the complement clause in which the content of the request is backgrounded. In the documents here scrutinized, this is

mostly expressed by an aorist participle, although the present is also occasionally attested (cf. 19 and 20). The infinitive as complement is rather rare, as in (23), by an Egyptian farmer from Kerkesephis, where the subjunctive of the main verb is also unexpected:

(23) (P.Tebt. I 56 9–11; late 2nd ct. BC)

καλῶς	οὖν	ποιήσης	εὐχαριστήσαι		πρῶτον	μὲν	τοῖς
<i>kalōs</i>	<i>oûn</i>	<i>poēsēis</i>	<i>euk^haristēsai</i>		<i>prōton</i>	<i>mèn</i>	<i>tois</i>
well	CONJ	do.AOR.SBJV.2SG	be.thankful.AOR.INF		firstly	PRT	DEF
θεοῖς	δεύτερον		δὲ	σῶσαι	ψυχὰς	πολλὰς	
<i>t^heois</i>	<i>deuteron</i>		<i>dè</i>	<i>sōsai</i>	<i>psuk^hàs</i>	<i>pollàs</i>	
gods	secondly	PRT	save.AOR.INF	lives	many		

‘First of all, therefore, please give thanks to the gods and, secondly, save many lives’ (White 1986: no. 52)

Moreover, the formula has quite an extensive use: it introduces requests from both superiors to their employees (cf. 18 addressed by the finance minister to his secretary), and from employees to their superiors (cf. 19 from Panakestor to the finance minister). It also applies to interactions among equals, as in (20), another piece from the troubled correspondence between Panakestor and Zenon about the management of the *dioikētēs* estate, and it is common in familiar letters, such as (24), from Isias to her husband, who is begged to come back home and rejoin his family.

(24) (UPZ I 59, 28–9; 168 BC)

καλῶς	ποιήσεις	καὶ	διὰ	ταύτην		καὶ	δι’	ἡμᾶς
<i>kalōs</i>	<i>poiēsēis</i>	<i>kaì</i>	<i>dià</i>	<i>tauten</i>		<i>kaì</i>	<i>di’</i>	<i>hēmās</i>
well	do.FUT.2SG	CONJ	PREP	DEM		CONJ	PREP	1PL.ACC
παραγ[ε]νόμενος	εἰς	τὴν	πόλιν					
<i>paragenómenos</i>	<i>eis</i>	<i>tēn</i>	<i>pólin</i>					
come.to.AOR.PTCP	into	DEF	city					

‘Please (lit. **you will do well**)’ – both for my (lit. our) sake and for hers – come back to the city’ (White 1986: no. 34)

Conversely, its use may not appear proper in petitions, probably because of the evaluation of the recipient’s behaviour involved by the collocation. It occurs only in the petition addressed to Zenon by a non-Greek speaker – maybe an Arab (cf. White 1986: 47) – working on Apollonios’ Syrian estate and complaining to Zenon about abuse by his Greek superiors. Here, the formula recurs twice: in the

conventional health wish opening the letter (cf. 25) and in the closing formula, where Zenon is asked to intervene in the dispute on his behalf (cf. 26).

(25) (P.Col. IV 66, 1–2; 256–5 BC)

.. δ... Ζήνωνι χαίρειν. **καλῶς ποιεῖς** εἰ ἔρρωσαι.
 .. d... Zēnōni k^háirein kalōs poieîs ei érrōsai
 Zenon.DAT rejoice.PRS.INF well do.PRS.2SG CONJ be.healthy.PRF.2SG
 ἔρρω- | μαι δὲ καὶ αὐτός.
 érrōmai dè kai autós
 be.healthy.PRF.1SG PRT CONJ DEM

‘... to Zenon greeting. **You do well** if you are healthy. I myself am also well.’ (White 1986: no. 22)

(26) (P.Col. IV 66, 21–2; 256–5 BC)

σὺ οὐ̃ν **καλῶς** ἂν **ποιήσαις** | ἐπιστροφῆν μου ποιησάμενος
 su oũn kalōs àn poiẽsais | epistroph^hèn mou poiẽsámenos
 you CONJ well PRT do.AOR.OPT.2SG care 1SG.GEN do.AOR.PTCP
 ‘Therefore, please (lit. **‘you would do well’**) cause a change of attitude toward me’ (White 1986, no. 22)

It is only in (26) that the phrase applies to a directive situation. In (25), its occurrence is likely due to the (improper) association with the impersonal collocation *kalōs ék^hei* ‘it is well’, which is very common in the stereotyped phrasing of the *formula valetudinis* (cf. 27). Other morpho-syntactic inconsistencies in the syntax of the structure may then depend on the contamination between the two utterances, such as the unusual *ei* ‘if’ complement clause, which is regular in the health wish with *ék^hō* ‘have’ (see Bruno 2015: 47–8 for further details on this).

(27) (P.Cair.Zen. I 59060, 1; 257 BC)

[εἰ ἔρρωσαι, **ἔχοι** ἂν **καλῶς**.
 ei érrōsai ék^hoi àn kalōs
 CONJ be.healthy.PRF.IND. 2SG have.PRS.OPT.3SG PRT well
 ὑγιαίνομεν δὲ καὶ ἡμεῖς.
 ugiáinomen dè kai hēmeîs
 be.healthy.PRS.IND.1PL PRT CONJ 1PL.NOM

‘If you are well, **it would be excellent**. We also are well.’ (White 1986: no. 15)

Example (26) could also represent the misuse of the formula by a non-native Greek speaker, especially in comparison with (9), from the petition by the

Greek Simale, which under a very similar wording, features the expected performative expression (cf. lines 6-7, *déomai oûn sou kai hiketeúō epistrop^hēn poiēsast^hai perì toutōn* ‘I beg you and entreat you to take care of these matters’). Besides, other aspects of the writing in the letter appear to confirm the sender’s difficulty in dealing with the epistolary formulary: in the opening greetings, the name of the recipient is placed after that of the sender, while in petitions it tends to be placed before in deference to the addressee. A similar deviance was encountered also in the petition of Simale (cf. 2.2), although there, in view of the user’s profile, it may be presumed to be a deliberate violation of the conventional linear order.

2.3.2 Asking for a Favour

In addition to the *kalōs* ‘well’ plus *poiéō* ‘do’ collocation, another recurrent strategy involves the use of a class of verbs derived from *k^háris* ‘favour’, by means of which the sender presents the request as a favour, thus emphasizing the discretionary power of the addressee, whose negative face is thus preserved. This is exemplified by (28) and (29) below, respectively featuring the verbs *euk^haristéō* ‘bestow a favour on’ and *k^harízō* ‘gratify’.

(28) (P.Cair.Zen. I 59015, 6–10; 259–8 BC)

καλῶς ἄν οὖν ποιήσῃς	τῆμ πᾶσαν σπουδῆν ποιησάμενος
<i>kalōs ἄn oûn poiēsais</i>	<i>tēm pāsán spoudēn poiēsámenos</i>
well PRT CONJ do.AOR.OPT.2SG	DEF all haste do.AOR.PTCP
τοῦ συλληφθῆναι	αὐτοῦς [ἵνα καὶ οἶα .οἶ] καὶ
<i>toû sullēp^ht^hēnai</i>	<i>autoûs hína kai oia .. oi kai</i>
DEF be.captured.AOR.INF.	DEM CONJ CONJ CONJ CONJ
παραδοῦς	Στράτωνι τῶι κομίζοντί σοι τὸ ἐπιστόλιον.
<i>paradoûs</i>	<i>Strátōni tōi komízontí soi tò epistólion.</i>
hand.over.AOR.PTCP	Straton.DAT DEF bringing 2SG.DAT DEF letter
τοῦτο γὰρ ποιήσας	εὐχαριστήσεις ἡμῖν.
<i>toûto gâr poiēsás</i>	<i>euk^haristéseis hēmîn</i>
DEM CONJ do.AOR.PTCP	bestow.a.favour.FUT.IND.2SG 1PL.DAT

‘Therefore, you would do well, making the due haste that they be recovered, to hand them over to Straton, who carries this note to you. For by doing this **you would (lit. ‘will’) grant** me (lit. ‘us’) **a favour.**’ (White 1986: no. 6)

(29) (P.Cair.Zen.V 59804, 11–12; 258 BC)

χαρίζοιο δ' ἄμ μοι περὶ ὧν σοι τὸ
k^harízoio *d' ám moi perì ôn soi tò*
 gratify.PRS.OPT.2SG PRT PRT 1SG.DAT about REL 2SG.DAT DEF
 ὑπόμνημα ἔδωκα ἀγοράσας καὶ ἀποστείλας μοι |
hypómnhēma édōka agorásas kaì aposteílas moi
 memorandum give.AOR.IND.3SG buy.AOR.PTCP CONJ send.AOR.PTCP 1SG.DAT
 καὶ σὺ δὲ γράφε πρὸς ἡμᾶς περὶ ὧν ἂν
kaì su dè gráp^he pròs hēmās perì hōn àn
 CONJ 2SG.NOM PRT write.PRS.IMP.2SG to 1PL.ACC about REL PRT
 βούληι· ποιήσομεν γὰρ αὐτό σοι προθύμως.
boulēi poiēsomen gàr autó soi prot^hýmōs
 want.PRS.SBJV.2SG do.FUT.IND.1PL CONJ DEM 2SG.DAT eagerly
'You would favor me by buying and sending to me the things about
 which I gave you the memorandum. And write to us whatever you want;
 for we will eagerly do it for you.' (White 1986: no. 9)

The pattern is shaped on the exchanges of favours between upper-class peers, of which the letter of recommendation is a typical instance (cf. 2.1). Accordingly, as in (29), it could be often also associated to formulas for the returning of the favour (cf. *gráp^he pròs hēmās perì hōn àn boulēi* 'write to us whatever you want', line 12) and it is therefore particularly common in the interaction among equals.

2.4 The Weight of the Participants

Compared to directive imperatives, the patterns so far discussed all show a modulation of the content of the request, whose force can be made explicit through the use of performatives, as in petitions, or concealed through indirect wordings, such as the collocation with *kalōs* 'well' plus *poiēō* 'do' or with the *k^háris*-verbs. Variations in the grammatical person – by which the participants are introduced in the text – can further contribute to determining the force of the utterance.

In (30), for instance, addressed by Herodes, Ptolemy VI's *dioikētēs*, to Onyas, a prestigious member of the royal court (on whose identity, cf. White 1986: 67–8), the polite overtone of the writing does not depend only on the polite formula *kalōs poiéseis* (lit. 'you will do well') in line 11, but also on the shift to the 3rd person in line 15 (*hékasta . . . epitelesthēi* 'each thing will be completed'), through which the two participants (i.e. the sender as prompter of the request, the recipient as the expected performer of the action) are backgrounded.

(30) (UPZ I 110, 11–18; 164 BC)

καλῶς ποιήσ\ε/ις τὴν πᾶ- | σαν προσενεγκάμενος ἐκτέν\ε/ιαν
kalôs poiéseis tēn pāsan prosenegkâmenos ektēneian
 well do.FUT.IND.2SG DEF all apply.AOR.PTCP zeal
 καὶ προ[ο]νο- | ηθεῖς, ὅπως μητεν τῶν ἀδυνατούντων γε- | ωργεῖν
kaì pronoē^heis hōpōs mēten tōn adunatoútōn geōrgeîn
 and take.care.AOR.PTCP CONJ CONJ DEF unable cultivate.INF
 περισπᾶται μηθεῖς μήτε τῶν δυνα- | μένων
perispâtai mē^heis mēte tōn dunaménōn
 be.engaged.PRS.SBJV.3SG no-one CONJ DEF able
 σκεπάζεται κατὰ μηδεμίαν παρ- | εὔρεσιν, **ἕκαστα**
skepázetai kata mēdemían pareúsin hékasta
 be.protected.PRS.SUBJV.3SG according no pretext each
 δ' **ἐπιτελεσθῆι** κατὰ τὸν ὑπο- | δεδειγμένον
d' epitelesthēi kata tōn hypodedeigménōn
 PRT be.accomplished.AOR.SBJV.3SG according DEF indicated
 ἐν τῷ πεμφθέντι σοι παρ' ἡμῶν | ὑπομνήματι τρόπον.
en tōi pemph^hénti soi par' hēmōn hypomnēmati trōpon
 in DEF sent 2SG.DAT from 1PL.GEN memorandum manner
 'please (lit. **'you will do well'**) apply all zeal and take all precaution, in
 order neither that those who are unable to work in the fields be impressed
 nor that those be protected (e.g., by patronage) on any pretext whatever;
 but **each thing be completed** according to the manner in which it was
 indicated in the memorandum that was sent to you.' (White 1986: no. 36)

Due to the change of person, the negotiation dynamics underpinning the speech act are minimized, since the action – also because of the shift to the passive – is presented outside the interactional space shared by sender and recipient. As in other threatening speech acts (cf. Brown & Levinson 1987: 226), in directives also, by definition oriented towards the addressee, the avoidance of the 2nd person entails a mitigation of the attack to their negative face.

Similarly, in (31), another instance from the Zenon archive, the sender, Artemidoros, the physician of the royal court, in his instructions for Zenon, shifts from the 2nd person (cf. *kalôs ... àm poiésais* 'you would do well', line 4; *peirō* 'try', line 9) to the 3rd person (*epimelés soi éstō*, line 10), with analogous mitigating effects. Note that, here, the recipient is addressed firstly with the *kalôs* plus *poiēō* collocation (line 4) and then with the bare imperative (*peirō*, line 8), whose alternation in the same message shows their comparable illocutionary force.

(31) (P.Cair.Zen. II 59251, 4–9; 252 BC)

καλῶς δ' ἄμ ποιήσαις ἀγοράσας | ἡμῖν ἵνα ὡς ἄμ
kalōs d' àm poiēsais agorásas hēmîn hína hōs àm
 well PRT PRT do.AOR.OPT.2SG buy.AOR.PTCP 1PL.DAT CONJ CONJ PRT
 παραγενώμεθα ἔχωμεν μέλιτος τοῦ βελτίστου μετρητὰς
paragenōmet^ha ék^hōmen mélitos tou beltístou metrētàs
 come.to.AOR.SBJV.1PL have.PRS.SBJV.1PL honey DEF best metretas
 γ καὶ κριθῶν ὥστε εἰς τὰ κτήνη (ἀρτάβας) χ, | τὴν
g kai krit^hōn hōste eis tà ktēnē artábas k^h tēn
 3 CONJ barley CONJ into DEF cattle artabs 600 DEF
 δὲ τιμὴν ἀπὸ τοῦ σησάμου καὶ τοῦ κροτόνος δοῦς/ς εἰς
dè timēn apò tou sēsáμου kai tou krotónos doús eis
 PRT price from DEF sesamon CONJ DEF kroton giving into
 ταῦτα, καὶ τῆς οἰκίας δὲ τῆς ἐμ Φιλαδελφείαι | ἐπιμελόμενος,
taúta kai tēs oikías dè tēs em P^hiladelph^heíai epimelómenos
 DEF CONJ DEF house PRT DEF in Philadelphia taking.care.PRS.PTCP
 ἵνα ὡς ἄμ παραγενώμεθα καταλάβωμεν αὐτὴν ἐστεγασμένην.
hína hōs àm paragenōmet^ha katalábōmen autēn estegasmēnē
 CONJ CONJ PRT come.AOR.SBJV.1PL find.AOR.SBJV.1PL DEM covered
 καὶ τὰ ζευγάρια δὲ καὶ τὰ ἱερίεια καὶ τοὺς χήνας |
kai tà zeugária dè kai tà hieríeia kai tous khēnas
 CONJ DEF oxen PRT CONJ DEF pigs CONJ DEF geese
 [κ]αὶ τὰ λοιπὰ τὰ ἐνταῦθα ὡς ἂν ἐκποιῆι
kai tà loipà tà entaút^ha hōs àn ekpoiēi
 CONJ DEF rest DEF there CONJ PRT suffice.PRS.SBJV.3SG
πειρῶ ἐπισκοπεῖν· οὕτω/ς γὰρ ἡμῖν μᾶλλον
peirō episkopeîn houtōs gàr hēmîn máλλον
 attempt.PRS.IMP.2SG look.upon.PRS.INF ADV CONJ 1PL.DAT ADV
 ἔσται τὰ δέοντα. | καὶ τὰ γενημάτια δὲ ἵνα τρόπῳ
éstai tà déonta kai tà genēmátia dè hína trópōi
 be.FUT.IND.3SG DEF needful CONJ DEF produce PRT CONJ manner
 τινὶ συγκομισθῆι **ἐπιμελές** σοι **ἔστω.**
tinì sugkomist^hēi epimelés soi éstō
 some be.gathered.AOR.SUBJV.3SG object.of.care 1SG.DAT be.PRS.IMP.3SG
 ‘And please (lit. ‘you would do well’) buy for us (me), in order that I (litt.
 ‘we’) may have whenever I (lit. ‘we’) arrive, three metretas of the best
 honey and six hundred artabs of barley for the animals, giving (paying)
 for these things from (the produce of) the sesame and the kroton; more-
 over, concern yourself with the house in Philadelphia, in order that I

(lit. ‘we’) find it roofed whenever I (lit. ‘we’) arrive. And try, as well as possible, to watch the oxen, the pigs, the geese and the rest of the stock there; for by doing so, I (lit. ‘we’) will have better (supply of) the necessities. And make it your concern (lit. ‘it should be your concern’) that the crop be harvested somehow.’ (White 1986: no. 24)

Interestingly enough, in his long list of instructions, Artemidoros avoids introducing himself with the 1st person singular: instead, he consistently uses the 1st person plural (cf. *hēmîn* ‘to us’, *paragenōmet^ha* ‘we would come’, *ék^hōmen* ‘we would have’ at line 5; *paragenōmet^ha* ‘we would come’, *katalābōmen* ‘we would find’, line 7; *hēmîn* ‘to us’, line 8). In epistolary practice, such “illogical plurals” are in particular often encountered in conventional and formulaic expressions with a crucial role in the modulation of the correspondents’ interactional space (see Bruno 2017 for more on this). They are thus – unsurprisingly – not uncommon also in directive situations, where, behind the plural, the sender conceals his personal responsibility for prompting the action, with possible mitigating effects on the request.

3 Conclusions

Some recurrent strategies in directive speech acts have been singled out within a small, but representative, corpus of early Ptolemaic papyri taken mainly from White (1986), where, beside imperatives, which are the most usual form for directives since the Classical stage, dedicated constructions emerge, which are more focused on the pragmatic context of the act.

Compared to the imperative mood (cf. 2.1), all the strategies observed involve variations of the illocutionary force of the utterance: it can be strengthened by the use of performatives (cf. 2.2) or dissimulated through more indirect phrasings such as the formulae with *kalôs* plus *poiēō* (cf. 2.3.1) or the *k^háris*-verbs (cf. 2.3.2) in accordance with very common paths of pragmaticalization cross-linguistically (cf. Molinelli 2016 on performatives, and Mauri & Sansò 2011 on the conventionalization of conversational implicatures). As argued by Dickey (2016a: 248–9), the wider repertoire of directive utterances encompassed by early Hellenistic papyri can be traced back to the different socio-cultural environment faced by the Greeks in Egypt, where the more rigid distinctions between social classes called for the routinization of strategies which facilitate interaction between the two parties and preserve social cohesion, while minimizing the threat of the act.

Provided with a more specific illocutionary value, the new patterns can display a more restricted distribution than imperatives. Only the *kalôs* plus *poiêō* formula actually occurs in a range of interaction situations comparable to the imperative, of which it appears, in the Graeco-Roman period, to be a more polite variant (see also Dahlgren & Leiwo, this volume). For the rest, performative verbs are routine in the asymmetric interaction typified in the epistolary type of petition (from which other directive markers tend to be banned), while the favours exchange pattern tends to mark requests between upper-class equals. Table 1 summarizes the strategies singled out and highlights some aspects of the variation.

Table 1: Directives found in Ptolemaic papyri.

Variational features Directive forms	Addresser-Addressee Relationship			Illocutionary Force	
	[+Symmetrical]	[-Symmetrical]		[+Direct]	[-Direct]
		High-to-Low	Low-to-High		
Imperative clause	+	+	+	+	-
Performatives (<i>déomai</i> , etc.)	-	-	+	+	-
<i>kalôs</i> + <i>poiêō</i> formula	+	+	+	-	+
<i>k'áris</i> -verbs	+	-	-	-	+

The morpho-syntactic properties of the clause also contribute to modulating the directiveness of the act, such as the modal inflection of the main verb, the shift of object of the request into a complement clause, as well as possible variations in the grammatical person used to refer to the two interactants (cf. 2.4). By the contrast between singular and plural, for example, the sender can respectively foreground or background his involvement as the source of the directive, which is maximum with performatives, where, unlike the other patterns, the sender is the subject of the main verb, which is always inflected in the 1st person singular.

Furthermore, the value of each form has been shown to depend on the context in which it occurs. The imperative clause, which is the least marked among directive strategies, tends to be avoided in entreaties, where the subordinate status of the petitioners is emphasized by the use of performatives, which make their negotiating position towards the recipient explicit. The same linguistic feature can moreover imply different values depending on the user's profile, such as the occasional imperatives encountered in petitions: misuse by an incompetent author in the case of an entreaty by a non-Greek petitioner, compared with an affirmation of identity by the influential Greek Simale.

Abbreviations

Papyrus editions are cited according to the *Checklist of Greek, Latin, Demotic and Coptic Papyri, Ostraca and Tablets* at www.papyri.info/docs/checklist. The glosses follow Leipzig Glossing rules (cf. <https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf>). Additionally, the following glosses have been adopted: AOR – aorist, OPT – optative, PRT – particle, CONJ – conjunction.

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Robert Crellin

What's in a (personal) Name? Morphology and Identity in Jewish Greek Literature in the Hellenistic and Roman Periods

Abstract: It has traditionally been taken to be the case that Hebrew personal names in literary Jewish Greek writers are regularly adapted to the morphology of Greek, and that non-nativization is a mark of low-level Greek. However, this view is only partly true: in fact most personal names are left unadapted also in the literary writers Philo of Alexandria and Ezekiel the Tragedian. Among writers of literary Greek, Flavius Josephus stands out by adapting in most cases. This treatment of personal names is not limited to literary registers: in documentary and epigraphic sources the norm before late antiquity is morphologically to adapt names of this kind. After surveying the various strategies employed for rendering Hebrew names in all these sources, the present study assesses the sociolinguistic reasons for the observed distribution. It is argued that the morphological adaptation of Hebrew names locates their referents in a Hebrew- or Semitic-speaking linguistic world, which has the effect of transporting the hearer/reader into the narrative and cultural world of the Bible. By the same token, Josephus' decision to adapt personal names locates his characters in Greco-Roman society, an approach that can be understood as part of his broader strategy of transferring the Bible into a Greco-Roman context. Both are suggested to form part of a broader strategy of constructing Jewish identity in the Greco-Roman world, and of advancing particular identities beyond their initial boundaries. This has the secondary effect of creating a community of speakers who consciously choose to deviate from normal Greek inflection in the matter of Biblical Hebrew names, thereby generating a linguistic signature for themselves.

Keywords: onomastics, Postclassical Greek, Hebrew, morphology, Josephus, Philo, Ezekiel the Tragedian, Greco-Roman society, Judaism, identity

1 Introduction: Rendering Personal Names into Another Language

How are personal names to be rendered into another language? Two kinds of nouns can be distinguished: proper nouns and appellatives, that is, common nouns. When a translator translates an appellative, his/her task is, in principle,

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straightforward: identify the lexical meaning of the appellative in question in the source language, and translate with the closest equivalent to that lexical meaning in the target language. Thus *tree* in English will be perfectly effectively rendered *arbre* in French in most cases. Furthermore, it is not an option to keep the original form: rendering English *tree* simply as *tree* in French will not be regarded as a translation.

However, when translating personal names there are more variables at play. In terms of the phonological treatment of personal names, a writer wanting to render Hebrew names in Greek faces two challenges. First, and most obviously, Hebrew possesses a number of phonemes that do not exist in Greek, including the glottal stop *aleph* /ʔ/ <א>, with which אַבְרָהָם ¹ *ʾabrāhām* ‘Abraham’ begins. Phonological issues have been considered elsewhere, notably recently by Krašovec (2010; 2009), and will not be addressed here. Instead, we are concerned with the morphology of Semitic names in Greek: Hebrew nouns, including proper nouns, do not inflect for case, while of course they do in Greek.² This means that a Hebrew name taken straight into Greek, without any added inflectional morphology, will be morphologically idiosyncratic: a nominative in Greek ἀβρααμ *abraam*³

1 Hebrew words are given with Tiberian vocalisation, and renderings into Latin script follow the transliteration scheme in van der Merwe, Naudé, and Kroeze (2017: 13–21). These renderings should be regarded as transliterations rather than transcriptions, since their aim is simply to give each Hebrew consonant or vowel sign an equivalent, rather than attempt to represent the phonology.

2 It is of course true that Hebrew nouns do change form according to their state (construct etc.).

3 For the purposes of this study I do not accent non-Greek names. For discussion of the issues involved in accenting foreign names in Greek, see Clarysse (1997). In addition, neither breathings nor capital letters are not used in the transliteration of Greek names. Iota adscripts are used in place of subscripts. For consistency, I apply these principles even where the cited publication places an accent or uses capitals, breathings and/or iota subscripts. Furthermore, papyrus documents are neither accented nor are diacritics or sentence punctuation used. The base texts used for the investigation were the following: for the Septuagint (LXX), Rahlfs 1971 [1935]), provided both by BibleWorks v.9 and the Center for Computer Analysis of Texts (CCAT, <http://ccat.sas.upenn.edu/gopher/text/religion/biblical/>) via The Unbound Bible (<https://unbound.biola.edu/>). The machine readable text of this version was “prepared by the TLG (Thesaurus Linguae Graecae) Project directed by T. Brunner at the University of California, Irvine, with further verification and adaptation (in process) by CATSS towards conformity with the individual Göttingen editions that have appeared since 1935” (CCAT readme file, <http://ccat.sas.upenn.edu/gopher/text/religion/biblical/0-readme.txt>). For Josephus, Niese (1885–1895) was used, provided electronically through BibleWorks v.9 and the Perseus Digital Library (<http://www.perseus.tufts.edu/hopper/>); for Philo, Borgen, Fuglseth, and Skarsten (2005); for Ezekiel the Tragedian, Jacobson (1983); for the Masoretic Text (MT), the Westminster Leningrad Codex, provided

'Abraham' violates the morphosyntactic requirement for case marking, since it is not inflected for nominative case.

Greek writers may be said to adopt one of two principal strategies:

- Leave the name without inflection for case, and terminate with the grapheme representing the nearest equivalent of the corresponding Hebrew phoneme, regardless of whether or not this is a permitted final consonant in Greek, e.g. ἀβρααμ *abraam* for אַבְרָהָם *ʾabrāhām*. I will refer to this strategy as *morphological non-adaptation*. I will use the adjectives (*morphologically non-adapted* and/or *uninflected*) to refer to these instances.
- Inflect for case, by incorporating the name into an inflectional paradigm, e.g. ἀβραμος *abramos* for אַבְרָהָם *ʾabrāhām*. I will refer to this strategy as *morphological adaptation*. I will use the terms (*morphologically adapted* and/or *inflected*) to refer to these instances.

Other strategies exist, notably the loan translation (calquing) of names, e.g. יִצְחָק *yīṣḥāq* 'Isaac' ~ γελάσιος *gelásios*, both from roots/stems with the meaning 'laugh', and sound-assimilation, i.e. assimilation to pre-existing Greek names e.g. יהושע *Yehōshuaʿ* ~ ἰάσων *íasōn* 'Jason', as well as using stereotypical translations, that is, standard Greek renderings of Hebrew terms, such as αἴγυπτος *aígyptos* for מִצְרַיִם *miṣrayim* 'Egypt' (cf. Tcherikover and Fuks 1957: 28 fn. 69; van Minnen 1986; Adams 2003: 370 fn. 133; Perkins 2010). These will not be considered here. The focus of the present investigation is rather on the morphological adaptation of Hebrew names to Greek.

The present investigation sets out to answer two questions, addressed in the first and second sections, respectively:

electronically both through BibleWorks v.9 and Open Scriptures Hebrew Bible. Searches were conducted using BibleWorks v.9, as well as software written by the author using morphology and lemmatization produced by the Open Scriptures Hebrew Bible and CCAT, used by permission. Original work of the Open Scriptures Hebrew Bible available at <https://github.com/openscriptures/morphhb>. CCAT material was obtained both from <http://ccat.sas.upenn.edu/gopher/text/religion/biblical/> and the Unbound Bible (<https://unbound.biola.edu/>). The following Göttingen editions were used for quoted forms: Genesis, Wevers (1974); Exodus, Wevers (1991); Numbers, Wevers (1982); Deuteronomy, Wevers (1977); Ezra-Nehemiah, Hanhart (1993); Job, Ziegler (1982); Esther (Esth), Hanhart (1966); Isaiah (Isa), Ziegler (1939). Quotations from the Minor Prophets, i.e. Amos, Haggai (Hag) and Jonah, were checked using the text of McCartney (2005a, 2005b, 2005c), based on that of Ziegler (1943). No Göttingen texts were available at the time of writing for Joshua (Josh), 2 Samuel (2Sam), 2 Kings (2Kgs) and 1–2 Chronicles (1–2Chr); for these Rahlfs (1971 [1935]) was used. For the purposes of this article, Ezra and Nehemiah (Neh) are given as such, and not as 2 Esdras. Septuagint 1 Esdras was not considered. Translations are my own unless otherwise stated.

- How are Hebrew personal names integrated into the inflectional paradigms of Ancient Greek?
- What are the socio-linguistic implications of the degree to which a given writer chooses to integrate Hebrew personal names into the Greek nominal paradigm?

In approaching these questions, existing approaches will be considered and assessed, before appropriate modifications are made.

2 The Morphology of Non-Greek Personal Names

2.1 Septuagint

2.1.1 Background to the Morphology of Personal Names in the Septuagint

The arrival of Alexander the Great in Egypt, and the succeeding Ptolemaic dynasty brought sweeping changes for Egyptian society, with a wholly new class of Greek speakers placed above the existing social structures (Bowman 1996: 122). This had a clear linguistic effect, with Greek now holding prestige status, and other languages, such as Egyptian and Aramaic, losing their former importance, at least from an administrative standpoint (Hinge 2009: 75–76; Bowman 1996: 122). At about this time, or not long afterwards, the Jewish community in Alexandria was established. Very quickly the community adopted Greek as its language (Schwartz 2009: 18; Tcherikover and Fuks 1957: 30–31), so that before long they needed a translation of the Hebrew Bible into Greek (Williams 2000: 316; Horrocks 2010: 106; Krašovec 2010: 87), likely around 250 BC for the first five books, the Pentateuch (Jobs and Silva 2015: 13). This translation would become known as the Septuagint, a collection of translations completed by different translators over a period of two or three centuries (*ibid.*)⁴ This contributed to the demise of Hebrew among the Jews of Egypt, since there was no longer any need to study Hebrew even for religious reasons (Tcherikover and Fuks 1957: 31).

What were the implications of these developments for the treatment of Hebrew names in Greek? Greek writers had, of course, been faced with the challenge of rendering non-Greek names into Greek for a long time before the Hebrew Bible was translated. As a rule, Greek historians chose to conform foreign names to the norms of Greek morphology. However, the way this was done

⁴ For the various ways in which this term is used, see Jobs and Silva (2015: 14–17).

was not always uniform. Thus Herodotus declines *αμασις* *amasis* all the way through as an *-i* stem noun. By contrast Diodorus Siculus and Plutarch decline *αμασις* *amasis* as a dental stem in *αμασιδ-* *amasid-*. The patterns available are given in Table 1.

Table 1: Inflection of the personal name *αμασις* *amasis* in Greek authors.

	Herodotus ⁵	Example passage	Later authors	Example passage
NOM	αμασις <i>amasis</i>	3.4		
ACC	αμασιν <i>masin</i>	1.77		
GEN	αμασιος <i>amasios</i>	3.4	αμασιδος <i>amasidos</i>	Diod. Sic. 1.42.2; ⁶ Plu. <i>Mul. virt.</i> 261c ⁷
DAT	αμασι <i>masi</i>	3.4		

Nevertheless, consistency of treatment does lie in the mere fact of morphologically adapting such names. In view, then, of what had become standard practice in Greek, one might expect non-Greek writers to follow suit. The reality, however, is somewhat more complicated.

It is immediately striking to the reader of the Septuagint that Hebrew names are very often given without case endings in Greek (Ilan 2002: 17–18). However, the issue is rarely directly treated directly, with the focus remaining on issues of transcription and transliteration (cf. e.g. Krašovec 2010). The issue is, however, addressed by Thackeray (1909: 160–161), who notes that “literary writers like Josephus” adapt names according to all the major inflectional classes in Greek, while in the Septuagint translated books of the Hebrew Bible this is not the case. Here Thackeray identifies what is in our terms a phonological distinction: personal names ending in a consonant in Hebrew “remain unaltered”, while names ending in a vowel, can be morphologically adapted, although this is not necessarily the case. Of these feminine nouns do not need

⁵ Text: Wilson (2015) provided by the *Thesaurus Linguae Graecae* (<http://www.tlg.uci.edu>), accessed 01/06/2018.

⁶ Text: Vogel (1888). Vogel notes that MSS DF have *αμασιος*.

⁷ Text: Nachstädt (1935) provided by the *Thesaurus Linguae Graecae* (<http://www.tlg.uci.edu>), accessed 01/06/2018.

any modification in the nominative, while masculines are inflected in $-\acute{\iota}\alpha\varsigma$ $-\acute{\iota}\acute{\alpha}s$. Furthermore, names “ending in other vowels” in Hebrew are declined according to a new morphological class of first declension nouns in $-\alpha\varsigma$ $-as$, $-\eta\varsigma$ $-\acute{e}s$, and $-\omicron\upsilon\varsigma$ $-ous$, and gives the examples of $\acute{\iota}\omega\nu\alpha\varsigma$ $\acute{\iota}\acute{o}nas$, $\mu\omega\upsilon\sigma\eta\varsigma$ $m\acute{o}us\acute{e}s$ and $\acute{\iota}\eta\sigma\omicron\upsilon\varsigma$ $\acute{\iota}\acute{e}sous$. Names inflected according to other inflectional classes, e.g. o - or consonant-stems are “almost unrepresented in the translations”.

While finding some support for Thackeray’s position, Perkins (2010: 450–451), in his analysis of the treatment in Greek of Hebrew personal names in Exodus, finds that the situation there is more complicated than that outlined by Thackeray. In particular, many names ending in vowels are found transcribed with uninflected forms in Greek, especially those in $\langle\text{v}\rangle$ $\langle\text{y}\rangle$.

The writing system used to write Hebrew, the West Semitic abjad (for the term see Daniels 1990), is characterized by omitting the writing of vowel phonemes in many contexts. Where vowel phonemes are represented, this is done by means of so-called *matres lectionis* (‘mothers of reading’), that is, consonant graphemes used to represent vowels (cf. Andersen and Forbes 2013; Ariel 2013; Krašovec 2010: 97). In the case of Hebrew four such *matres* are used: $\langle\text{h}\rangle$ $\langle\text{h}\rangle$, $\langle\text{x}\rangle$ $\langle\text{ʔ}\rangle$, $\langle\text{y}\rangle$ $\langle\text{y}\rangle$ and $\langle\text{w}\rangle$ $\langle\text{w}\rangle$. In principle, therefore, final vowels in personal names are found in Hebrew where these orthographic consonants are found at the end of a word.

In the next subsections assess the distribution of morphologically adapted personal names in the Septuagint. First Hebrew names ending in vowels are considered in 2.1.2, followed by those ending in consonants in 2.1.3. The reasons for the distribution of morphological adaptation thus uncovered is then be addressed at 2.1.4.

2.1.2 Hebrew Names Ending in Vowels

Hebrew names ending in vowels may be morphologically adapted, although to varying degrees according to the vowel in question.

Hebrew names in $-\acute{a}$ with the vowel denoted by $\langle\text{h}\rangle$ $\langle\text{h}\rangle$ are frequently morphologically adapted in Greek. Many names terminating in $-\gamma\acute{a}$, e.g. אֲרִיאֵה $\acute{a}ri\acute{a}$ are adapted into the existing paradigm in $-\acute{\iota}\alpha\varsigma$ $-\acute{\iota}\acute{a}s$ (see Table 2), in this case $\omicron\upsilon\rho\acute{\iota}\alpha\varsigma$ $our\acute{\iota}as$. The lack of iota in the dative is to be seen in the context of the loss of the final i -element of long diphthongs (cf. Horrocks 2010: 116).⁸ Parallels

⁸ Indeed, one wonders how real the subscripts/adscripts presented in the editions of texts and papyri for this period actually are.

Table 2: Inflection of ουριας *ourias* in the LXX.

NOM	ουριας	<i>ourias</i>	2Sam 11:11
ACC	ουριαν	<i>ourian</i>	2Sam 12:9
GEN	ουριου	<i>ouriou</i>	2Sam 11:14
DAT	ουρια	<i>ouria</i>	2Sam 11:8

include עֲזַרְיָה ^{sa}*zaryâ*, adapted as ἀζαριας *azarias* (e.g. 2Kgs 15:1 NOM; 2Kgs 14:21 ACC; Ezra 7:1 GEN) and אֲמָסְיָה [?]*amašyāh* adapted as αμασιος *amasias* or αμεσσιος *amessias* (Amos 7:10, NOM; Amos 7:14, ACC; 2Kgs 15:1, GEN).

There is, however, some ambivalence in the tradition as to the form of the genitive, with genitives in -ια *-ia* also attested, e.g. ἀζαρια *azaria* (Neh 7:7). This latter kind of paradigm is also found where the *-â* termination is preceded by other consonants. Thus masculine יהוּדָה *yehûdâ* becomes ιουδας *ioudas*, and is inflected according to a pattern alpha throughout (see Table 3). Here יוֹנָה *yônâ* rendered ιωνας *iōnas* may be considered parallel (see Jonah 2:1, NOM; 1:7, ACC; 4:6, GEN).

Table 3: Inflection of ιουδας *ioudas* in the LXX.

NOM	ιουδας	<i>ioudas</i>	Gen 35:23
VOC	ιουδα	<i>iouda</i>	Gen 49:8
ACC	ιουδαν	<i>ioudan</i>	Gen 38:22
	ιουδα	<i>iouda</i>	Gen 29:35
GEN	ιουδα	<i>iouda</i>	Gen 49:10
DAT	ιουδαι	<i>ioudai</i>	Gen 38:24

Feminine names in *-â* are similarly inflected as feminine nouns of the first declension, although, as in the case of the masculines, the alpha is maintained throughout the declension, rather than alternating with eta in the genitive and dative as one might expect from cases such as μουσα *moûsa* (GEN μούσης *moúsēs*) ‘Muse’ (for this phenomenon in Classical Greek, cf. Conybeare and Stock 1905: 26). Thus מִלְכָּה *milkāh* is rendered μελχα *melk^ha* in the nominative (Gen 22:20) and μελχας *melk^has* in the genitive (Gen 24:15), rather than *μελχης *melk^hēs*.

Almost the same behaviour can be seen in names in *-â* with the vowel denoted by <א> <ʔ> is used in Biblical Hebrew as a *mater lectionis* for the final vowel of certain personal names (Ariel 2013), and a number of these are

inflected when transcribed into Greek. Table 4 gives the attested inflection of εσδρας *esdras*.⁹

Table 4: Inflection of εσδρας *esdras* in the LXX.

NOM	εσδρας	<i>esdras</i>	Ezra 7:6
ACC	εσδραν	<i>esdran</i>	Neh 8:13
GEN	εσδρας	<i>esdras</i>	Neh 12:26
DAT	εσδραι	<i>esdrai</i>	Neh 8:1

Names in *-ê* are also inflected. Here the principal example is מֹשֶׁה *mōšê* ‘Moses’, which is inflected according to the innovative pattern in Table 5.

Table 5: Inflection of μωσσης *mōusēs* in the LXX.

NOM	μωσσης	<i>mōusēs</i>	Exod 2:11
VOC	μωσση	<i>mōusē</i>	Exod 5:4
ACC	μωσσην	<i>mōusēn</i>	Exod 2:10
GEN	μωσση	<i>mōusē</i>	Exod 18:5
	μωσσεως	<i>mōuseōs</i>	1Kgs 2:3
DAT	μωσσηι	<i>mōusēi</i>	Exod 3:12

Names ending in other vowels show more varied behaviour. As previously noted, Perkins (2010: 450) finds that names in <ι> <υ> are consistently uninflected in Septuagint Exodus. This may also be said of the Septuagint as a whole: some examples are given in Table 8.

Notable exceptions are מֹרְדֳכַי *mordokay* rendered by μαρδοχαιος *mardokhaios* (e.g. Esth 2:5), and הָגַי *hagay* rendered by αγγαιος *aggaios* (NOM, e.g. Hag 1:13; GEN αγγαιου *aggaiou*, e.g. Hag 1:3), which are both inflected according to the regular Greek *o*-stem pattern. A list of adapted personal names in <ι> <υ> is given in Table 5, where it is striking that one verse in Genesis contains all the adapted names in that book, and that the rest of the examples are found outside the Pentateuch.

⁹ The notable deviation here is the genitive singular in *-ας* *-as*: the name is declined as though it were a feminine *a*-stem, rather than a masculine. Neh 12:26 is apparently the only instance of the genitive of this name. A number of MS omit the final *-ς* *-s* (Hanhart 1993 *ad loc.*). שְׁבַנָּה *šebnā* transcribed as σομνας *somnas* (Isa 36:3, NOM; 37:2, ACC) may be considered parallel.

Table 6: Examples of Greek transcriptions of adapted personal names in <y> <y> in the LXX.

Hebrew		Greek		Example passage
הַגִּי	<i>hagî</i>	αγγις	<i>aggis</i>	Gen 46:16
אַרְאֵלִי	<i>ar'ēlî</i>	αριηλις	<i>ariēlis</i>	Gen 46:16
אַרְוֵדִי	<i>'arōdî</i>	αροηδισ	<i>aroēdis</i>	Gen 46:16
עֲרִי	<i>'erî</i>	αηδισ	<i>aēdis</i>	Gen 46:16
שׁוּנִי	<i>sûnî</i>	σαυνις	<i>saunis</i>	Gen 46:16
אַחִי	<i>'ēhî</i>	αγγις	<i>aggis</i>	Gen 46:16
מֶרְדֹּכַי	<i>mord^o kay</i>	μαρδοχαιος	<i>mardok^h aios</i>	Esth 2:5
שִׁמְעִי	<i>šim'î</i>	σεμειου (GEN)	<i>semeiou</i>	Esth 2:5
הַגַּי	<i>hagay</i>	αγγαιος	<i>aggaios</i>	Hag 1:13
בָּנִי	<i>bānî</i>	βαναιας	<i>banaias</i>	Neh 8:7

Morphologically adapted transcriptions of Hebrew names in <y> <w> are largely restricted to names with the suffix יהִי *-yāhū*, e.g. יהוֹשֻׁעַ *yō'sīyāhū* 'Josiah', e.g. 2Chr 35:22. This may contract to יהִי *-yā*. As such these names are often treated as names in *-ā* and inflected according to the Greek *a*-stems, so that יהוֹשֻׁעַ *yō'sīyāhū* becomes ιωσιας *iōsias*. Morphological adaptation is not required of such names, however: אֵלִיָּהוּ *'ēlīyāhū* 'Elijah' becomes uninflected ηλιου *ēliou*, e.g. 1Kgs 17:1.

There is some evidence for morphological adaptation of names in *-ū* where the final orthographic consonant is <א> <ʔ>, namely in the name פַּלְלוּ *pallū*², adapted as φαλλους *p^hallous* (for some discussion, see Perkins 2010: 451). The inflectional pattern, so far as it is attested, is given in Table 7. A parallel exists in אֵלִיהוּ *'ēlīhū*² adapted as ελιους *eliou*s (Job 32:2, 5, 6; 34:1; 36:1), although in this case only the nominative is attested.

Table 7: Inflection of φαλλους *p^hallous* in the LXX.

NOM	φαλλους	<i>p^hallous</i>	Gen 46:9, ¹⁰ Exod 6:14, 1Chr 5:3
GEN	φαλλου	<i>p^hallou</i>	Num 26:8
DAT	φαλλου	<i>p^hallou</i>	Num 26:5

Finally, the name שְׁלֹמֹה *šalōmō* 'Solomon' calls for special mention. In Hebrew this name ends in <ה> <h>. However, in Greek it is adapted into Greek with a final <y> <n>. Sometimes, in addition, the name is inflected in translated books, e.g.:

10 For the reading φαλλους *p^hallous* here, see Wevers (1993: 775).

- (1) ἐν ἡμέραις ροβοαμ υἱοῦ σολομωντος
en hēmérais roboam huiou solomōntos
 in days.DAT.PL Roboam son.GEN.SG Solomon.GEN.M.SG
 ‘in the days of Rehoboam the son of Solomon’
 (2Sam 8:7)

In this instance there is, however, no counterpart for this phrase in the Masoretic Text (MT), raising the possibility that this is an interpolation composed originally in Greek. As with *iair*, however, in most instances this name is left unadapted, as τῷ σαλωμων τῶι *salōmōn* ‘for Solomon’, with dative article at 1Kgs 5:2.

Throughout the Septuagint there is in general no requirement for Hebrew personal names ending in vowels to be morphologically adapted, and non-adapted examples may readily be found for each final vowel, as given in Table 8. This fact demonstrates that morphological non-adaptation was in almost all cases an option open to the translator.

Table 8: Examples of Greek transcriptions of non-adapted personal names in <y> <y> in the LXX.

Hebrew	Final vowel	Greek	Example passage
מְנַשֶּׁה <i>mənaššē</i>	-ê	μανασση <i>manassē</i>	Isa 9:20
תֹּגַרְמָה <i>tōgarmā</i>	-â	θοργαμα <i>t^horgama</i>	Gen 10:3
אֶלְקָנָה <i>ʾelqānā</i>	-â	ελκανα <i>elkana</i>	Exod 6:24
אַבִּיָּה <i>ʾabīyā</i>	-â	αβια <i>abia</i>	1Sam 8:2
רַפָּאִיָּה <i>rəpāyā</i>	-â	ραφαια <i>rap^haia</i>	Neh 3:9
שָׁבָה <i>šəbā</i>	-â	σαβα <i>saba</i>	Gen 10:7
מַסְסָה <i>maššā</i>	-â	μασση <i>massē</i>	Gen 25:14
סִיבָה <i>šībā</i>	-â	σιβα <i>siba</i>	2Sam 9:2
עֲזִיזָה <i>ʿazizā</i>	-â	οζιζα <i>oziza</i>	Ezra 10:27
עֲדְנָה <i>ʿadnā</i>	-â	εδνε <i>edne</i>	Ezra 10:30
קַלִּיטָה <i>qəlītā</i>	-â	καλιταν <i>kalitan</i>	Neh 10:11
לְוִי <i>lēwī</i>	-î	λευι <i>leui</i>	Gen 46:11
מַחֲלִי <i>mahlī</i>	-î	μοολι <i>mooli</i>	Exod 6:19
גַּדְעֹנִי <i>gīdʿōnī</i>	-î	γαδεωνι <i>gadeōni</i>	Num 1:11
אַנָּנִי <i>ʾnānī</i>	-î	ανανι <i>anani</i>	Neh 1:2
אֵלִיָּהוּ <i>ʾēlīyāhū</i>	-û	ηλιου <i>ēliou</i>	1Kgs 17:1
יֹסִיָּהוּ <i>yōʾšīyāhū</i>	-û	ιωσια <i>iōsia</i>	1Chr 3:14

2.1.3 Hebrew Names Ending in Consonants

In line with Thackeray's claim, the great majority of personal names with stems ending in a consonant in Greek are left unadapted. The treatment of אַבְרָהָם *ʾabrāhām* 'Abraham' is typical:¹¹

Table 9: Inflection of ἀβρααμ *abraam* in the LXX.

NOM	ἀβρααμ	<i>abraam</i>	Gen 22:10
ACC	ἀβρααμ	<i>abraam</i>	Gen 17:9
GEN	ἀβρααμ	<i>abraam</i>	Gen 18:17
DAT	ἀβρααμ	<i>abraam</i>	Gen 17:15

There are, nonetheless, some notable exceptions, which can be seen in Table 10 and Table 11, from which the following points may be noted:

- Inflected forms tend to be found in the later books (Kings, Chronicles, Esther, Nehemiah), suggesting that later translators were (a little) more relaxed. Exceptions are ἰησους *iēsous* for יהושע *yəhōšuaʿ*, which is ubiquitous, and πετεφρης *petep^hrēs* for פּוֹטִיפָר *pōtīṭṭār* in Genesis.
- As may be seen in Table 10, a number of exceptions are not originally Hebrew names, but Egyptian (פּוֹטִיפָר *pōtīṭṭār*) or Persian, or at least not Hebrew, as being the names of Persian officials (שֵׁטָר *šētār*, מְמוּקָן *məməqān* and הֵתָךְ *hētāk*). This suggests that different principles were applied to names of this kind.
- All the Hebrew names listed, per Table 11, have final nasals, gutturals or *resh*.

Table 10: Non-Hebrew names ending in consonants in Hebrew, transcribed into Greek in morphologically adapted forms in the LXX.

Hebrew		Greek		Example passage
פּוֹטִיפָר	<i>pōtīṭṭār</i>	πετεφρης	<i>petep^hrēs</i>	Gen 39:1
שֵׁטָר	<i>šētār</i>	σαρσαθαιος	<i>sarsat^haios</i>	Esth 1:14
מְמוּקָן	<i>məməqān</i>	μουχαιος	<i>mouk^haios</i>	Esth 1:21
הֵתָךְ	<i>h^atāk</i>	αχραθαῖος	<i>ak^hrat^haios</i>	Esth 4:9

¹¹ Wevers (1974) lists no inflected variants for these instances.

Table 11: Hebrew names ending in consonants transcribed into Greek in morphologically adapted forms in the LXX.

Hebrew		Greek		Example passage
מְשֻׁלָּם	<i>məšullām</i>	μοσολλαμος	<i>mosollamos</i>	1Chr 3:19
יֹדְהָנָן	<i>iðhānān</i>	ιωαννας	<i>iōanas</i>	1Chr 5:36
יְקַמְיָם	<i>yəqamʿām</i>	ικεμιας	<i>ikemias</i>	1Chr 23:19
יְהוֹדָיָן	<i>yəhōdāyān</i>	ιεχονιας	<i>iek^honias</i>	2Chr 36:8
יֵאִיר	<i>yāʾīr</i>	ιαιρου	<i>iairou</i>	Esth 2:5 (GEN)
יְהוֹשֻׁעַ	<i>yəhōšuaʿ</i>	ιησους	<i>iēsous</i>	(see Table 12)
שֵׁמַע	<i>šemaʿ</i>	σαμιας	<i>samaias</i>	Neh 8:4
יֹדָאֵה	<i>yōʾāh</i>	ιωας	<i>iōas</i>	2Kgs 18:18, 26, 37

Because of the scarcity of the forms, and therefore lack of evidence for paradigms, it is difficult to assign inflectional classes to these examples, although *μοσολλαμος* *mosollamos* and *ιαιρου* *iairou* are good candidates for *o*-stem nouns, while *ικεμιας* *ikemias* and *ιεχονιας* *iek^honias* are good candidates for *a*-stem nouns in *-ίας -ías*. *ιησους* *iēsous* is, however, inflected according to a distinctive and innovative pattern, per Table 12.

Table 12: Inflection of *ιησους* *iēsous* in the LXX.

NOM	ιησους	<i>iēsous</i>	Exod 17:10
ACC	ιησουσ	<i>iēsoun</i>	Num 13:16
GEN	ιησου	<i>iēsou</i>	Exod 17:14
DAT	ιησου	<i>iēsou</i>	Deut 3:21
	ιησοι	<i>iēsoui</i>	Josh 5:2

Nevertheless, the fact that a given name is morphologically adapted even very frequently, does not guarantee that it will be morphologically adapted everywhere, as the counterexamples in Table 13 and Table 14 show. Indeed, in general final <ע> <ʿ> and <ח> <ḥ> in personal names are transcribed with zero, and the name is left uninflected. The effect of this is to have non-inflected nouns ending in a vowel in Greek. Thus *נֹחַ* *nōaḥ* ‘Noah’, e.g. Gen 5:30 and 5:32, is rendered *νωε* *nōe* regardless of case, while *תֵּרַח* *terāḥ* ‘Terah’, e.g. Gen 11:26 and

11:27, comes out consistently as $\theta\alpha\rho\alpha$ t^hara , again regardless of case.¹² Further examples are given in Table 15.¹³

Table 13: Examples of Greek transcriptions of non-adapted personal names in <ϑ> <ϑ> in the LXX.

Hebrew	Greek	Example passage
יְהוֹשֻׁעַ	γῆδοῦσα ^f	ἰησοῦε <i>iēsoue</i> 1Chr 7:27 ¹⁴
שֵׁמַע	שֵׁמַע ^f	σεμαα <i>semaa</i> 1Chr 2:43, 44
שָׁמַע	שָׁמַע ^f	σαμα <i>sama</i> 1Chr 8:13

Table 14: Examples of Greek transcriptions of נְאֻחַי יוֹדָאֵה in the LXX.

Case	Greek	Passage
NOM	ἰωας <i>iōas</i>	2Kgs 18:18, 26, 37
	ἰωα <i>iōa</i>	2Chr 29:12
	ἰωαα <i>iōaa</i>	1Chr 26:4
	ἰωαχ <i>iōakh</i>	1Chr 6:6 (also Isa. 36:3, 11, 22)
ACC	ἰουαχ <i>iouakh</i>	2Chr 34:8
GEN	ἰωαχα <i>iōakha</i>	2Chr 29:12

2.1.4 Principles Governing the Distribution

We may summarize the findings from the above investigation of morphological adaptation of Hebrew names in the Septuagint as follows:

- Hebrew names ending in consonants are mostly non-adapted morphologically in Greek;
- Hebrew names ending in vowels are often, but not always, morphologically adapted in Greek;

¹² For the rendering of Hebrew <נ> <ה> as Greek <ε> see also Krašovec (2010: 96).

¹³ Occasionally final <נ> <ה> is rendered with <χ> <k^h>, e.g. נְאֻחַי *ʾārah* transcribed ορεχ *orekh* (1Chr 7:39). This alternation may be linked to an original phonological alternation between /x/ and /h/ (for which see Steiner 2005 and references there).

¹⁴ Here Brooke, McLean, and Thackeray (1932) list only the MSS N (C8th), 60 (C10th) and 489 (C10th) with morphologically adapted readings. For MS dates see https://en.wikipedia.org/wiki/Septuagint_manuscripts accessed 18/06/2018.

Table 15: Examples of Greek transcriptions of non-adapted personal names in <נ> <ח> and <ע> <ף> in the LXX.

Hebrew		Greek		Example passage
שֶׁלַח	<i>šelah</i>	σαλα	<i>sala</i>	Gen 11:14
זֶרַח	<i>zerah</i>	ζαρα	<i>zara</i>	Gen 46:12
קֹרַע	<i>qōrah</i>	κορε	<i>kore</i>	Exod 6:21
צֹפַח	<i>šōpāh</i>	σωφα	<i>sōp^ha</i>	1Chr 7:35
בָּלָא	<i>bāla^ς</i>	βαλα	<i>bala</i>	Gen 46:21
אֵלִישָׁמָא	<i>ʿēlišāmā^ς</i>	ελισαμα	<i>elisama</i>	Num 1:10
אֲחִירַע	<i>ʿāhīra^ς</i>	αχιρε	<i>ak^hire</i>	Num 2:29
אֵלִישָׁא	<i>ʿēlišā^ς</i>	ελισαιε	<i>elisaie</i>	2Kgs 8:7
הוֹשֶׁעַ	<i>hōšēa^ς</i>	ωσηε	<i>ōsēe</i>	2Kgs 15:30
הוֹשָׁמֹד	<i>hōšāmō^ς</i>	ωσαμω	<i>ōsamō</i>	1Chr 3:18
יְהוֹשֻׁעַ	<i>yāhōšua^ς</i>	ιησουε	<i>iēsoue</i>	1Chr 7:27
אַבִּישׁוּעַ	<i>ʿābīšūa^ς</i>	αβισου	<i>abisou</i>	1Chr 6:35
אֵלִיאָדָא	<i>ʿelyādā^ς</i>	ελιαδα	<i>eliada</i>	2Chr 17:17

It is therefore clear that Thackeray’s original claims are along the right lines, albeit in need of some modification:

- While it is generally the case that personal names ending in consonants in Hebrew “remain unaltered” (2.1.1), this is by no means universally so, since there are a several cases where names ending in the guttural consonants <ע> <ף> and <נ> <ח>, <ר> <ר> or the nasals <מ> <מ> and <ן> <נ> are morphologically adapted.
- Personal names ending in vowels in *-ā* in Hebrew are not restricted to being inflected according to the pattern in *-ίας -iās*, but are frequently inflected according to the non-native Greek pattern in *-ας -as*.
- It is an overstatement to say that the other inflectional classes, especially the *o*-stems, are “almost unrepresented”, although they are clearly in the minority.

The overall picture, then, is that the Septuagint translators had an aversion to the morphological adaptation of Semitic names, except where these names ending in vowels in Hebrew. Even here, morphological adaptation is not complete, so that in most cases names are inflected according to inflectional classes that did not exist for native Greek words. We will discuss the possible reasons for this distribution in the second part of this article, but before we can do this, we need to examine the distribution in other Jewish writers, starting with those composing literary Greek.

2.2 Ezekiel the Tragedian

Ezekiel the tragedian lived and worked in Alexandria likely in the 2nd ct. BC (Jacobson 1983: 11, 13–17), and his play, the *Exagoge* was likely written for both Jews and non-Jews (*ibid.* 8).

So far as the evidence goes, provided in Table 16, his treatment of the inflection of names ending in vowels, like מֹשֶׁה *mōšē* ‘Moses’ parallels that of the Septuagint.

Table 16: Inflection of μωσης *mōsēs* in Ezekiel the tragedian.

NOM	μωσης	<i>mōsēs</i>	l. 224
VOC	μωση	<i>mōsē</i>	ll. 97, 243
ACC	μωσην	<i>mōsēn</i>	l. 30

Also parallel with the Septuagint is his treatment of names ending in consonants, such as ιακωβ *iakōb* and μαριαμ *mariam*:

- (2) (Ezekiel the tragedian, 1–2, text Jacobson)

ἀφ' οὗ δ' ιακωβ [...] | κατήλθ' [...]

ap^h hoû d' iakōb katēlt^h [...]

When PRT Jacob come_down.AOR.3SG

‘And when Jacob... came down...’

(Ezekiel the tragedian, 18, text Jacobson)

μαριαμ δ' ἀδελφή μου κατώπτευεν πέλας

mariam d' adelph^hé mou katópteuen pélas

Mariam PRT sister.NOM.F.SG 1SG.GEN observe.IMP.F.3SG nearby

‘Mariam my sister kept watch close by.’

However, there is evidence that Ezekiel was open to morphologically adapting such names, cf. Thackeray’s claim that this was the prerogative of literary writers. Consider example (3) where three names are given in the genitive, but only one, ιακωβου *iakōbou*, is inflected. This may well be for metrical reasons.¹⁵ Nevertheless, it demonstrates that, Ezekiel felt able to choose, if he so desired,

¹⁵ The play is in iambic trimeters (van der Horst 1984: 354), meaning that the line would not scan with ιακωβ *iakōb*.

to use morphologically adapted next to non-adapted forms. A parallel example is the accusative form *ααρων-α aarōn-a* ‘Aaron-ACC’ at line 116 of the *Exagoge* (cf. Perkins 2010: 455).

- (3) (Ezekiel the tragedian, 104–5, text Jacobson)

ἐγὼ θεὸς	σῶν,	ᾧν
<i>egō t^heōs</i>	<i>sōn,</i>	<i>hōn</i>
1SG God.M.NOM.SG	POSS.2SG.GEN.PL	REL.GEN.PL
λέγεις,	γεννητόρων,	αβρααμ τε και
<i>légeis,</i>	<i>gennētórōn,</i>	<i>abraam te kai</i>
say.PRS.2SG	father.M.GEN.PL	Abraham PRT and
ισαακ και	ιακωβου	τρίτου
<i>isaak kai</i>	<i>iakōbou</i>	<i>trítou</i>
Isaac and	Jacob.GEN.SG	third.GEN.SG

‘I am the God of your fathers, as you say, Abraham, Isaac and Jacob the third.’

2.3 Philo of Alexandria

Philo lived and worked in Alexandria at the end of the 1st ct. BC and the beginning of the 1st ct. AD (Schwartz 2009: 10–11). His works can be divided into two groups: *esoteric* works written for those within Greek-speaking Judaism, and *exoteric* works, written for those from without, including non-Jews (Royse 2009: 33).

In Philo names ending in vowels, like יהודא *yehūdā*, as well as gutturals like *γῆδῶα* *yēhōšua*^f are treated much as they are in the Septuagint, that is, morphologically adapted according to innovative inflectional classes. Compare Table 17 below with Table 3 above, and Table 18 below with Table 12 above.

Table 17: Inflection of *ιουδας ioudas* in Philo.

NOM	ιουδ ^α ς	<i>ioudas</i>	<i>Leg.</i> 1.80
ACC	ιουδ ^{αν}	<i>ioudan</i>	<i>Pla.</i> 1.134
GEN	ιουδ ^α	<i>iouda</i>	<i>Som.</i> 2.44
DAT	ιουδ ^{αι}	<i>ioudai</i>	<i>Leg.</i> 2.96

Table 18: Inflection of ἰησους *iēsous* in Philo.

NOM	ἰησους	<i>iēsous</i>	<i>Ebr.</i> 1.96
ACC	ἰησουσ	<i>iēsoun</i>	<i>Mut.</i> 1.121

מֹשֶׁה *mōšē* ‘Moses’ is inflected slightly differently, however, as Table 19 shows: instead of a genitive in -η -ē we have a genitive in -εως -eōs. Nevertheless, the name still does not follow an existing Greek inflectional pattern.

Table 19: Inflection of μωσσης *mōusēs* in Philo.

NOM	μωσσης	<i>mōusēs</i>	<i>Opi.</i> 1:2
ACC	μωσσην	<i>mōusēn</i>	<i>Leg.</i> 1.40
GEN	μωσσεως	<i>mōuseōs</i>	<i>Leg.</i> 1.76
DAT	μωσσηι	<i>mōusei</i>	<i>Leg.</i> 2.78

Unlike Ezekiel, however, there is little evidence that Philo inflected Hebrew names ending in consonants. Thus Philo has ἀδαμ *adam*, ἰακωβ *iakōb*, ἀβρααμ *abraam* and ἰσαακ *isaak* regardless of case form, as examples (4) through (8) demonstrate. Furthermore, the type of work, whether esoteric or exoteric, seems to have little bearing on whether or not a name is morphologically adapted. Thus ‘Abraham’ is uninflected both in the *De Abrahamo* (e.g. *Abr.* 1.51), an exoteric work, as in *Legum allegoriae*, an esoteric work (examples below).

(4) (Philo *Legum allegoriae* 1.90)

τῷ	ἀδαμ
<i>tōi</i>	<i>adam</i>
DEF.DAT.M.SG	Adam

(5) (Philo *De sacrificiis Abelis et Caini* 1.119)

τοῦ	ἰακωβ
<i>tou</i>	<i>iakōb</i>
DEF.GEN.M.SG	Jacob

(6) (Philo *Legum allegoriae* 3.83)

ὁ	ἀβρααμ
<i>ho</i>	<i>abram</i>
DEF.NOM.M.SG	Abram

- (7) (Philo
- De posteritate Caini*
- 1.173)

ἀπὸ ἀβρααμ
 apò *abraam*
 from Abraham

- (8) (Philo
- Legum allegoriae*
- 3.85)

τῷ ἀβρααμ
 tōi *abraam*
 DEF.DAT.M.SG Abraham

2.4 Flavius Josephus

Unlike the Alexandrians Ezekiel and Philo, Flavius Josephus, who lived and worked in 1st ct. AD, was originally from Palestine, although after the destruction of Jerusalem in 70 AD, he moved Rome (Smallwood and Rajak 2012). His *Antiquitates Judaicae* (*A. J.*) and his *Contra Apionem* (*C. Ap.*) are written explicitly with Greek-speaking non-Jews in mind (see ex. (26) below and his introduction to *C. Ap.*). The *De Bello Judaico* (*B. J.*) is ostensibly a translation into Greek of a work originally written in Aramaic but now lost, for the Jews of Mesopotamia (Smallwood and Rajak 2012). However, this too has Greek-speaking non-Jews in mind (*B. J.* 1.3).

In contrast to what seems to be normal practice in the Septuagint and Jewish writers of literary Greek, Josephus morphologically adapts almost all personal names of Semitic origin, *pace* Thackeray, as may be seen from the paradigm in Table 20.¹⁶

Table 20: Inflection of ἀβρααμ *abraam* in Josephus.

NOM	ἀβραμος	<i>abramos</i>	<i>A. J.</i> 1.151
ACC	ἀβραμον	<i>abramon</i>	<i>A. J.</i> 1.149
GEN	ἀβραμου	<i>abramou</i>	<i>A. J.</i> 1.148
DAT	ἀβραμωι	<i>abramōi</i>	<i>A. J.</i> 1.176

However, when it comes to morphologically adapting names ending in vowels or gutturals in Hebrew, he largely adopts the patterns found in the Septuagint. Compare the following tables with Table 3 and Table 12 above.

¹⁶ Found using BibleWorks v.9 using Niese (1885–1895).

Table 21: Inflection of *ιουδας ioudas* in Josephus.

NOM	ιουδας	<i>ioudas</i>	A. J. 1.304
ACC	ιουδαν	<i>ioudan</i>	A. J. 7.372
GEN	ιουδα	<i>iouda</i>	A. J. 2.116
DAT	ιουδαι	<i>ioudai</i>	A. J. 2.178

Table 22: Inflection of *ιησους iēsous* in Josephus.

NOM	ιησους	<i>iēsous</i>	A. J. 3.308
ACC	ιησουν	<i>iēsoun</i>	A. J. 3.49
GEN	ιησου	<i>iēsou</i>	A. J. 7.68
DAT	ιησου	<i>iēsou</i>	A. J. 3.52

A notable exception to this is ‘Moses’, which inflects with a genitive in *-εως -eōs* as in Philo:

Table 23: Inflection of *μωσης mōsēs* in Josephus.

NOM	μωσης	<i>mōsēs</i>	A. J. 17.159
GEN	μωσεως	<i>mōseōs</i>	A. J. 2.1
DAT	μωσηι	<i>mōsēi</i>	C. Ap. 1.299

Josephus is very consistent, with only a few cases where he does not morphologically adapt. The following examples can be given:¹⁷

(9) (Jos. B. J. 5.380)

αβρααμ¹⁸

abraam

Abraham

¹⁷ These examples were found using BibleWorks v.9 using Niese (1885–1895).

¹⁸ It should be noted that there are variant readings, as reported by Niese (1894: 486–487). Specifically L and C have ἀβράαμοσ *abrāamos* and ἀβρά-|αμοσ *habrā-|amos* respectively. However, the two manuscripts generally considered to be the best, namely P and A (cf. Pearse 2002a), do not morphologically adapt.

- (10) (Jos. B. J. 5.387)
 σενναχηρειμ¹⁹
sennak^hēreim
 Sennacherib
- (11) (x2, Jos. A. J. 1.180, 181)²⁰
 μελχισεδεκ
melk^hisedek
 Melchizedek
- (12) (Jos. A. J. 9.136, 138, 154: the god; Jos. C. Ap. 1.156: a king)
 βααλ
baal
- (13) (Jos. C. Ap. 1.250, 265, 286)
 οσαρσηφ/οσαρσιφ
osarsēp^h/osarsip^h
- (14) (Jos. C. Ap. 1.290)
 πετερσηφ
petersēp^h

On occasion he appears to give Greek-like terminations, but without inflecting for case, as in the following examples of Egyptian names, exemplified in (15) through (17). These examples are not inflected, since the endings are not valid genitive terminations in Greek, and should therefore be regarded as morphologically non-adapted.

- (15) (Jos. C. Ap. 1.95)
 τοῦ μηφραμουθωσις
toû mēp^hramout^hōsis
 DEF.M.GEN.SG Mephramouthosis
- (16) (Jos. C. Ap. 1.96)
 τοῦ θμωσις
toû t^hmōsis
 DEF.M.GEN.SG Thmosis

¹⁹ See previous note. At 5.387 C has σενναχήρειμοσ *sennak^hēreimos*.

²⁰ According to Niese the MSS S, P and L have μελχισεδέκησ *melk^hisedékēs* at both points. However, these manuscripts are inferior to R and O, which also have this passage, and S and P, at least, ‘when unsupported are seldom trustworthy’ (Pearse 2002b).

(17) (Jos. C. Ap. 1.96)

τοῦ ἀμενωφίς
toû amenōp^his
 DEF.M.GEN.SG Amenophis

It is probably not possible to be categorical about the reasons for the lack of adaptation for each instance in which Josephus chooses not to adapt personal names: given the sheer number of personal names in Josephus' works, it is perhaps not surprising that the manuscript tradition might vary at this kind of level. We will address possible motivation in regard to examples (9) and (10) in part two. In addition, it is worth noting that examples (15) through (17) are in sections that do not give Josephus' original contribution, but which purport to relay the Egyptian historian Manetho's words. These can be contrasted with the following example, where Josephus quotes Manetho in *oratio obliqua*:

(18) (Jos. C. Ap. 1.88)

τὸν δὲ μισφραγμουθωσεως υἱὸν θούμμωσιν ἐπιχειρῆσαι
tòn dè misp^hragmout^hōseōs huiōn t^hoúmmōsin epik^heirēsai
 DEF.ACC.M.SG PRT Misphragmuthosis son.ACC.SG Thummosis attempt.INF
 μὲν αὐτοὺς διὰ πολιορκίας ἐλεῖν
mèn autoùs dià poliorkias heleîn
 PRT 3PL.ACC through siege.GEN.SG take.INF
 'but that the son of Misphragmuthosis, Thummosis, tried to take [the
 shepherds. . .] through siege' (Jos. C. Ap. 1.88)

The alternation between direct quotation, where the names are not inflected, and indirect quotation, where the names are inflected, may be significant, since Josephus claims to pay very close attention to the actual words used by Manetho:

(19) (Jos. C. Ap. 1.74)

οὗτος δὲ τοίνυν ὁ μανεθως ἐν τῇ δευτέρᾳ τῶν αἰγυπτιακῶν ταῦτα περὶ
 ἡμῶν γράφει. παραθήσομαι δὲ τὴν λέξιν αὐτοῦ καθάπερ αὐτὸν ἐκείνων
 παραγαγῶν μάρτυρα·
 'Indeed this Manetho, in the second book of his Aegyptiaca, writes as fol-
 lows in our regard. I will give his phrasing as though presenting the man
 himself as a witness.'

However, we should be careful not to lay too much store by any one example, since Josephus morphologically adapts e.g. οσαρσηφ/οσαρσιφ *osarsēp^h/osarsip^h*

to οσαρσηφον *osarsēp^hon* at (20), a passage where he purports to be quoting Manetho directly.²¹

(20) (Jos. C. Ap. 1.237–38)

κᾶπειτα κατὰ λέξιν οὕτως γέγραφεν [...]

kápeita katà léxin hóútōs gégrap^hen [...]

and later by word.ACC.F.SG thus write.PRF.3SG

οσαρσηφον ἐστήσαντο [...]

osarsēp^hon estésanto [...]

Osarseph.ACC.M.SG appoint.AOR.IND.ACT.3PL

‘And later [Manetho] has written word for word as follows... They appointed Osarseph...’

Nevertheless, the overall picture remains clear: Josephus morphologically adapts personal names to a much greater extent than Philo or Ezekiel. However, the Semitic personal names in question in these sources were almost all historical figures at the time of writing. To understand better the processes involved, it is important to understand how contemporary Semitic personal names were treated in the same period. For this we must turn to the papyri and epigraphic sources.

2.5 Epigraphic and Documentary Sources

Josephus is then unusual among Jewish literary writers writing in Greek in systematically morphologically adapting Semitic names. However, if the papyri and epigraphic material are considered, his treatment of names is not so distinctive. An examination of the indices in Tcherikover and Fuks (1957) and Tcherikover, Fuks and Stern (1964) demonstrates that by far the majority of Semitic names in papyri throughout the Hellenistic and Roman periods in both Palestine and Egypt are morphologically adapted (for similar findings see Perkins 2010: 454–55). Take, for example, the following list of names from 259 BC in Palestine given at (21) (square brackets from the printed text, representing parentheses in the original document; points are points in the original document).

²¹ Parallel are Jos. C. Ap. 240 and 241. On the authenticity of these sections purportedly by Manetho, see Bar-Kochva (2010: 247) and references there.

(21) (P.Iand.Zen. 52, Tcherikover and Fuks 1957: 125)

.ιπποστρατος	. <i>ippostratos</i>
.αυαηλος	. <i>auaēlos</i>
.παναβηλος	. <i>panabelos</i>
.ζαβαλνος	. <i>zabalnos</i>
.φιλων	. <i>p^hilōn</i>
.μενων	. <i>menōn</i>
.ζηνων	. <i>zēnōn</i>
.οσαιος	. <i>osaios</i>
[[ανναιος]]	[[<i>annaios</i>]]
.σανναιος	. <i>sannaios</i>
.κουσνατανος	. <i>kousnatanos</i>
νικων	. <i>nikōn</i>
πρ.[. <i>pr.</i> [

While this name list certainly contains wholly Greek names, such as ιπποστρατος *ippostratos*, there are also some notable morphologically adapted Semitic names here, including αυαηλος *auaēlos* (לאי w^ʿl or לגי w^ʿl), παναβηλος *panabelos*, i.e. an amalgamation of Pan and Baʿal, ζαβαλνος *zabalnos*, cf. Heb. זבלון *zblwn* and Septuagint ζαβουλων *zaboulōn* (cf. Tcherikover and Fuks 1957: 125).

The same phenomenon can be seen in Egypt, as in the following example from the Zenon archive:

(22) (P.Cair.Zen. III 59377 = C.Pap.Jud. I 13; text and trans. Tcherikover and Fuks 1957: 140–141)

υπομνημα	ζηνωνι	παρα	αλεξανδρου	και
<i>upomnēma</i>	<i>zēnōni</i>	<i>para</i>	<i>alexandrou</i>	<i>kai</i>
memorandum.NOM.SG	Zenon.DAT.SG	from	Alexander.GEN.SG	and
ισμαηλου				
<i>ismaēlou</i>				
Ishmael.GEN.SG				
'Memorandum to Zenon from Alexander and Ismaelos'				

As (21), this example too is likely of an early date, associated as it is with the reign of Philadelphus (Tcherikover and Fuks 1957: 140), that is, to the period from 283 to 246 BC (Ellis 2003: 68). In it we have the name ισμαηλος *ismaēlos*, an adapted form of לִשְׁמַאֵל *lišmāʿēl*, where the Septuagint has the non-adapted ισμαηλ *ismaēl* (Tcherikover and Fuks 1957: 141). This tendency is repeated across Egypt. Thus all the names listed in Tcherikover and Fuks as being on ostraca

from Upper Egypt are potentially morphologically adapted (Tcherikover and Fuks 1957: 194–226, esp. 200–202).

Names ending in vowels in Hebrew are also morphologically adapted, as we might expect given the treatment of consonants. However, they are adapted in the same way as we see in the Biblical material and the literary writers. This is to say that they are adapted according to an innovative pattern from a Greek perspective (see Table 24).

Table 24: Inflection of *ιουδας ioudas* in papyri²².

			Document	Date	Provenance
NOM	ιουδας	<i>ioudas</i>	BGU 13 2319	126 AD	Arsinoites, Egypt
ACC	ιουδαν	<i>ioudan</i>	P.Babatha 17	128 AD	Maoza, Jordan
GEN	ιουδα	<i>iouda</i>	P.Babatha 14	125 AD	Maoza, Jordan
DAT	ιουδαι	<i>ioudai</i>	P.Masada 741	67–74 AD	Masada, Palestine

There are exceptions, to the policy of morphological adaptation, but these are few and far between. One such is the following list of names from a fragment of a property declaration from Boubastos (Fayûm), dated 23rd January 240 BC:

(23) (W.Chr. 198 = C.Pap.Jud I 36; text and trans. Tcherikover and Fuks 1957: 181–182)

[...]	γεωργοι	μισθωι	χαζαρος	ραγεσοβααλ	ιαβ
[...]	<i>geōrgoi</i>	<i>mist^hōi</i>	<i>k^hazaros</i>	<i>ragesobaal</i>	<i>ieab</i>
farmer.NOM.M.PL	hire.DAT.SG	Khazaros.NOM.M.SG	Ragesobaal	ieab	
κρατερος	σιταλκες	νατανβααλ	ποιμην	ποταμων	
<i>krateros</i>	<i>sitalkes</i>	<i>natanbaal</i>	<i>poimēn</i>	<i>potamōn</i>	
Krateros.NOM.M.SG	Sitalkes	Natanbaal	shepherd.NOM.M.SG	Potamon	
βουκολος	ωρος	(γίνονται)	σώ(ματα)	ιε.	
<i>boukolos</i>	<i>Hōros</i> ,	(<i>gínontai</i>)	<i>sō(mata)</i>	15	
cow-herd.NOM.M.SG	Horus.NOM.M.SG	become.PRS.3PL	body.NOM.N.PL		
'... hired field-hands Khazaros, Ragesobaal, Ieab, Krateros, Sitalkes, Nathanbaal, shepherd Potamon, cowherd Horos, 15 persons.'					

In this example are listed the clearly Semitic names *ραγεσοβααλ ragesobaal*, *ιαβ ieab* and *νατανβααλ natanbaal* in non-adapted forms. Mitteis and Wilcken

²² Texts and information from <http://papyri.info/> (accessed 31/05/2018).

(1912: 231, following p.c. with Wellhausen) note that these names are likely to be Nabataean or Idumaeen. Alongside these are other names which look Greek and therefore inflected, such as κρατερος *krateros* and ποταμων *potamōn*. The likely adapted name χαζαρος *k^hazaros* in example (23) is probably non-Greek (Tcherikover and Fuks 1957: 181–182).

Comparable to the non-adapted examples above are the examples given below, the first from a name list from Upper Egypt dating to the 2nd ct. BC, the second in a document from Soknopaiu Nesos (Arsinoites, Egypt) from the 2nd ct. AD:

(24) (BGU 6 1474 = C.Pap.Jud. I 116, Tcherikover and Fuks 1957: 224, l. 3)
.ναταν .*natan*

(25) (SPP 22 178 R = C.Pap.Jud III 464, Tcherikover, Fuks and Stern 1964: 24, l. 24)
.αζακιελ .*azakiel*

A strong preference for morphologically adapted names can be seen from an examination of Semitic names in Jordanian epigraphic inscriptions in Al-Qudrah (2001). Of the list of over 200 Semitic male names given at pp. 202–203, only twelve are given in morphologically non-adapted form: αβρααμ *abraam*, βενιαμιν *beniamin*, γαβριηλ *gabriel*, εμμανουηλ *emmanouēl*, ιακωβ *iakōb*, ιαφιθ *iaph^hit^h*, ισακ *isak*, ιωβ *iōb*, ιωσηφ *iōsēp^h*, λωτ *lōt*, ραφαηλ *rap^haēl* and σοβαιβ *sobaib*. Al-Qudrah (2001: 37) notes that αδαμιος *adamios* is also found in the form αδαμ *adam* in one inscription. It is thus possible that there are more morphologically non-adapted forms. However, the fact that Al-Qudrah gives most names in morphologically adapted forms supports the popularity of this treatment.

Williams (2007 n. 66) observes that non-adapted Hebrew names are to be found for the most part at the start of the Hellenistic period before the immigrant Jewish community had assimilated, and then again in late antiquity (4th ct. AD and on; see also Williams 2007 n. 67; 2000: 316–18). The preference for morphologically adapted names in the later Hellenistic and Roman periods can be seen from an examination of the Greek Lexicon of Personal Names (Fraser and Matthews 2015).²³ Table 25, which gives the results of a search for a set of Semitic names up to the 4th ct. AD, is instructive.²⁴

²³ Semitic names are few and far between. This is no doubt due, of course, to the fact that the volumes relating to Palestine and Syria have yet to be published.

²⁴ Note that there are no entries for μωσς *mōsēs* before the 5th ct. AD.

Table 25: Adaptation and non-adaptation of Semitic names in Greek up to 4th ct. AD.

Potentially adapted	Frequency	Non-adapted	Frequency
αβρααμιος <i>abraamios</i>	2	αβρααμ <i>abraam</i>	1
ιακωβος <i>iakōbos</i>	0	ιακωβ <i>iakōb</i>	1
ιωαννης <i>iōannēs</i>	10	ιωαναν <i>iōanan</i>	0
ιωσηπος <i>iōsēpos</i>	6	ιωσηφ <i>iōsēp^h</i>	3
μαρια <i>maria</i>	26	μαριαμ <i>mariam</i>	0
TOTAL	44		5
%	89.8		10.2

On the face of it, nearly 90% of names in this period are potentially morphologically adapted, while 10% are non-adapted. It should be cautioned, however, that two names, αβρααμιος *abraamios* / αβρααμ *abraam* and ιακωβος *iakōbos* / ιακωβ *iakōb* are not attested frequently enough for the results to be particularly useful in and of themselves, and another, ιωσηπος *iōsēpos* / ιωσηφ *iōsēp^h*, is marginal. Nevertheless, taken together, the results certainly point in the direction of preference for morphologically adapted names, with only one name, ιακωβ *iakōb* / ιωσηπος *iōsēpos*, showing more instances of non-adaptation than adaptation. Indeed, two names, ιωαννης *iōannēs* / ιωαναν *iōanan* have no examples of non-adaptation. In sum, then, we may say that the epigraphic material evidences the same tendency as the documentary sources for preferring morphologically adapted names as opposed to non-adapted names.

The fact that morphologically adapting personal names is the norm in epigraphic and documentary material suggests that it was also the norm for most Jews and other bearers of Semitic names to have, or at least to use in certain contexts, morphologically adapted names in Greek. Furthermore, it shows that if the translators of the Septuagint had wanted to use morphologically adapted names, it would have been perfectly possible for them to have done so (cf. Perkins 2010: 454). Seen in this light, Josephus' practice of morphologically adapting Hebrew names was in fact in line with day-to-day practice among such people operating in the Roman period. This in turn makes the practice of Jewish literary writers the more unusual in their systematic non-adaptation of these names. It is to this question that I turn in the next section.

2.6 Summary

Based on the findings of the first part of this study, we can identify three strategies in the morphological adaptation of personal names: non-adaptation, partial adaptation and full adaptation:

- Non-adaptation: The final consonant is not permitted according to Greek rules, and the form is not inflected, e.g. אַבְרָהָם ^ʔ*abrāhām* ‘Abraham’ > NOM ὁ ἀβραάμ *ho abraam*; GEN τοῦ ἀβραάμ *toû abraam*.
- Partial adaptation: The form is inflected, but according to an innovative inflectional pattern with no counterpart for native Greek words, e.g. many names ending in <ה> <h> and <ע> <ʿ> such as מֹשֶׁה *mōšē* ‘Moses’ > NOM ὁ μωυσησ *ho mōusēs*; GEN τοῦ μωυσησ *toû mōusē*.
- Full adaptation: The name is inflected according to a pre-existing Greek paradigm, e.g. אַבְרָהָם ^ʔ*abrāhām* ‘Abraham’ > NOM ὁ ἀβραμὸς *ho abramos*; GEN τοῦ ἀβραμῶν *toû abramou*.

The Biblical material and the works of the Alexandrians Philo and Ezekiel are characterised by non-adaptation, although for names ending in vowels, and in some instances gutturals and other consonants, all Jewish writings adopt the strategy of partial adaptation. Full adaptation is characteristic of Josephus, as distinct from writers of Jewish literary Greek based in Alexandria, as well as most documentary and epigraphic sources. From this analysis an important question follows, namely why should the Septuagint and Alexandrian literary writers apart from Josephus be so conservative in the degree to which they morphologically adapt personal names, as compared with the documentary and epigraphic sources, as well as Josephus? It is to this question that I turn in the second part of this study.

3 The Socio-Linguistic Significance of the Morphological Treatment of Non-Greek Personal Names: Code-Switching as a Marker of Cultural Identity

Despite the loss of their ancestral language, the Jewish community of Alexandria maintained a strong national identity, albeit peaceably (Schwartz 2009: 18). However, it seems unlikely that the arrival of the Jewish community in Alexandria combined with the loss of their ancestral language(s) would have had no linguistic

effect in the new state of affairs. I wish to suggest that a by-product of the narrative transposition of the nexus of speaker/writer ~ hearers/readers into a Hebrew-speaking world by means of the non-morphological adaptation of proper names was the generation of a linguistic signature for the community as a whole,²⁵ a signature that set both apart from the rest of the Greek-speaking community.²⁶

The behavior we are considering, namely the use of Hebrew morphology for personal names in documents otherwise written in Greek, has parallels in the treatment of Greek personal names in Latin. Adams (2003: 369) identifies the use of Greek inflectional endings in personal names in Latin texts as a type of code-switching. The difference in our case is that the use of Hebrew morpho-syntactic rules entails that names would terminate with zero in all instances, as opposed to simply having different terminations from the usual Latin ones. Nevertheless, the principle is the same. Seen in this light, we can recast our question as the following: why should the Septuagint translators and the Alexandrian writers code-switch in their rendering of personal names, while Josephus and writers of documentary and epigraphic sources choose not to?

The question can be seen in the framework of identity: a personal name, by definition, is more directly tied to an individual than any other word class. The changing of the form of that name according to the rules of a foreign language's morphology is, depending on how that individual construes their own identity, likely to result in a perceived diminishing of identity on the part of the individual concerned, or their community (cf. Adams 2003: 369). Those instances where in the epigraphic and documentary materials personal names are code-switched can be seen as straightforward examples of this process in action, that is, of Jewish identity being preserved by means of non-adaptation of the personal names in question. By the same token, those cases where personal names *are* adapted can be seen as instances where the language user seeks to bridge the gap between his own background and culture, and the Greco-Roman culture of the majority.

In the Septuagint and the writings of Philo and Ezekiel, the referents of personal names were historical figures at the time of writing. Accordingly, the issue in our case is not how an *individual* construes their own identity, but how a *community* construes the identity of a group of figures who are significant for

25 Cf. proper names serving as “culture-specific items or cultural markers” in modern translations (Mussche and Willems 2010: 474–5; Nord 2003: 184).

26 For the expression of Greek identity through the morphology of female personal names in Latin, including in Jewish communities, and its consequent effect on the structure of the language, see Adams (2003: 374, 473–92).

that community's identity. Language nevertheless has an important role to play here too (cf. Swain 1996: 17). The authors and translators in question will have decided how to render personal names in the light of the audience(s) for whom they were writing (cf. Perkins 2010: 456). Josephus even states, in the quotations given at (26) and (27), exactly for whom he is writing, and what consequences this has for his treatment of the morphology of personal names: he was writing for a Greco-Roman audience, and for this reason morphologically adapts personal names (cf. Jos. *B. J.* 1.3 for a similar intention expressed in the *Jewish War*).

(26) (Jos. *A. J.* 1.5)

ταύτην δὲ τὴν ἐνεστῶσαν ἐγκεχέρισμαι πραγματεῖαν νομίζων ἅπασιν φανεῖσθαι τοῖς ἔλλησιν ἀξίαν σπουδῆς· μέλλει γὰρ περιέξειν ἅπασαν τὴν παρ' ἡμῖν ἀρχαιολογίαν καὶ διάταξιν τοῦ πολιτεύματος ἐκ τῶν ἑβραϊκῶν μεθρημηνευμένην γραμμάτων.

'I have embarked upon the present treatise in the opinion that it will seem to all Greeks worthy of their attention; for it will contain all our history and arrangement of the constitution, translated from the Hebrew Scriptures.'

(27) (Jos. *A. J.* 1.129)

τὰ γὰρ ὀνόματα διὰ τὸ τῆς γραφῆς εὐπρεπὲς ἠλλήνισται [*hēllénistai* make_Greek.PRF.3SG 'have been made Greek'] πρὸς ἡδονὴν τῶν ἐντευξομένων· οὐ γὰρ ἐπιχώριος ἡμῖν ὁ τοιοῦτος αὐτῶν τύπος, ἀλλ' ἔν τε αὐτῶν σχῆμα καὶ τελευτὴ μία, νωχός [*nōk'ós* Noah.NOM.M.SG] τέ τοι νωε [*Nōe* Noah] καλεῖται καὶ τοῦτον τὸν τύπον ἐπὶ παντὸς τηρεῖ σχήματος.

'For the names have been hellenized for the sake of the beauty of the narrative with a view toward the pleasure of those who come upon it. For such a form of their name is not the one used in our country, but their form is one and their ending is one. Thus Nochos is called Noe, and preserves this form in every case.' (trans. Feldman 2000)

There is no parallel statement on the part of the Septuagint translators or the Alexandrians of which I am aware. However, as previously noted, Williams (2007 n. 66) observes that undeclined, that is, morphologically non-adapted, names are more common earlier in the Hellenistic period, whereas by the end of the 3rd ct. BC names of Hebrew and Semitic origin had to a significant degree been abandoned in favour of wholly Greek names (Williams 2000: 318; Tcherikover and Fuks 1957: 27–30). We can therefore identify at least two stages:

- An initial stage, when the Jewish community in Egypt were less likely to morphologically adapt their names to Greek conventions, and instead code-switched in order to preserve their Jewish identity. Since the Pentateuch was translated in this period, the code-switching in these translations can be seen as part of the same phenomenon. The fact that Manetho was also working in this period, and was also likely writing for non-Greeks (Dillery 1999: 94), also has the potential to explain his code-switching.
- A later stage, starting at around the end of the 3rd ct. BC, during which the later Septuagint translators, along with Philo and Ezekiel were working. During this stage the Jewish community as a whole either morphologically adapted their names, or avoided the use of Semitic names. The decision to code-switch would therefore have been marked even within the Jewish community.

Hellenized Jews comprised a critically important section of Philo and Ezekiel's target audience (Jacobson 1983: 8, 13–17; Royse 2009: 33–34), as indeed they did for the later Septuagint translators. It is therefore reasonable to suppose that their reason for code-switching in the rendering of personal names was that their audience were used to using, if not the whole Bible, then at least the first five books, in Greek, where personal names are code-switched. Accordingly, these translators and authors would have sought to maintain the distinction of their community's identity, vis-à-vis that of the majority (Greek and Egyptian) cultures surrounding them, by means of code-switching the names of figures in a document which was central to the identity of that community, namely the Pentateuch.²⁷

We can say, then, that the Septuagint translators, Philo and Ezekiel, in using code-switched forms, deliberately foreignize the characters named, while Josephus, in choosing to use morphologically adapted personal names, deliberately locates the referents of those personal names in a Greek-speaking environment (cf. Nord 2003: 184). Josephus therefore consciously strives to de-foreignize, that is, to bring his characters into a Greco-Roman world. Nord (2003: 185) sees such treatment of names as part of a broader narrative strategy, whereby “a story set in the receiver's own cultural world allows for identification, whereas a story set in a strange, possibly exotic world may induce the reader to stay ‘at a distance’.” This can be seen played out in modern translations. For example, in Arabic translations of Harry Potter, the transliteration of names has been found to “have a considerable foreignizing effect on the target text” (Mussche and Willems 2010: 481).

²⁷ For other possibilities, see Perkins (2010).

In Nord's terms, then, we can say that Josephus not only sets his characters in the receiver's own cultural world, but the narrative as a whole: Josephus translates the cultural environment of the Bible into a Greco-Roman setting. Conversely, writers who code-switch may be said to create a parallel narrative world, to be distinguished from the Greco-Roman one that people were inhabiting in their daily lives, to which readers, whether Jew or non-Jew, are invited. In the terms of Transportation Theory (Green and Brock 2000: 701; Gerrig and Prince 1991: 10–11),²⁸ we can interpret these authors' approach as a strategy to bring the reader into a Biblical narrative space. It is of interest in this regard that Philo does not morphologically adapt even in works written for the benefit of a gentile audience. Personal names, then, are used in the writings of the antique Greek-speaking Jewish community in order to "promote, construct and promulgate their cultural identities" (Perkins 2009: 11)²⁹ by creating narrative worlds with the potential to serve the broader social and cultural agendas of the writers vis-à-vis their hearers/readers.

There is in fact, a tantalising instance in which the non-adaptation of personal names functions in exactly this way. While the names for Abraham and Sennacherib, as with almost all other personal names in Josephus, are morphologically adapted as ἀβραμς *abramos* and σεναχειριμος *senak^heirimos* (e.g. Jos. B. J. 4.531, Jos. A. J. 10.1) in one key passage, quoted in direct speech, these names are left in their non-adapted forms. The relevant sentences are given at (28) and (29).

- (28) (Jos. B. J. 5.380)
- | | | | |
|----------------|---------------------|---------------|-------------------|
| τί | οὖν ὁ | ταύτης | ἀνὴρ |
| <i>tí</i> | <i>oûn ho</i> | <i>taútēs</i> | <i>anēr</i> |
| Q.NOM.N.SG | PRT DEF.NOM.M.SG | DEM.F.GEN.SG | man.NOM.M.SG |
| αβρααμ, | προπάτωρ | δὲ | ἡμέτερος; |
| <i>abraam,</i> | <i>propátōr</i> | <i>dè</i> | <i>hēmēteros;</i> |
| Abraham | forefather.NOM.M.SG | PRT | POSS.1PL.M.NOM.SG |
- 'What then did the husband of this woman, Abraham, our forefather, do?'

²⁸ According to this theory, "[s]omeone ('the traveler') is transported, by some means of transportation, as a result of performing certain actions. The traveler goes some distance from his or her world of origin, which makes some aspects of the world of origin inaccessible. The traveler returns to the world of origin, somewhat changed by the journey." (Gerrig and Prince 1991: 10–11, as quoted in Green and Brock 2000: 701).

²⁹ Perkins (2009: 11) is speaking about prose fiction, but the analysis seems appropriate here. Perkins cites Thomas (2003).

(29) (Jos. B. J. 5.387)

βασιλεὺς	ἄσσυρίων	σενναχηρειμ [. . .]	ἔπεσεν;
<i>basileùs</i>	<i>assuriōn</i>	<i>sennak^hēreim</i>	<i>épesen;</i>
king.NOM.M.SG	Assyrian.GEN.PL	Sennacherib	fall.AOR.IND.ACT

‘Did the king of the Assyrians, Sennacherib. . . fall?’

Significantly, in this passage, Josephus presents himself addressing fellow Jews. If the text can be trusted and one can therefore see this as an example of practice in Jewish Greek speech, it provides evidence that Jews may have identified themselves to one another by their use of morphologically non-adapted forms of the personal names of historic figures.³⁰

Finally, it is worth noting that in all the works, literary, documentary and epigraphic, personal names ending in a vowel in Hebrew are morphologically adapted into a distinctive non-native Greek paradigm. This suggests that there were limits to integration even for the communities and individuals most eager to align their identities with that of their Greek and Roman fellows.

4 Conclusion

We first sought to survey the distribution of morphologically adapted personal names versus non-adapted forms in Jewish Greek during the Hellenistic and Roman periods. While it has traditionally been held that Jewish writers of literary Greek always morphologically adapt personal names of Semitic origin, the true picture is rather more complicated. The Septuagint, as well as literary Greek writers such as Philo and Ezekiel, use for the most part morphologically non-adapted forms. By contrast, Josephus morphologically adapts in all but a handful of cases, while the documentary and epigraphic sources prefer adapted forms until late antiquity.

I argued that code-switching in personal names is deliberate and serves to locate the referents in a non-Greek, i.e. Semitic, linguistic world. In turn, the deliberate choice on the part of Josephus to use morphologically adapted names may be said to locate the referents in question in a Greek linguistic world. The same applies, *mutatis mutandis*, to those writers of epigraphic and documentary material who morphologically adapt their names. Both strategies

30 There is a parallel for this variable treatment of a proper name according to the speaker-audience relationship. Elliott (1977: 463) argues that in Luke–Acts, the word for Jerusalem is spelled differently according to who is speaking and where the action is taking place.

can be seen as part of a broader strategy of constructing particular Jewish identities in the Greco-Roman world.

Surprisingly the question of the morphology of personal names has hardly figured in discussions of the question of Semitisms in Jewish Greek writers and the question of the existence of 'Jewish Greek' that it conjures.³¹ Yet if the non-morphological adaptation of personal names in Greek is seen as a type of code-switching, it seems reasonable that these Semitisms might constitute a *bona fide* element of distinctively Jewish Greek language in the Hellenistic and Roman periods.

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Abbreviations

The glosses follow Leipzig Glossing rules.³²

<i>Abr.</i>	<i>De Abrahamo</i>
<i>A. J.</i>	<i>Antiquitates Judaicae (Jewish Antiquities)</i>
AOR	aorist
<i>B. J.</i>	<i>Bellum Judaicum (Jewish War)</i>
<i>C. Ap.</i>	<i>Contra Apionem (Against Apion)</i>

³¹ For references and some discussion, see Jacobson (1983: 191). Horrocks (2010: 106–108, 147–148) does not mention personal names in his discussion of substrate features relating to the Septuagint and New Testament. Jacobson (1983: 42–43) does not mention the issue in his discussion of possible Semitisms in Ezekiel's diction. Kamesar (2009) does not mention the morphology of proper names in Philo's texts.

³² <https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf>

Chr	<i>Chronicles</i>
Contempl.	<i>De vita contemptiva (On the Contemplative Life)</i>
Diod. Sic.	Diodorus Siculus
Ebr.	<i>De ebriate (On drunkenness)</i>
Esth	<i>Esther</i>
Exod	<i>Exodus</i>
Gen	<i>Genesis</i>
Hag	<i>Haggai</i>
Hdt.	Herodotus
Heb.	Hebrew
Isa	<i>Isaiah</i>
Josh	<i>Joshua</i>
Jos.	Josephus
Kgs	<i>Kings</i>
Leg.	<i>Legum allegoriarum</i>
LXX	Septuagint
MS	manuscript
MSS	manuscripts
MT	Masoretic Text
Mul. virt.	<i>Mulierum virtutes (The Virtues of Women)</i>
Mut.	<i>De mutatione nominum (On the Change of Names)</i>
Neh	<i>Nehemiah</i>
Num	<i>Numbers</i>
Pla.	<i>De plantatione (On Noah's Work as a Planter)</i>
Plu.	Plutarch
PRT	particle
Sam	<i>Samuel</i>
Som.	<i>De somniis (On Dreams)</i>

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Sonja Dahlgren and Martti Leiwo

Confusion of Mood or Phoneme? The Impact of L1 Phonology on Verb Semantics

Abstract: The Greek texts from Egypt show extensive nonstandard vowel production, which could cause inadvertent confusion in e.g. Greek mood or case endings. This has previously been seen as evidence of a bad command of Greek, either because of internal phonological change or due to imperfect knowledge of Greek. On closer look numerous similarities to the nonstandard vowel production in Greek texts can also be found in native (Coptic) Egyptian texts. Greek loanwords in Coptic are treated according to Coptic phonological rules and show nonstandard vowel usage of the same nature that is present in Greek in some sociolects. The nonstandard spellings present evidence of underdifferentiation of Greek phonemes as well as transfer elements of the Egyptian prosodic system. The vowel usage is examined within the framework of L2WS (second language writing systems) studies, and evidence for the coarticulatory effect of the consonants on the vowels' quality is drawn from the field of articulatory phonetics.

Keywords: Ancient Greek phonology, Ancient Greek modality, Postclassical Greek, Coptic phonology, Language contact

1 Introduction

Egypt in the Roman period was a multilingual society with various levels of language contact. In addition to what had already been brought to Egyptian by the Persians, the Hellenistic rulers had made Greek the official language of Egypt, and it remained so even after the Romans took charge. For the Romans, Greek was a prestige language in Egypt (Adams 2003: 10–11) and therefore they saw no need to change the working language policy. Egyptian scribes were trained in Greek but the texts show a vast variety of phonological and morphosyntactic variation. It is evident that there were scribes with various levels of expertise, some completely bilingual, others with only the most basic ability to read and write the Greek alphabet, and copy from a model (for studies of the level of bilingualism in Egypt, see e.g. Vierros 2012: 33). The language use of the less educated scribes and private writers offers us a glimpse into the phonological situation of Greek usage in Egypt. There are various aspects to consider. Thus far, the language-internal phonological development has been more or less the

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only linguistic reason considered, in addition to imperfect learning of Greek by the Egyptian scribes (Bagnall 2007: 21). Some nonstandard spellings have been attributed to the influence of Coptic (Egyptian) (cf. Gignac 1976: 55; Horrocks 2010: 112)¹ but for instance the numerous instances of vowel raisings have been connected almost conclusively to Greek *iotacism* (see further discussion in Dahlgren 2017). In this paper, we discuss the phonetic outcome of Greek vowel underdifferentiation (/y, u/) and unstressed vowels' reduction (/a, e, o/), and how these relate to the understanding of L2 Greek.

The raising of Greek front vowels caused the grapheme-phoneme correspondence to become irregular, differing from the close match in Classical Greek. This is a particular concern in Modern Greek in the feedback direction, i.e. from spelling to orthography (Protopapas & Vlahou 2009: 991). According to Horrocks (2010: 167–168), the situation of the 2nd to 3rd century Greek in Egypt was the same as in Modern Greek apart from the final raising of /y/ to [i].

Except for reasons caused by language internal development, nonstandard variation in the orthography has been regarded to result from lack of education and poor mastering of Greek (see e.g. Bagnall 2007: 16–17, 21 on the Narmouthis Greek collection). What we propose as one of the reasons behind the numerous misspellings is the impact of Egyptian phonology combined with transfer of some of the elements of the first language writing system (L1WS) to the second language writing system (L2WS). These effects have been considered both from the point of view of phonological impact as well as that of L1 orthographic conventions.² To account for the impact of Egyptian phonology, the subject is approached within the study of coarticulatory phonetics.

The data presented here consist partly of private letters from the Eastern Desert of Egypt (O.Claud. 2) that may show potential prosodic and phonemic transfer from Egyptian, and partly of scribal documents from Middle Egypt (OGN I), which furthermore give evidence for underdifferentiation of foreign phonological units, specific in nature due to the impact of Egyptian. The corpora have been selected because of their geographic distance to one another, showing that the phonetic variants are not local; both also display probably the most prominent Egyptian-induced phenomenon, the reduction of word-final vowels to schwa.

1 We use Horrocks (2010) as main reference for the Greek phonological development. Horrocks uses the earlier works on the subject by Gignac (1976) and Teodorsson (1974, 1977) as basis for his arguments but in addition to this enhances knowledge of especially the dating of e.g. the raising of front vowels to [i], and corrects some of Teodorsson's more advanced theories.

2 See Cook and Bassetti 2005 (1–56) for a good introduction to the various levels on which L1WS can have an effect on the outcome of L2WS production, often based on the phonetic level of L1.

2 Contact-Induced Phonological Variation

For the Egyptian writers of Greek, underdifferentiation of foreign phonemes and inadvertent transfer of the L1 stress system caused misperception of Greek phonology, visible in the many nonstandard graphemic variants of the Greek words. Related to the root and pattern morphological structure of Afroasiatic languages,³ the functional load of consonants was higher than that of vowels, as reattribution of vowel quality to that of the adjacent consonant may be important for perception, as stated in Traunmüller (1999). This is paralleled in the production of Northwest-Caucasian and Chinese schwa-like vowels, and the consonantal coarticulatory effects on these by place or manner of articulation, giving instant information on the consonants' articulation (Traunmüller 1999: 1–3). When Greek was thus treated according to the phonemic practices of Egyptian, valuable information of e.g. case endings and verbal modality was lost.

The graphemic variation in some Greek informal documents can be compared to that in Greek loanwords in Coptic, where variation shows similar tendencies in the nonstandard vowel production. The geographical areas from which the (Greek) materials are selected present distinct immigration settler patterns as well as different Coptic dialects but nevertheless, the results show similar patterns in nonstandard variation. This suggests that the phenomenon is not dialect-dependent but an overall outcome of a language contact between two structurally different languages. The outcome on the phonological level in this long-term language contact situation follows the general patterns of underdifferentiation of foreign phonemes and L1 phone substitution as presented by Weinreich (1963: 18–19). Matras (2009: 223–225) outlines a 4-scale structure on the types of phonological interference in contact situations. Following this scale we can suppose that the Egyptian users of Greek were on level A: Semi-bilinguals or monolinguals, or on level C: emerging bilinguals (the matter of placement of the Greek-Coptic contact on Matras's scale is discussed in more detail in Dahlgren 2017). On the level A of contact, as proposed by Matras (2009: 223–226), word-forms borrowed from the donor language are adjusted to the sound patterns of the speaker's mother tongue, which seems to be exactly how the L1 Egyptian writers were using L2 Greek; on level C, more typical patterns of bilingualism emerge. In addition to underdifferentiation of some Greek phonemes and substituting others with L1 phones, prosodic transfer from Egyptian is visible in the treatment of Greek unstressed syllables, the phoneme inventory of which often

³ The word formation principle on which the Afroasiatic languages operate is called 'root and pattern morphology'. Essentially it means that word formation lies on a so-called consonant root.

follow the Coptic phonological rules. The issue of phonological transfer is studied in detail in Dahlgren (2017); here we will provide information on how some of these features affect understanding of Greek morphosyntax.

3 Evidence for Phonological Transfer

Knowledge of Egyptian phonology and prosodic system is obviously imprecise, as for most of the language's history no graphemes for vowels existed in the writing system. However, by internal evidence from comparative Afroasiatic linguistics as well as by comparing Egyptian to e.g. Akkadian transcriptions of Egyptian words and phrases, some of the historic vowels and word stress patterns have been identified (Loprieno 1995: 29).⁴ What has thus been uncovered is that Egyptian had a strong word stress, and due to this heavy word stress, adjacent syllables were reduced in quality. The results of the reduction lay more heavily on vowels than consonants. This is typical of Afroasiatic languages, as consonants have a strong effect on the adjacent vowels (Girgis 1966: 75–76; Greenberg [1962] 1990: 433).⁵ The stress position in Coptic was typically on one of the last two syllables of the word, with the stressed syllable usually containing /o/, /ɔ/ or /e/ (Peust 1999: 270–273).⁶ There was no unstressed /o/ or /ɔ/ in Coptic (Peust: 1999: 211–213, 250–254).

Coptic unstressed vowels were usually marked with three letters, <a, e, o>, which reflects the tendency of unstressed vowels' reduction to /ə/, especially in word-final position, as described by Loprieno (1995: 48) and Peust (1999: 253). This seems to be a frequent phenomenon in the Greek texts written by Egyptian writers as well. Under the influence of their mother tongue, Egyptian scribes writing L2 Greek thus produced many nonstandard graphemic forms when depicting the Greek unstressed vowels' phonemic quality. In Greek, however, vowel quality was an important morphological marker, which native writers usually produced according to the synchronic standard in spite of the word stress position because of the fact that the information in, for example, case marking, lies on the last syllable.

⁴ In addition to that, Peust has compiled most of the study of Egyptian phonology (1999: 22–36).

⁵ A preliminary phonetic analysis of the consonantal environment related to the nonstandard vowel production is presented in Dahlgren (2016).

⁶ Earlier stages of Egyptian writing systems were consonantal, from Middle Egyptian (hieroglyphs) to Demotic (cursive writing, derived from hieroglyphs), so evidence for vowel quality is not easily attained. This changed with Coptic, the final stage of Egyptian, which used the Greek alphabet, and thus provides evidence for the quality of vowels in Egyptian.

Some changes in case marking, however, came to be standard in time. For example, the third declension plural accusative ending *-as* started fluctuating in Postclassical Greek, but the variation was already evidenced in some dialectal inscriptions as early as the 6th century BCE (Horrocks 2010: 223, fn. 7). It is, therefore, part of the analogous simplification pattern evident also in other parts of Greek morphology, and the ending was finally stabilised in *-es* levelling the accusative plural *-as* with the nominative plural in *-es* (Horrocks 2010: 117).⁷

According to Cook and Bassetti (2005: 36), L2 reading is generally easier if L1 and L2 writing systems use the same script, but writing L2 with the same script as that for L1 might also be a source of confusion due to L1 spelling conventions. On the other hand, both the phonology and the writing system of L1 might affect the spelling of the L2WS. Good examples of this are the Japanese learners' productions of L2WS English words, for example *recentry* 'recently' with the confusion between /l/ and /r/ as well as *yesuterday* 'yesterday' written with an epenthetic vowel according to the syllable structure of Japan (Cook and Bassetti 2005: 41–43). Both phenomena, the phonological level as well as that of spelling, are clearly visible in the L2 Greek texts produced by Egyptian writers. The usage of <e> in the place of Greek word-final /o/ is both in line with transfer from the (Coptic) Egyptian phonological system (the word-final vowel was most often /ə/) and the orthographic conventions (the unstressed vowel was typically marked with <e> according to e.g. Loprieno 1995: 48 and Peust 1999: 250).

In addition to the structural difference related to the unstressed vowels' quality and position between Greek and Egyptian that caused variation on the orthographic level, i.e. the difference in the ability of keeping vowel quality distinct even word-finally, Greek also had more vowels than (Coptic) Egyptian did, for instance a fourth high front vowel /y/.⁸ The reconstructed inventory of Coptic phonemic vowels differs slightly from one researcher to another, but it is generally accepted that Coptic had the vowels /i, e, ε/ (Peust 1999: 201), if the Greek vowel graphemes presented quality, or /i, e, e:/, if quantity (Loprieno 1995: 46–48). It seems that Greek at this time had the following vowels: /i, y, ɛ, e, ø, a, o, u/ (Horrocks 2010: 167). Despite the slightly different vowel inventories given by Loprieno and Peust, it is clear that Egyptian had no /y/. Accordingly, there are clear instances of underdifferentiation regarding Greek /y/.

⁷ See for example O.Claud. 2. 252: ἀπάξου τοὺς φιλοῦντές σε πάν[τ]ρες *aspázou toùs filoûnt-és se pánt-es* [Greet all your friends]. The standard accusative plural is <filount-as. .pant-as>.

⁸ We mark the phonetic level [a], the phonemic level /a/ and the graphemic level (transliteration) <a>. After a form has been introduced, it will be referred to in transcription in *italics*. On the phonemic level, Greek original vowel quantity is ignored as it was no longer existent in the time period of the texts analysed here.

Often, this phoneme was graphemically depicted with the digraph *ou* <ou>, originally marking the Greek diphthong /ou/, which was pronounced as /u/ from the 7th century BCE onwards (Horrocks 2010: 161).

In addition to some more frequent variation, such as concerns, for example, *iotacism*, there is also other kind of nonstandard fluctuation regarding Greek /y/. The fact that some of the graphemic variation concerning this occurred between *υ* <y> /y/ and *ου* <ou> /u/, instead of other vowels such as *η* <ē> /e/ or <i> /i/, is a clear indicator that for L1 Egyptian writers, these spellings represented the same phoneme, a back rounded vowel part of their own vowel inventory. Since Egyptian had /u/, it was an easy substitute on the high rounded vowel /y/, thus giving the spelling variation between *υ* <y> and *ου* <ou>, demonstrating underdifferentiation of Greek /y/ as /u/ (see below). In later stages of the Greek vowel raising, there was spelling fluctuation between *ι*, *υ*, *η*, *οι* <i, y, ē, oi> as all of these came to represent the same phoneme, /i/, the roundedness of /y/ having also disappeared at this point. This process of Greek front vowels' raising to /i/ started in the Ptolemaic period (323–30 BCE) but was completed only by early Byzantine times (from ca. 330 CE onwards [Horrocks 2010: 167]). Thus 2nd to 3rd century CE texts are rather early for *υ* <y> /y/ to be replaced with <i> /i/, and consequently, few instances of this particular variation occur in the texts of the Narmouthis ostraca, OGN I (*Ostraca Greci da Narmuthis* I), which are written by Egyptian scribes and are one of the main sources for the variation between /y/ and /u/. The same /y, u/ variation exists also in some ostraca from the Roman *praesidia* in the eastern desert of Egypt, where there likewise were many Egyptian L2 Greek writers (see e.g. Cuvigny 2013).

Underdifferentiation therefore seems to be the reason behind the vowel variation, for example, in the writing of the standard Greek word (1) *πυρού* <pyrou> /pyru/ 'of wheat' as *πυρου* <pourou> /puru/, indicating underdifferentiation of the Greek phoneme /y/, which has been replaced with the (Egyptian) rounded back vowel /u/.

(1) OGN I, 42

<u>Standard</u>	<u>Nonstandard</u>
<i>pyrou</i> /pyrú/	<pourou> /puru/
'wheat (gen)'	

However, the same word *pyrou* is written as *ποιρου* <poirou> in two other texts in the same collection, as shown in (2). This phenomenon is part of the Greek internal phonological development, as /y/ and /oi/ were in the Roman period in the process of merging, both representing a rounded front vowel; according

to Horrocks, /y/. The variation between υ <y> and οι <oi> is very frequent in the papyri of Roman Egypt (Gignac 1976: 197–199; Horrocks 2010: 167).⁹

(2) OGN I, 46, 86

Standard **Nonstandard**
pyroú /pyrú/ <poirou> /pyru/

On the surface level, writing <poirou> instead of the standard <pyrou> in (2) could be seen as evidence of the Greek internal phonological development affecting the writer. On first thought, it seems evident that the scribe must have been aware of the phonetic reality of Greek to be using <oi> to depict /y/. Then again, the scribe could have merely learned to write the word like this based on having read it in this form, written by native Greek writers. However, using both <ou> /u/ and <oi> /y/ for the standard /y/ represents strengthening evidence for the general difficulty in distinguishing the difference between /u/ and /y/, probably the more so for the phoneme occurring in the unstressed syllable.¹⁰ That the effect of Greek internal phonological development was the factor behind these misspellings can furthermore be excluded on the basis of the intermixed usage of voiced and voiceless velar and dental plosives within the Narmouthis texts. This was among the most frequent transfer features from (Coptic) Egyptian to Greek in the Roman period, and proves that the writers of the texts were L1 Egyptians. (Coptic) Egyptian did not have a phonological opposition between these phonemes, but between voiceless stops and ejectives (Loprieno 1995: 43). Graphemic variation between /g, k/ and /d, t/ are therefore very frequently seen in Greek texts written by L1 Egyptians, and have been seen as an indicator of bilingualism and a consequence of (Coptic) Egyptian not having voiced plosives (Gignac 1976: 63, 82).

4 Confusion of Form or Phoneme?

In addition to underdifferentiation of Greek phonemes that were not part of the (Coptic) Egyptian phonemic inventory, there are instances of nonstandard

⁹ For a nice example of this variation in the papyri of Fayyum see, e.g., P.Fay. 112 and 114 written by the sender of the letters, Bellienus Gemellus, himself, compared to P.Fay. 110 written by a scribe for him. Gemellus has difficulties in spelling this phoneme, whereas the scribe does not make mistakes.

¹⁰ The issue of /y, u/ underdifferentiation and the phonemic quality of <oi> and <y> is discussed in detail, including its relation to especially early Roman period Greek in Egypt, in Dahlgren (2017: 68–82).

marking of Greek vowels that seem to be due to (Coptic) Egyptian prosodic influence. A frequently occurring example of this involves the marking of Greek /a, e, o/ in unstressed syllables. In Greek these were distinctive phonemes and, furthermore, bore morphological meaning, e.g. marking the mood of verbs, for instance distinguishing the active aorist infinitive πέμψαι <pempsai> ‘to send’ from the active aorist imperative πέμψον <pempson> ‘send’. The mood-marking phoneme here is syllable-final.

In native Greek writings outside of Egypt, while there were some spelling errors related to the orthographic depth¹¹ of the Greek alphabet, reminiscent of e.g. native English speakers’ phonetically-based nonstandard spellings such as *wierd* vs. *weird*, *point of you* vs. *point of view* i.e. using graphemic variants that are pronounced the same (in Greek mostly related to the various phonemes on their way to raising to /i/), mood-marking vowels mostly followed the standard (see also Leiwo 2017). Either they were phonetically distinct enough or learnt by heart in their graphemic form due to their morphosyntactic importance because otherwise Greek infinitive and imperative forms, for instance, might have got confused with one another as in the examples regarding *pempse* below. Roman-period evidence of phonological and graphemic variation in Greek verbal morphology mostly comes from the papyri and ostraca in Egypt due to the fact that the climate was nowhere else sufficiently dry to preserve documents written on papyrus, so the material evidence cannot be regarded with absolute objectiveness.

Nevertheless, in the Greek stone inscriptions there are hardly any spelling errors related to the confusion of different moods with one another, whereas in the Roman Egypt there is abundant evidence of graphemic variation of this sort that, as a result, appears to suggest confusion of mood; certainly, the inscriptions have nothing as distinctive as the variation between /e/ and /o/ as there was in Egypt. This is regardless of the fact that in many ways, mostly in relation to *iotacism*, phonological development was more advanced in 4th century BCE Athens than it was in Graeco-Roman Egypt; according to Teodorsson (1974: 286–299), *iotacism* was already well advanced in the “majority system” ca. 350 BCE with ι, ει, η, ηι, υ, υι <i, ei, ē, ēi, y, yi>¹² having been raised to /i/, monophthongisation was complete, and the stress system had changed to a primary

¹¹ Orthographic depth means the grapheme-phoneme correspondence. In English, e.g., where a phoneme might be written with many different graphemes, it is deep; the writing system of English is phonologically opaque. In languages like Italian and Finnish, where there is a simple correspondence between a phoneme and a grapheme, it is shallow: these are phonologically transparent writing systems (the term ‘writing system’ here meaning orthographic conventions specific to a language) (Cook & Basseetti 2005: 6–7; Aro 2004: 10).

¹² ει <ei> only before a consonant or word-finally.

stress one. According to Horrocks, however, this is an exaggeration, to be pushed forward by at least a century – especially regarding the vowel quantity loss and the change in stress system, as well as the raising of η, υ <ē, y> to /i/ (Horrocks 2010: 165). The Athenian majority system, even more cautiously interpreted, was at any rate more developed than the variety the Macedonian conquerors brought with them to Egypt. In Egypt, the Ptolemaic elite introduced a more archaic form of the language as the official language of the court, with aspects taken from Old Attic phonology; while this language form also started developing toward what we see in Modern Greek, it was still more conservative to begin with than even the spoken variety of Athens in the 4th century BCE, as presented above. The development started again in Egypt, only reaching the more advanced level of 4th century BCE Athens in the late Roman period (Horrocks 2010: 165–167).

As we have argued above, the /e, o/ variation in Egyptian Greek is probably caused by the tendency of (Coptic) Egyptian unstressed vowels' reduction to schwa. This feature, related to the impact of the phonological level of Egyptian, caused confusion between /e/ and /o/ in some Greek verb forms and resulted in uncertainty of the verb form's intended meaning between e.g. infinitive and imperative (Leiwo 2017). Examples from Petenephtes, a writer of several private letters on ostraca, give a detailed insight into the general phenomenon. Petenephtes uses four different variants of the verb πέμπω <pempō> 'send', all in a syntactic context of a request (see Leiwo 2010, 2017).

The most popular form of asking someone to do something in Roman Egypt was to use a politeness phrase, such as καλῶς ποιήσεις <kalōs poiēseis> 'please' with the active aorist participle. However, many letter writers started to use either the active aorist imperative, the future indicative or the aorist infinitive instead of the participle (see Leiwo 2010). The aorist stem of the verb <pempō> 'to send' is *pemps-* with the first aorist formation suffix *-s-*.

The first aorist active infinitive ends in *-ai*, at the time of the text pronounced [e], whereas the 2nd person aorist active imperative ends in *-on*. Furthermore, the present 2nd person active imperative ends in *-e* as does the 2nd person active imperative of the aorist 2, for example λαβέ <labe> 'take' from the verb λαμβάνω <lambanō>.¹³ All of these forms create difficult morphology for the L2 speaker. Loss of word-final /n/ was also a widespread phenomenon in Greek texts at this time (Gignac 1991: 187; Horrocks 2010: 171), which

13 Second aorist is a traditional name for the aorist of the verbs that have apophony. The aorist 2 has the same endings as the present, whereas the first aorist has its own aorist endings together with a stem morpheme {s} (it can have some other formations as well, but they are not important here).

added to the confusion on the phonetic level. In addition to these, there was the phonetic merger between unstressed /e/ and /o/ with the Egyptian L2 Greek users. As a result, to a L2 Greek speaker of an Egyptian origin, all of these forms probably represented the phonetic form [ˈpemp̩sə]. This might also be related to a psycholinguistic aspect, the so-called rule-processing reasoning, which functions so that only one imperative morpheme {(s)e} is activated in a person's mind (see Leiwo 2005: 252–253 for further details). The form is, thus, psycholinguistically always the same [ˈpemp̩sə] but its spelling has variation due to the irregularity (i.e. depth) of the L2 writing system, combined with the writer's imperfect Greek (orthographic) skills, which on the practical level resulted in trying different spelling variants. As can be seen from above, there is a strong element of multicausality to the phenomenon.

Generally, the infinitive was more seldom used in similar syntactic contexts. Furthermore, confusion of the morphological forms between infinitives and imperatives of the type *pempse* and *pempson* (IMP) and *pempsai* (INF), with the writer not recognising the difference between the imperative and the infinitive, was not at all usual. On the contrary, the majority of the writers did recognise the difference (Leiwo 2017). Petenophotes's form *pempse* could be interpreted as an infinitive (*pempsai*) since <ai> was pronounced [e] in standard Greek pronunciation. Therefore, taking into account that the word-final /e/ was unstressed and probably reduced to schwa, both forms were pronounced [ˈpemp̩sə]. However, from the semantic and syntactic context it seems more likely that Petenophotes did not change the syntax in his very stereotypical letters but is using the imperative in each instance. Accordingly, the outcome of seemingly different forms is due to simple spelling problems, confusing [e] and [o] in the word-final, unstressed position due to the impact of (Coptic) Egyptian (see the table above for the phonetic level confusion). Another issue that speaks in favour of the imperative is the fact that Petenophotes never uses the spelling *pempsai* that is the standard form of the active aorist infinitive, and also used by other writers in the same social context.

One more suggestion supports this explanation: Greek verbs borrowed to Coptic were taken in the infinitive form which was altered, thus becoming identical to that of the 2nd person singular Greek imperative (Layton 2007: 126, 155). According to Grossman & Richter (2017), there was variation in the manifestation of the Greek infinitive in Coptic dialects between the endings *-in* and *-e/i*. This has to do with the gradual loss of the final *-n* from the bare verbal stem in some dialects, leaving the form similar in appearance to the imperative form mentioned above (Grossman & Richter 2017: 208–223). Furthermore, in most native Coptic verbs, the imperative form was the same as that of the infinitive (Layton 2007: 90). The polysemy of the infinitive and imperative in Coptic,

regarding both the Greek loan verb borrowings as well as the native Coptic ones, no doubt enhanced confusion in the usage of Greek imperatives.¹⁴

In the verb forms in Table 1, the unstressed <o> has been replaced with <e>, thus being in line with Coptic orthographic practices for marking the unstressed syllable's vowel. As regards the nonstandard vowel depiction in the Greek verb usage, all of the evidence points toward L1 phonological transfer which was perhaps further strengthened by the polysemy of Coptic infinitive and imperative. The same type of variation is found in OGN I, 115 κέρασεν <kerasen> from the standard κέρασον <kerason> 'to mix (imp.)', from far across the country to the examples of O.Claud. from the Eastern Desert; therefore the variation was not idiosyncratic to one scribe, nor a product of a local variety. Further evidence that these nonstandard forms result from the impact of Egyptian phonology is the fact that transfer of (Coptic) Egyptian phonology was not limited to verbs, it also had effect on nouns, as in *pourou* for *pyrou* in (1–2). This is even more transparent in (3) in the nonstandard form κηπεν <kēpen>, the accusitive singular of the noun κήπος <kēpos> 'garden', as the nonstandard vowel variation occurs between /e/ and /o/ similarly to the above-mentioned nonstandard verb forms *kerasen* (from *kérason*) and *pempsen* (from *pémpson*).

Table 1: /e, o/ variation in O.Claud. 2¹⁵

Standard Greek	Petenephotēs' production	Egyptian pronunciation
<i>pémp-son</i> [ˈpempson] send.ACT.AOR.IMP.2SG	<pempson>, <pempson̄>	[ˈpempɓə]
<i>pémp-sai</i> [ˈpempse] send.ACT.AOR.INF	<pempsen>	[ˈpempɓə]
<i>pémp-e</i> [ˈpempɛ] send.ACT.PRS.IMP.2SG	<pempse>	[ˈpempɓə]

¹⁴ Although 2nd–3rd centuries CE are a bit early to talk about Coptic proper, it seems reasonable to assume that this applies even before extensive use of it. The Narmouthis Demotic (Egyptian) ostraca from the same collection contain Greek loan verbs treated in this way.

¹⁵ O.Claud. 2.243, 3 πέμψε <pempse> and 11 πέμψον <pempson> ; 246, 4 πέμψε <pempse>, 6 πέμψεν <pempsen>, 249, 8 πέμψων <pempson̄>. The form πέμψεν <pempsen> is attested also in a letter of Maximos (O.Claud. 2.262, 3): γράφεις μου ὅτι πέμψεν μου φάσιν ἀπὸ τῶν [=τῶν] ἰς ἕκον *gráphis my hōti pémpsen my phásin apō tōn is ŷkon* [You write to me that "send me word about those at home"]. All the forms are glossed in Table 1.

- (3) O.Claud. 4.892, 6–7
- | | |
|-----------------|--------------------|
| <u>Standard</u> | <u>Nonstandard</u> |
| <i>képon</i> | <kēpen> |
| garden.ACC | garden.ACC |

This example (3) shows the same type of phonologically-based nonstandard variation which again affected the Greek unstressed syllable's vowel. The evidence presented above suggests Egyptian phonological impact on the treatment of Greek syllables. It is clear that the L1 Egyptian writers, when deviating from the standard Greek orthography, marked the Greek unstressed syllable according to Egyptian prosodic rules, which dictated a limited vowel inventory in the unstressed syllable. The unstressed syllable was then characterised in the manner of Coptic orthographic practices, with especially the word-final unstressed vowel in the graphemic form <e>, which was the most usual grapheme for depicting the word-final schwa. Nonstandard vowels in other positions were often written with any one vowel from the unstressed vowels' inventory best describing the adaptation to the adjacent consonants' manner or place of articulation, such as /a/ from /e/ in vicinity of velar consonants or /r/, which will be discussed in the next section.

5 Coptic Treatment of Greek Loanwords: Consonant-to-vowel Coarticulation

As we will see in the examples below, the phenomenon present in Petenephotēs's use of unstressed Greek /a, e, o/ is paralleled in the Coptic usage of Greek loanwords.¹⁶ Most of the written Coptic sources are from a later period than the Greek texts presented here as Coptic texts appear in larger quantities only from 4th century CE onwards; however, there is a 3rd century CE Coptic magical text from Soknopaiou Nesos near Narmouthis (Choat 2006: 30–42). Therefore, some form of (Old-)Coptic was written earlier than is generally assumed. In addition, as some of the linguistic features present in Coptic are already visible in earlier stages of Egyptian (see, e.g. Rutherford 2010: 204–206 on auxiliary verbs in Demotic), it is reasonable to assume that Coptic shows the phonological status that was existent already before the standardisation of Coptic.

¹⁶ Many more examples such as the ones presented here can be seen in Girgis (1966) and Dahlgren (2017).

Coptic orthography strived for an almost phonetic representation of the spoken reality of the language. One of the orthographic conventions was the graphemic marking of allophones. If, for instance, in a (Greek) word there was the sequence /np/, this was written <mp> because of the effect of the bilabial on the nasal (Layton 2000: 20). Following this principle, the vowels were marked into the graphemic form that was close to their phonetic realisation. Unstressed /a, e, o/ were often intermixed in Greek loanwords, as we can see in (4) and (5), compared again with the Greek usage of the documents in OGN I (6), and the letters of Petenephtotes (7). From the geographical distribution of the examples we can argue that the phenomenon is not dialectal but a result of the differences between the language structures.

- (4) Codex Schøyen. 14 (4th cent. CE)¹⁷
Standard¹⁸ Nonstandard Location
t^herapeúō <t^harapeuē> Middle Egypt
 ‘to be an attendant, do service’
- (5) P.Ryl.Copt. 275 (3rd cent. CE)
Standard Nonstandard Location
aksiou <eksiou> Hermopolis/Upper Egypt
 ‘to neglect’
- (6) OGN I, 115 (2nd–3rd cent. CE)
Standard Nonstandard Location
kérason <kerasen> Fayyum/Middle Egypt
 ‘to mix (imp.)’
- (7) O.Claud. 2 (2nd cent. CE)
Standard Nonstandard Location
pémpson <pempse(n)> Mons Claudianus/Eastern desert
 ‘to send (imp.)’

<t^harapeuē> in (4) is a nonstandard form of the Greek loanword θεραπεύω <t^herapeuō> ‘to be an attendant, do service’, with a change from the standard /e/

¹⁷ Analysis of nonstandard orthography in Greek loanwords in Coptic manuscript editions used for (4), (5) courtesy of DDGLC (Database and Dictionary of Greek Loanwords in Coptic), FU Berlin.

¹⁸ ‘Standard’ means the orthographic form of the word in Standard Greek, as this was usually how the word was borrowed into Coptic. ‘Nonstandard’ means a written variant deviant from this.

on the first syllable to /a/. The Greek stress is on the third syllable, and if it is assumed that the Greek stress was retained, it may be seen that the vowel depicted with a nonstandard grapheme is again unstressed. An explanation for the use of α <a> may be found in the Coptic phonology. Coptic could have word-internal unstressed /e/ but often this was just a graphemic variant for a non-phonological vowel value, especially near a sonorant (Peust 1999: 250–252). It was probably, as a neutral vowel, affected by the nearby consonants' quality. The choice of α <a> replacing the standard Greek original ε <e>, therefore, could be explained by the presence of /r/; those coronals that are produced with a more retracted tongue body, like retroflexes, may cause retraction of the adjacent vowels (Flemming 2003: 336).

Coptic /r/ has been described as [r] by Peust (1999: 128) and [r] by Loprieno (1995: 33), so the pronunciation probably was not as far pushed as that of retroflex, but it might have been palato-alveolar. A possible comparison of similar phonetic realisation of a consonantal quality on an adjacent vowel that seems to be typical of Afroasiatic languages is found in modern Arabic, in which /q/, pharyngeals and /r/ cause retraction of /a/ to [ɑ] (according to Abd El-Jawad 1987, emphatic i.e. pharyngealised /r/ exists across all varieties of North African Arabic), while (other) coronal consonants cause fronting of vowels. It is generally assumed that Egyptian had emphatic consonants, and one of the phonetic realisations of this may have been retroflexion (Peust: 1999: 82–83). In either case, /e/ might have been retracted to /a/ (even [ɑ]) by the adjacent /r/. Further proof of vowel retraction to /a/ in combination with /r/ seems to be the attestation of the Greek loanword ἐργάτης <ergatēs> 'workman' in Coptic written as <argatēs> (attestations in Girgis 1966: 75).

However, this change was not typical of Greek loanwords in Coptic, as /r/ mostly seems to cause fronting and raising of /a/ but /e/ is nearly always retracted to /a/; together these seem to point toward a tendency of centralising unstressed vowels in general. Coptic dialects usually had the vowels /a, i, u, ə/ in word-internal unstressed position (Peust 1999: 252). It is therefore plausible to assume that the (possibly) retracting effect of the adjacent /r/ might have caused the writing of what was essentially a schwa with <a> to give it a more retracted colour (cf. Dahlgren 2017: 94–97).

Essentially, the situation with *t^harapeuē* is mirrored by *kérason* being written as <kerasen> in (6) in that the unstressed vowel is treated as schwa. In *kerasen*, the unstressed final vowel has taken the assumed phonetic form of /ə/, as it has in Petenephote's variant *pempsen* from the standard form *pémpson* in (3), again in (7). It is evident that the unstressed vowels' quality in both Greek examples follow the prosodic rules of the writers' L1, Egyptian, which is in line with the phonetic ambitions of Coptic orthography.

In <eksiou> in (5), the unstressed vowel's quality in this phonetically-based graphemic form has resulted in <e> from the standard <a> in the Greek loanword ἀξιου <aksiou>. There is some evidence in the world's languages that velar consonants can cause fronting, phoneme-specifically. In the South Wakashan language Ditidaht (spoken in Canada), velar consonants generally cause strong fronting on the low vowels apart from the central vowel /a/ [ə~ɑ], which shows strong retraction. The high vowels, on the other hand, show strong retraction, especially /i/. In the Ditidaht vowel inventory, therefore, [ɑ:] tends to be fronted by the effect of adjacent velar consonants (Sylak-Glassman 2013: 22, 30).

According to Peust (1999: 201) the phonetic quality of Coptic <a> is [a]. When compared to, e.g., Ditidaht, its closest phonemic equivalent in the vowel inventory of that language is probably /e/ [ɛ~æ] or /e:/ (<ee> in the Ditidaht system) [æ], as Ditidaht has no [a]. However, in Ditidaht /e/ is fronted when it is adjacent to velars and /e:/ is raised and fronted. This seems to be perfectly in line of what seems to be happening to Greek /a/ in the Coptic system, when /a/ is adjacent to a velar consonant, being thus part of an apparent overall tendency of vowel assimilation to the velar place. Indicators of exactly the same phenomenon have also been found in American English by Hillenbrand et al. (2001: 754), with a slight upward shift for back and central vowels, especially if the consonantal environment is initial instead of final.

6 Conclusions

Greek papyri and ostraca from Egypt present a rewarding case for studying contact-induced variation in vowel quality. The evidence comes from written material only, but with the aid of articulatory phonetics and L2WS studies, the nonstandard vowel variation, as it is preserved in the graphemic form, can be analysed in reference to the phonological systems of the languages in contact.

Greek and Egyptian were structurally very different in one crucial respect: in line with the typical Afroasiatic word formation structure, the functional load of consonants in Egyptian was higher than that of the vowels. Greek, on the other hand, preserved vital information of morphology in vowels. In addition, Egyptian had a stress accent that caused reduction on the vowels of unstressed syllables, especially final ones, and final syllable is the position in which the Greek inflectional information mostly lies, such as in standard Greek *pemp̄sai/pemp̄son*, where the difference of either an infinitive marking or that of an imperative is distinguished in the final syllable. Consequently, in the variant spellings followed from the inadvertent transfer of Coptic phonological rules, information of, e.g., Greek case endings or mood was seemingly lost.

The examples presented in this study show that e.g. variation between Greek /e/ and /o/ results from the fact that there was no /o/ or /ɔ/ in the Coptic unstressed vowels' inventory, and that the Coptic neutral vowel was most often depicted with <e>, according to the Coptic orthographic conventions. This led to a grapheme-based confusion, where the intended Greek mood is not always recognisable in some Greek verb forms. Parallels can be drawn for the same phonetically-based phenomenon from Greek loanwords in Coptic, as they were attempted to be integrated within the native language phonology resulting in writing forms similar to the nonstandard vowel usage of Greek texts produced by L1 Egyptian writers.

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Abbreviations

The glosses follow Leipzig Glossing rules.¹⁹

AOR	aorist
ACT	active
L1/2	First/second language
L1/2WS	First/second language writing system

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Change in Grammatical and Lexical Structures in Postclassical Greek: Local Dialects and Supradialectal Tendencies

Abstract: The coexistence of local dialects and supradialectal languages (Attic-Ionic Koiné, local Koinaí) in the Hellenistic period is recognizable in the dialectal inscriptions from all regions of Greece in that era. The coalescence of dialectal and supradialectal grammatical and lexical structures in written language is evident at different levels of analysis: numerous apparent dialectal features, even if in texts consequently written in dialect, turn out to be simply dialect-colored variants of common Greek patterns, once one translates them to Attic and compares them with literary texts. The concrete manifestations of this situation follow different paths in the different regions: both the creation of new forms and structures, which are neither dialectal nor Attic-Hellenistic properly, and the occurrence of syntactic calques and artificial hyperdialectalisms. The present contribution focuses on the manifestations of the coexistence of dialect and Koiné and Koinaí in dialectal texts of the regions of Aeolis, Crete and especially Thessaly between 3rd and 1st centuries BC, with special consideration given to the bilingual version of the letter of King Philippos in the long inscription from Larisa (a.217/6).

Keywords: Koiné, language contact, Greek dialect

1 Introduction

It is a well-known fact that the grammatical and lexical structures of Attic, namely the so-called “Großattisch”, with some Ionic elements, which spread as the language of trade and administration from the 5th century BC as a variety directly preceding the Koiné, underwent change during the Postclassical

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period. Needless to say, the changes we may state (and try to explain) are those of the written language such as it occurs in the inscriptions, first and foremost the language of Hellenistic chancelleries, which is ultimately that of the upper classes and reflects a high variant of Greek. Other variants and sociolects remain unknown and only sporadically appear in the written texts.

The coexistence of regional dialects and supradialectal languages (Attic-Ionic Koiné, as well as local Koinaí) in the Hellenistic period is a fact in practically all regions of Greece to different degrees. In every region in which Koiné (or a non-Attic local Koiná) and a local dialect coexist, and this often means *coalesce*, their interrelations at the different levels of grammar can only be elucidated (or, at least, approached) in the light of the local inscriptions and of literary texts. The latter are the source for syntactic patterns underlying the phraseology of the official documents. It is therefore only at the level of written language that the (often diverging) patterns of development of grammatical and lexical structures in the different regions may be stated. The spoken language, both of the dialects and of the Koiné, which is ultimately the cause of the decline and disappearance of the dialects, remains practically hidden in official texts and only sporadically emerges in private inscriptions. The process of progressive absorption of the old dialects by Koiné (and Koinaí) is connected with (or conditioned by) strictly nonlinguistic factors, and follows different paths in different regions. This will be illustrated on the basis of dialectal inscriptions of Aeolis, Crete, and especially Thessaly from the time between 3rd and 1st centuries BC.¹

1 Poleis and regions are mentioned according to the abbreviated Latin form: ATRax, CIERion, CRANnon, GONnoi, LARIssa, MATropolis, MOPSium, PHALanna, SCOToussa, TETHonium. Inscriptions from *IG IX 2* (1908) are quoted by their number, those published in *SEG* by number of the volume followed by number of the inscription (e.g. 43: 310 for *SEG* 43: 310). Some conventional abbreviations:

CIER: Cierion, early 2nd ct. BC: *IG* 258

CRAN: Crannon, mid 2nd ct. BC: Migeotte 1984: 113–114 fn. 32

LAR 1: Larissa, 217/6 BC: *IG* 517 (§8)

LAR 2: Larissa, ca. 160–150 BC: *SEG* 51: 368 (Helly 2006)

LAR 3: Larissa, 2nd ct. BC: Helly 1970b

LAR 4: Larissa ca. 170/169 BC: *SEG* 51: 636 (Tziafalias et al. 2006)

LAR 5: Larissa, early 2nd ct. BC: *SEG* 50: 605 (Tziafalias & Helly 2005)

LAR 6: Larissa, 2nd half 2nd ct. BC: *BCH* 131, 2007, 421–482 (Tziafalias & Helly 2007)

MATR: Matropolis, 2nd half 3rd ct. BC: *SEG* 36: 548 (Helly 1970a)

MOPS: decrees from Mopsion, 2nd ct. BC: García Ramón et al. 2007

PHAL: Phalanna, early 2nd ct. BC: *IG* 1229

SCOT: Scotoussa, 197–185 BC: *SEG* 43:311 (Misaïlidou Despotidou 1993)

THET: Thetionion, 5th ct. BC: *IG* 257

The presence of Attic, and of the Attic-Ionic Koiné as well as regional Koinaí, is overwhelming in official texts: even if they are consequently written in dialect, plenty of apparent dialectal features turn out to be simply dialect-coloured variants of supradialectal patterns, once one translates them into Attic. This will be shown by the Thessalian inscription discussed below (§8). The same applies, in some regions, to local Koinaí which basically rely on the Koiné, but cannot always be distinguished from the regional (sub)dialect. This is a major difficulty which may be stated at two levels.

First, it is often difficult to determine which phenomena represent the authentic dialect and which phenomena are rather borrowings from a supradialectal variety of Koiné. The lexicon and syntax of dialectal inscriptions reflect to a large extent – especially in public documents – supradialectal patterns which have been adapted to the local dialect. The degree of dialectal adaptation varies depending on the type of the inscription. This, for example, applies to most of the conjunctions, which are basically those of Koiné (and of other dialects): their form is often dialectally colored, but they may even occur in their Attic form (§2). A very special case, and a promising field of research, is that of the formulas attested in public documents: if a formula occurs only in one particular region, either in dialect or in Koiné or in both, it is not easy to determine whether it is a dialectal formula that has been translated into Koiné or vice versa (§3).

Second, the modalities of the coexistence of supradialectal Koiné and local dialect as well as the varying degree of authenticity of dialectal forms allow one to recognize for the recognition of different levels of dialect competence and very often of an adaptation of the linguistic form to the political circumstances, as it has been shown for Hellenistic Crete (§4).

These possibilities will be exemplified by means of some characteristic instances (§2–4). The present contribution will focus on a set of features which illustrate the coexistence of dialect and supradialectal Koiné in inscriptions written in Thessalian from the Hellenistic period (3rd–1st cts. BC), some of which have been recently published (§§5–7). A closer look at a Thessalian text from Larissa will make evident the difficulties and challenges of a study on the interrelation between dialect and Koiné (§§8,9).

2 Koiné vs. Dialect

Let us remember two characteristic instances illustrating the difficult question of the degree of dialectal authenticity of forms and constructions with dialectal phonetics and morphology.

(i) The formula ν βῶλῆμενος *u bōlēmenus* ‘anyone who likes’ is attested in the Pamphylian dialect:

- (1) Sillyon (1st half 4th ct.), Brixhe 1976, no. 3.13

καὶ $\eta\alpha\iota(\alpha)$ ἀνειῆ καὶ ν βῶλῆμενος ...

kai^h ai(i) a neiē kai u bōlēmenus ...

Attic:

καθέντων ἄγεα ἀνειή καὶ ὁ βουλόμενος

kat^h éntōn^h ágea a neiē^h o kai^h o boulómenos

‘... and might he make sacrileges cease and anyone who likes ...’²

The expression is unique in Pamphylian, a dialect in which there is no attestation of the article, and thus turns out to be dialectal only as to its (rather complicated) phonology. As convincingly argued for by García Teijeiro (1978), the syntagm itself simply reflects the supradialectal formula ὁ βουλόμενος ‘anyone who likes’ (attested since Herodotus).

(ii) Certain particles are attested in dialectal texts in their Attic form and have, therefore, no dialectal relevance. This is the case with coordinative $\tau\epsilon$... καὶ (*te* ... *kai*) attested in decrees written in Thessalian, which has led to endless discussions on the apical of $\tau\epsilon$ (*te*) instead of $\tau\pi\epsilon$ (*pe*), the presumably regular outcome of Proto-Greek $*-k^h e$ in the Aeolic dialects. There is no reason to assume that $\tau\epsilon$ is an exceptional reflex of $*-k^h e$:³ the occurrence of formulas in Koiné which match those of the dialectal texts strongly suggests that Thess. $\tau\epsilon$ is a supradialectal, i.e. not a dialectal form, cf. e.g.:

- (2) Larissa (Thessalian; 217/216 BC), LAR 1.15–6

... ἀλλὰ $\tau\epsilon$ πολλὰ τουν χρεισιμουν εσσεσθειν

... *alla te polla toun k^hreisimoun essest^hein*

Larissa (Attic; 217/216 BC), LAR 1.8

ἕτερά $\tau\epsilon$ πολλὰ τῶν χρησίμων ἔσεσθαι

h^héterá te pollà tōn k^hrēsímōn ésest^hai

‘**and** that there will be **many other benefits**’

² ... “puissent-ils faire cesser les sacrileges, et que celui qui le veut ...” (Brixhe 1976: 179).

³ It is not excluded that the apical reflex of $*-k^h e$ is due to the enclitic character of the particle, but the full matches with Hellenistic formulas make a phonological explanation unnecessary.

The same applies to τε in the supradialectal expression επαινεῖσθαι τε (corresponding to Attic επαινεῖσαι τε) ‘and (it has been decided) to praise...’, frequent in Thessalian decrees.⁴

Equally non-dialectal are the correlatives μέν...δέ in dialectal non-Attic or Ionic inscriptions: if μέν ultimately goes back to **mán* (Dor. μάν [ma:n]), as is currently assumed, it can only conceal a shortened form of *μήν (*mén*), which is actually an Attic-Ionic form.

3 On Cross-Regional, Supradialectal Formulaic Expressions

In Postclassical Greek, the occurrence of formulas and standard expressions, especially in public documents, is a matter of fact.⁵ This can only be accounted for as a reflection of the cultivated prose of a supradialectal phraseology of the Hellenistic chancelleries, which relies basically on “Großattisch”. The formulaic expressions show variations from region to region which may reflect deviations from a basic, more or less complex, pattern, but they do not represent a grammatical or lexical change proper: they simply show the flexibility of basic formulas. Some of the expressions actually occur in (or are taken from) poetry and drama as well (López Eire 1997). All this emerges only once we conventionally translate the dialectal text, which very often appears to neatly represent the local dialect, sometimes even with hyperdialectalisms, into Attic: in this moment what seems to be an almost hermetic dialectal text, with dialectal phonetics and peculiar orthography, turns out to be a piece of Hellenistic prose.

A major problem arises when a formula, with or without variants, occurs only in one given region in both dialectal and Koiné inscriptions and has no semantic parallels in Hellenistic literary or epigraphic texts. The possibility of a regional, specific expression, written originally in dialect and subsequently translated into Koiné remains open. At any event, the reverse scenario, i.e. a formula created in the variety of Koiné of the region and later translated into its local dialect, can hardly be ruled out either. By contrast, when a formula is attested in the works of poets or historians, the possibility of a local origin can safely be excluded.

⁴ For further characteristic instances (CRAN 460.7–9, PHAL.39–41) cf. García Ramón 1987: 146–7.

⁵ Formulaic expressions occur already in the Classical period, even in texts written in the local alphabet, but this falls outside the scope of the present study.

An instructive case is that of the honorific formula (actually a complex of formulas) to express that the thankful acknowledgement of the polis to its benefactors should be visible to all. This formula occurs – to varying degrees of complexity – in a number of regions in dialectal and non-dialectal texts. A sample of four texts allows one to recognize the very same constitutive elements (a–f), placed in varying positions or expressed by synonyms, as well as the absence of one (or two) of them in some cases. Leaving aside the variation in the choice of synonyms or in the word-order, the following five constitutive elements (quoted in Attic) may be stated:

- (a) [DONOR]: ὁ δῆμος ‘the demos, people’ / ἡ πόλις ‘the city’, cf. examples (4), (5), (6) below;
- (b-c) [EVIDENCE – AWARD]: φαίνεται . . . ἀποδιδούς / ἀποδιδούσα *p^hainētai* ‘[lit.] should appear . . . as having granted’, i.e. ‘(it) should be evident that he/she grants’;
- (d) [WORTH, DUE – GRATITUDE]: καταξίας χάριτας ‘worthy gratifications’;
- (e) [DESTINATEE(S)]: τοῖς εὐεργετῆν . . . προαιρουμένοις ‘to those who chose to be benefactors’, cf. example (4), τοῖς αὐτῆς εὐεργέταις ‘to its benefactors’, cf. example (5).

A sixth element (f), commutable with (b–c) in texts (3) and (4), may be added:

- (f) [HONOUR – DECENT, GOOD]: τοὺς καλοὺς καὶ ἀγαθοὺς τῶν ἀνδρῶν τιμᾶν (3) / τιμῶσα *toùs kaloùs kai agat^hoùs tōn andrōn timān timōsa* (4) ‘to honor / honorings those among men who are brave and good’.

A modest sample of four texts clearly shows that simplification of complex sentences and enlargement of simple sentences are both equally possible.

- (3) Priene (Ionic; ca. 200 BC), *IvPriene* 112.12–4
 οπως ουν ο δημοσ φαινηται τους καλους και αγαθους των ανδρων τι
 [μῶν] / κα[ι] αξιας χαριτας αποδιδουσ
*^hopōs oūn ^ho dēmos p^hainētai toùs kaloùs kai agat^hoùs tōn andrōn timōn
 kai aksīās k^háritas apodidouís*
 ‘. . . (so) that it be evident that the demos honors those among men who
 are brave and good, and grant them due acknowledgement’
- (4) Cnossos (Cretan; 2nd ct. BC), *IC I: VIII*, 12.20–24
 οπαι ων και α πολισ των Κνωσιων / φαινηται ευχαριστος ιονσα και τοσ
 καλος καγα/θος των ανδρων vac. αποδεχομενα και τιμιονσα, / τας τε
 καταξιανσ χαριτανσ αποδιδονσα τοισ / ευεργετην αυταν προαιριομενοισ

opāi ōn kai ā polis tōn Knōsiōn / p^hainētai euk^haristos ionsa kai tos kalos kaga/t^hos tōn andrōn vac. apodek^homenā kai timionsa, / tās te kataksiāns k^haritas apodidonsa tois / euergetēn autān proairiomenois

Attic:

ὄπι οὖν καὶ ἡ πόλις ... / φαίνεται εὐχάριστος οὔσα καὶ τοὺς καλοὺς κάγαθους τῶν ἀνδρῶν ἀποδεχομένη καὶ τιμῶσα, τὰς τε καταξίας χάριτας ἀποδιδούσα τοῖς εὐεργετεῖν αὐτὴν αἰρουμένοις

hōpēi oūn kai hē pōlis ... p^hainētai euk^haristos oūsa kai toūs kaloūs kaga/t^hoūs tōn andrōn apodek^homēnē kai timōsa, / tās te kataksiās k^haritas apodidouōsa toīs euergeteīn autēn hairouménōis

‘(so) that it be evident that the polis of the Cnossians is grateful and receives favourably and honors those among men who are brave and good, granting due acknowledgement / gratifications to those who had chosen to be its benefactors’.

- (5) Olympia (Elean dialect; 3rd/2nd ct. BC), Schw. *DGE* 425.16–18 (= Minon 2007, no. 34)

ὄπωρ δε καὶ α πολερ καταξιαῖρ φαῖναται χαριτερ / ἀποδιδῶσσα τοῖρ αὐταρ / εὐεργεταῖρ

opōr de kai ā poler kataksiair p^hainātai k^hariter apodidōssa toir autār euergetair

‘(so) that it be evident that the polis grants due acknowledgement to its benefactors’.⁶

- (6) Olous (Crete, Koiné!; 3rd/2nd ct. BC), *IC* I, XXII: 4B 47

ὄπως δὲ καὶ ἡ πόλις φαίνεται χάριτας ἀποδιδούσα τοῖς αὐτῆς εὐεργέταις

hōpōs dē kai hē pōlis p^hainētai k^haritas apodidouōsa toīs autēs euergetais

‘(so) that it be evident that the polis grants due acknowledgement to its benefactors’.

The formula, specifically variant (5), occurs in Thessaly once, with the exact same structure typified also in a Hellenistic decree from Gonnoi, and with an interesting specific variant (§6).

⁶ The formula occurs with slight variants in texts written in Koiné in other regions, e.g. ὄπως πᾶσι συμφανὲς [ἢ ὅ]τι Ἀκραϊφιεύς δύνανται τὰς καταξίας τιμὰς καὶ χάριτας ἀποδιδόναι / τοῖς ἑαυτῶν εὐεργέταις *hōpōs pāsi sumph^hanēs [ēi hō]ti Akraip^hieūs dú/nantai tās kataksias timās kai k^haritas apodidónai / toīs h^heautōn euergetais*, *IG* VII 4131.30–32 (Acraephia).

The basic structure introduced by ὅπως οὖν/δέ (καί) in (6) and (7) (Cret. *οπαι ων και*) is best reflected in (5) and (6), whereas (6) and (7) reflect enlarged variants of the formula.

Only the taking into account of the whole evidence from all regions case by case could allow for a comprehensive overview of the formulaic complex. The repertoire of standard phrases and their variants is practically unlimited: some work has been done on formulas in proxeny decrees (López Eire 1993 and 1997; Morpurgo Davies 1997; García Ramón 2010), but much remains open to further research.

4 Hybrids and Hyperdialectal Forms

The coexistence of supradialectal Koiné/Koinaí and local dialect in every region may lead to the creation of forms and structures which are not dialectal, but cannot be labelled either as Attic-Hellenistic proper or as reflex of a local Koiná: this is the case with “hybrids” and with hyperdialectal forms. The artificial creation of dialectally shaped texts, as a mere reflection of Attic or supradialectal patterns, is fairly frequent. The procedure has been persuasively set forth by Brixhe (1993) on the strength of 39 Cretan texts (3rd–2nd ct. BC), from 13 poleis, which reflect different levels of competence in the use of the dialect (Brixhe 1993: 42–44 on Lesbian; cf. “évolution” or “contaminations” in Hodot 1990: 265 with references): the author sketches a systematic typification of neutral elements common to the dialect and Koiné, dialectal features, Koiné, cf. Attic <σσ> instead of <ττ>, for example, in *επρασσον* ‘they made’, *θαλασσαν* ‘sea’, specific Koiné, Doric Koiná, hybrid forms, and hyperdialectalisms (see below). He also states that the language of the text is largely conditioned by the nature of its intended recipient: Koiné or mixed dialect are preferably used if the intended recipient is from another city while the dialect is preferred if this is a Cretan citizen.

Some instances of (i) hybrid forms and (ii) hyperdialectalisms in Cretan and Lesbian inscriptions may be remembered at this point:

(i) In Cretan (data from Brixhe 1993: 51–3): *ται βουλαι* ‘to the council’ for Cret. *ται βωλαι* (cf. Attic *τῆ βουλῆ*), genitive plural *πρεσβευταν* ‘of the elders’ (for Cret. *πρεσγευταν* vs. Att. *πρεσβευτῶν*), also the unexpected use of <v> for <σ> in the nominative plural [*κρ*]ινοντεν ‘deciding’ (: Att. *κρίνοντες*), *αμεν* ‘we’ for *αμες* (: Att. *ἡμεῖς*),⁷ *ει κα* ‘if (eventually)’ (for Cret. *αι κα*: Att. *εἰ ἄν*).

⁷ This has its starting point in the coexistence of the Cretan form for the first plural *-μες* *-mes* and *-μεν* *-men*, whence *-ες* *-es* becomes an apparent variant of *-εν* *-en*.

Hybrid forms are frequent in Lesbian texts in the Roman period (Hodot 1990: 114), e.g. the spelling <ει> for /i(:)/ in the accusative plural ταις ... διαταξεις ‘the dispositions’, αλλαις ταξεις ‘other dispositions/arrangements’, which reflects the coexistence of Lesb. τάξις vs. Attic τάξεις (2nd ct. AD). The same applies to Delphic (2nd ct. BC), where the conjunction εφ’ωτω reflects a contamination of Delph. εφ’οτω (13x) and Hellen. ἐφ’ώτε (103x), ἐφ’ώ (5x) as in (7) (Lejeune 1940: 18):

(7) Delphi (156/5 BC)

... **εφ’ωτω** ελευθερα **ειμεν**

... *ep^h’ ōtō eleut^herā eimen*

Attic:

ἐφ’ώτε ἐλευθέρα εἶναι

ep^h’ h’ōite eleut^héra eînai

‘**under the condition that** it remains free’

(ii) Hyperdialectal forms in Cretan inscriptions: spellings with apparently dialectal <α> vs. <η>, <ω> for <ου>, and <θθ> for <σσ> (of different origins), e.g. gen.sg. ειρανας ‘(in period of) peace’ (: ιρηνας), Φετεθθι ‘for/in years’ (: Φετετσι) (cf. Brixhe 1993: 53–6), or βωλομαι ‘I will’ created based on Att. βούλομαι instead of Cret. δηλομαι ‘I will’.

Hyperdialectal <α> for <η> is also frequent in Lesbian, cf. εφαβος ‘adolescent’ (: ἔφηβος), εφαβαρχον ‘overseer of the youth’ (without psilosis), κασιγνατον ‘brother’ (: Hom. κασίγνητον). An instructive case is the use of <αι> for <η> (for Att. */a:/ or */e:/) in Lesbian:

(8) Mytilene (1st ct. BC), *IG 12: 2,222.4–5*

αποκατασταισαισαν τα ιρα

apokatastaisaisan ta ira

Attic:

ἀποκαταστήσασαν τὰ ἱερά

apokatastésasan tà^hierá

‘**having re-established** the rituals’

This hypercorrect dialectal form may have been created on analogy to the obscure form αιμισον ‘half’ as in (9):

(9) Mytilene (ca. 426 BC), *IG 12: 2,1.4–5*

ταις αρχαις πλεας των **αιμισεων**

*tais ark^hais pleas tōn **aimiseōn***

Attic:

τὰς ἀρχὰς πλείους τῶν ἡμισέων

tàs ark^hàs pleíous tôn ^hēmiséōn

‘the magistrates in number greater than more than to **half**’

This example involves an unetymological /ai/ for *ē (**sēmitu-* ‘half’, cf. Att. ἡμισυ): the match Lesb. <αι> : Att. <η> makes possible an inverse spelling <αι> for <η> (Hodot 1990: 71). The same applies to the unexpected geminates of χρηματα (Cyme, 3rd ct. BC: τα ιφα χρημμα[τα] ‘the religious matters’, μεγαλλα [ι]ς ‘with great/big’ (2nd ct. AD), ισσοθειοισι (1st ct. BC – 1st ct. AD), created artificially on the assumption that geminates are characteristically Lesbian in view of the correspondences Lesb. <μμ>, <λλ>, <σσ> vs. Att. <μ>, <λ>, <σ> in some phonetic contexts (/Vmm/, /Vll/, /Vss/ vs. /V:m/, /V:l/, /V:s/). A similar situation is reflected in Thessalian inscriptions; cf. §7.⁸

5 Koiné and Dialect on Inscriptions Written in Thessalian (3rd–1st ct. BC)

The dialect inscriptions from Thessaly richly exemplify the procedures sketched above (§§2–4). Some instances exemplifying it will be discussed in what follows.

(i) Forms with spectacularly Thessalian shapes turn out to conceal common terms of Postclassical Greek, which may occur in other regions or in late literary texts. This is the case of Thess. εἰβοκία, which, in my opinion, has to be interpreted as *ἐπιτόκια (neuter plural) ‘unshorn small animals’ (García Ramón 2007a: 104), in a fragmentary stele found in the Theater of Larissa (end of 3rd ct. BC; Tziafalias & Bouchon & Helly 2016).⁹ The extreme dialectal character of the text is evident in the light of the Attic version I add below.

(10) Larissa, Helly & Bouchon (2007: 1.1–3)

και ορμαμενουν τελεσσειν **εἰβοκία** δυα του μεν Δι ορσεν, τα μα
 Εννοδια θειλυ, και **οκκε** πενψεσθειν **μελλει** εἰβοκία δυα δομεν και
 [οι]ν θειλειαν μελαιναν . . .

*kai^h ormāmenoun telessein epbokia dua tou men Di orsen, ta ma
 Ennodia t^heilu, kai^h okke penpsest^hein mellei epbokia dua domen kai
 oin t^heileian melainan*

⁸ The simplification of regular geminates in Lesbian, e.g. genitive μηνος (*recte* μηνως : Att. μηνός), σταλα (*recte* σταλλα : Att. στήλη) reflects an inverse spelling (Hodot 1990: 91).

⁹ Bruno Helly kindly shared a first version of this text with me during a stay in Lyon in July 2001.

Attic:

καὶ ὀρωμένων τελέσαι **ἐπιπόκια** δὺα τῶ μὲν Διὶ ἄρρεν, τῇ δὲ Ἐν(ν)οδία θῆλυ καὶ ὅταν πέμψεσθαι μέλλῃ ἐπιπόκια δὺα δοῦναι καὶ ὄιν] θήλειαν μέλαιναν . . .

καὶ ἠορωμένων τελέσαι **epipókia** dúa tōi mèn Diī árren, tēi dè En(n)odíai t^hēlu καὶ ἠόταν πέμψεστ^hαι **méllēi** epipókia dúa doúnai kai óin t^héleian mélainan . . .

‘and when they start performing? the ritual, two **unshorn small animals**, one male for Zeus, and a female for Ennodia, and **whenever they were about to** start the procession they should give two unshorn small animals and a black female sheep’.

This text is very instructive in many respects. The form ἐπιπόκια (< *epi-pókia)¹⁰ in line 1 is the diminutive of the possessive compound ἐπί-ποκος ‘having his/her fleeces [οποκος on’), which occurs in a *lex sacra*, i.e. the calendar of offerings in Cos (11), in a fully similar context:

(11) Cos (1st half 2nd ct. BC), IG XII 4, 280 (: *SGDI* 3731), 1.5–6

[Εκ]αται εμ πολει . . . / . . .] **επιποκον** τελε[αν

[Ek]atāi em polei . . . / . . .] **epipokon** tele[ān

‘to Hekate . . . an **unshorn**, full-grown (sheep)’

The epithet τελεαν (acc.) refers to οιν ‘sheep’ (mentioned in line 4). It must be noticed that in line 3 in (13), we read μέλαιναν (not †μελανναν from *mel-nīa-), with fully Attic spelling.

The expression οκκε πενψεσθαι μέλλει ‘whenever they were about to start the procession’ is, in spite of its dialectal shape, the same as in Attic and other Greek dialects, namely οκκε with the subjunctive of the main verb (cf. Attic ὅτε ἄν, ὅταν). The conjunction οκκε, being the outcome of *^hót-ke from *^hota ke (parallel to the Attic ὅταν with the subjunctive), is fully dialectal.¹¹ Thus, Thessalian ὄκκε (*^hóta ke) with the subjunctive matches the Lesbian construction with ὄτα κε with the subjunctive both phonetically and syntactically (12),

10 Thess. Επιπόκια (*ep-pokia/, with apocope of ἐπι^ο) shows a spelling <πβ> for /pp/, which fully matches <πβ> in the patronymic Κοπβιδάιος IG 517.59 (implying a name *Κοπιδᾶς /Koppid-/, with a characteristically onomastic geminate), cf. κοπίδᾶς ‘merchant of κοπίδες and κοπίς ‘curved sabre’ (Eur. *El.* 836–837 Φθιάδ’ ἀντὶ Δωρικῆς / οἷσει τις ἡμῖν κοπίδα ‘he will bring us a sabre of Phthia instead of one from Doris’, cf. García Ramón 2007a: 104–105).

11 The existence of ὄτα in Thessalian, as in Lesbian (ὄτα), is assured by one occurrence of ποτα (: Att. ποτε) in Crannon (García Ramón 1987:105). Thess. and Lesb. ὄτα imply the existence of ὄτα /ὄτα, τότα, ποτα, πότα in both dialects.

while there is only a syntactic correspondence in (Ionic) Attic ὅταν or Doric ὄκκα (from *ὄκα κα).

- (12) Nasos (4th ct. BC), *IG* 12:2.645.a33–4

και **οτα κε** α πολις **ιροποιηται** . . . δ[ιδω]σθω

kai ota ke ā polis iropoiētai . . . d[idō]st^hō

‘and **whenever** the polis **acts as hieropoios** (overseer of sacred matters)’

(ii) Some subordinate conjunctions are actually Attic with dialectal colouring: completive διεκι (: Att. διότι, i.e. ὅτι), “completive-final” οπουσ κε with the aorist subjunctive (: Att. ὅπως ἔν) with verbs of purpose and decision (13), also temporal ουσ ‘when’ (: ὡς) with aorist (or imperfect), οπει κε ‘when’ (: ἐπεάν) with subjunctive, comparative ουσ ‘as’ (: ὡς), καθουσ (: καθώς),¹² also οι ‘where’ (: Att. οὔ) in the great inscription from Scotoussa (14).

- (13) Phalanna (197–185 BC), *PHAL.* 29–31

επιμελες μα γενεσθου / . . . **οπουσ** τονε το ψαφισμα . . . / . . . <αν>**τεθει**

epimeles ma genest^hou / . . . ^hopous tone ta psāp^hisma . . . / . . . <an>tet^hei

‘and **it must be cared to that** the decree **be exposed**’

- (14) Scotoussa (3rd ct. BC), *SCOT* A72, B60

επειδει πλειουν τοπος **ειε** / δαμοσσοσ οι κεχορτισται . . . οι τ’εχορτισθει

epeidei pleioun topos eie / dāmossos oi kek^hortistai . . . oi t’ ek^hortisthei

‘given that there was a broader space that is public, in which an enclosure is/was established’.

(iii) Syntactic structures, which in fact reflect a conflation of dialectal and Koiné patterns, may be considered specifically Thessalian. An illustrative instance of this is the subordinate clause with ουσ τε with subjunctive, attested in decrees, which occurs in two different constructions that have no parallel in other dialects. They are:

(a) completive-final clauses with φροντισα- . . . ουσ τε with subjunctive ‘take thought that that’:

- (15) Larissa (ca. 160–150 BC), *LAR* 2.28.45 (also *LAR* 4. 21–22; ca. 179–169 BC)

. . . **φροντιξειν** τοσ ταγοσ **ουσ τε δοθει** αυτου α πολιτεια

. . . *p^hrontiksein tos tagos ^hous te dot^hei autou ^hā politeiā*

‘that the tagoi take thought that citizenship be granted to him’,

¹² Cf. Méndez Dosuna 1999 [1997] (rightly against the alleged “local” sense of the conjunction).

- (16) Crannon (mid of 2nd ct. BC), CRA 30–31

τοσ ταμιας **φροντι/σαι ους τε** . . . / **γενειθει** τα πολι α δοσις
tos tamias p^hronti/sai^hous te . . . / geneit^hei tā poli^hā dosis
 ‘that the treasurer take thought that the payment be done . . .’

The construction ους τε with subjunctive reflects an interference of the type οὐς / ὅπως κε with subjunctive (: Attic ὡς / ὅπως ἄν with subjunctive) with consecutive ὥστε with infinitive, depending on a verb of intention, cf. μελειθειμεν ‘to take care of’ (Attic μεληθηῖναι) in (17) or ψαφισασθαι ‘to decide by decree, resolve’ (Attic ψηφίσασθαι) in (19) or φροντισειν ‘consider’ in (20) cf.:

- (17) Larissa (3rd ct. BC), LAR 461a.10 (also 461a.37)

μελ]ειθειμεν μα τ[ος ταμιας, **ους κε** τονε / το ψαφισμα **ονγραφει** εν κιονα . . .
meli^hei^heimen ma t[os tamias, ^hous ke tone / to psāp^hisma ongrap^hei en kiona . . .
 ‘and that the treasurers take care that the decree be recorded on the stele’

- (18) Larissa (ca. 217/6 BC), LAR 1.14

ψα[φ]ιξασθει[ν α]μμε ο(υ)ς κε . . . **δοθει** α πολιτεια
psa[p^h]iksast^hei[n a]mme^ho(u)s ke . . . dot^hei^hā politeiā
 ‘that we resolve that citizenship be granted’

- (19) Phalanna (2nd ct. BC), PHAL 13–14

φροντισειν ους κε δοθει αυτοις πολιτεια κατ τον νομον . . . **και** συμφανες
ει απαντεσσι διεκι
p^hrontisein^hous ke dot^hei autois politeiā kat ton nomon . . . kai sump^hanes ei^hapantessi dieki
 ‘. . . to be provided for that citizenship be granted . . . and be evident to all . . .’

(b) consecutive clauses proper (i.e. a free adjunct to the main clause):

- (20) Crannon (mid of 2nd ct. BC), CRA 14–15

ους τε . . . ες παντων **ε/γλυθει** τουν δ[α]νειουν
^hous te . . . es pantoun e/glut^hei toun d[a]neioun
 ‘so that he be set free from all loans’

The construction of ους τε with subjunctive turns out thus to be a Thessalian peculiarity which came into being in the course of the replacement of ὡς τε ^hōs te by ὅπως in Postclassical Greek (cf. Lejeune 1940: 14 fn. 21; García Ramón 1993: 135–136).

6 Koiné and Dialect n in Inscriptions Written in Thessalian: The Formulaic Expressions

The formulaic expressions which occur in the Thessalian decrees provide evidence for different alternatives, which actually apply to all regions at different scale.¹³

6.1. A first possibility is that the form(ula) attested in Thessalian matches formally one or more counterpart(s) attested in Attic and in other dialects and/or in literary Greek, or reflects literary patterns (no counterpart in Attic and in other dialects). In this case we assume that the Thessalian form(ula) may well reflect a supradialectal pattern. This is, for example, the case with Thess. (και) αυτου και εσγονοις ‘for him and his descendants’ (: Att. αὐτῷ καὶ ἐγγόνοις) and of εμ πολεμου και εν ιρεινα ‘in war and peace’ (: Att. ἐν πολέμῳ καὶ ἐν εἰρήνῃ) and with the supradialectal complex formula discussed in §3. The latter is found in two variants in Thessaly: (i) a Koiné variant which perfectly fits into the standard pattern (21), or (ii) a specific Thessalian variant διεκι ... περραται ... αττιδουμεν (: Att. *διότι πειρᾶται ἀποδιδόναι), ‘that (the demos) tries to grant’ (22):

(21) Gonnoi (200 BC), Helly 1973: no. 42.14–18:

... ἴ/να οὖν κ[αὶ] ὁ δῆ[μος] ἡμῶν / [φραίνηται] ἀ/[ποδιδόναι] τὰς καταξίας χά/[ριτας τοῖς] εὐεργετοῦσιν.

... ^hi/na oûn k[ai] ^ho dê[mos] ^hēmôn [p^hainētai] a/[podidónai] tàs kataksiās k^há/[ritas toîs] euergetoûsin.

‘... **in order that it be evident that** our demos **grants** due acknowledgement / gratifications to his benefactors’.

(22) Larissa (ca. 170/169 BC), LAR 4.21–24:

... ουστε ... / ... συμφανες ει παν/τεσσι **διεκι** ο δαμος ο Λαρισαιουν **περ [ρ]ατει** τοις ορθους / οστρεφομενοις καταξιας τιμας και χαριτας **αττιδο [υ]/μεν...**,

... *ouste ... / ... sump^hanes ei pan/tessi **dieki** o dāmos ^ho Larisaioun **per [r]atei** tois ort^hous / ostrep^homenois kataksiās timās kai k^haritas **atdid[o]/umen...***

¹³ The Thessalian material deserves to be treated exhaustively. Some work has been done recently (García Ramón & Helly 2007: 81–89 on the evidence from the decrees of Mopsion, 3rd–2nd ct. BC, also García Ramón 2008, 2010).

‘... so that it be evident to all **that** the demos of the Larissaeans **tries to grant** due honors and acknowledgement/gratifications to those have dwelt and conducted correctly ...’.¹⁴

6.2. A second possibility is that the form(ula) is exclusively attested in Thessaly,¹⁵ both in dialect and in Koiné,¹⁶ and is clearly different from (and in opposition to) its semantic counterpart(s) with identical meaning in Thessalian Koiné, or in Hellenistic Koiné, or in other dialects, or in literary Greek. In this case, three alternative possibilities remain open:

- i. The Thessalian form(ula) has no counterpart either in Attic and in other dialects or in literary Greek, i.e. there is no possibility of comparison: it may well reflect a local pattern. It is not easy to determine whether it is a dialectal formula translated into the Koiné of Thessaly or vice versa. This is the case with φυλας ποιας κε βελλουνθει(ν) ‘of the tribe to which he/they would wish to belong’ and ο φαμενος απειλευθερουσθειν ‘(the one) who declares to have been set free’.
- ii. The Thessalian form(ula) has a counterpart in literary Greek, or reflects literary patterns (and has no counterpart in Attic and in other dialects): it may well reflect a supradialectal pattern. This is the case with δρασαντ- και παθοντ- ‘being agent and patient’.
- iii. The Thessalian form(ula) is clearly different from (and in opposition to) one or more semantic counterpart(s), with identical meaning, attested in inscriptions in Attic and in other dialects, or in literary texts. The form(ula) may well reflect a specifically dialectal pattern, for instance, κεν ταγα κεν αταγια ‘both in war and in peace’, εμ πολεμου και εν φρινα ‘both in war and in peace’ (: Att. ἐν πολέμῳ καὶ ἐν εἰρήνῃ), (και) αυτου και γενεαι ‘to him and to his offspring’, (και) αυτου και εσγονοις ‘to him and to his descendants’ (: Att. καὶ αὐτῶ/αὐτοῖς καὶ τοῖς ἐκγόνοις).

14 Cf. also Larissa (ca. 171 BC), *SEG* 31: 574.12–16: ... ουσ[τ]ε ... / ... συμφανε[ς ει παν]/τεσσι **διεκ** [ι ο δαμο]ς Λαρισσαιουν [π]ερ του[ν ante]/χ[ο]μενουν τουν πολιταν **περρατει** και τι[μας]/ και χαρ [ιτας **ατδι]δουμην** τας αξιας ... ^hous[te] ... / ... *sumph^hane[ς ei pan]/tessi **diek**[i ^ho dāmo]s Larisaïou[n p]er tou[*n* ante]/k^h[o]menoun toun politān **perratei** kai ti[mās]/kai k^har[itas **atdi]doumen** tās aksias* ‘... so that it be evident to all **that** the demos of the Larissaeans **tries to grant** due worthy honors and acknowledgement / gratifications to those having shown solidarity with our citizens’.

15 Any given formula which is attested only in Thessaly may turn out to have been in use in other regions in the light of new inscriptions.

16 A form(ula) attested *only in Thessalian dialect*, but not in Thessalian Koiné, could well reflect a specifically dialectal pattern. I must confess that I cannot mention a sure instance of this case, as the formulas known to me all have a counterpart in texts in the Koiné of the region.

As to (i), the formula φυλας (. . .) ποιας κε βελλειται / βελλουνθειν has three variants (23–25):

(23) Larissa (3rd ct. BC), 513.6

. . . φυλας **ελεστειν** ποιας κε βελλ/ουνθειν . . .

. . . *p^hul/ās elestein poiās ke bell/ount^hein* . . .

Attic:

φυλῆς **ἐλέσθαι** ὁποίας ἂν βούλωνται

p^hulēs ^helésthai^h hōpoiās àn bouílontai

‘should they choose of which tribe they would (be member)’

(24) Mopsion (2nd ct. BC), MOPS no. 5.12–13

. . . εμμεν φυλας **ελο/μενου** ποιας κε β[ελλ]ειται . . .

. . . *emmen p^hulās elo/menou poiās ke b[ell]eitei* . . .

Attic:

φυλῆς **ἐλομένω** ὁποίας ἂν βούληται

p^hulēs ^heloménōi^h hōpoiās àn bouílētai

‘. . . after **having chosen** of which tribe he would (be member) . . .’¹⁷

(25) Mopsion (2nd ct. BC), MOPS no. 7.9–10

και φυλας ποιας κε βελλειται – [ε]μμεν

kai p^hulās poiās ke belleitai –[e]mmen

Attic:

καὶ φυλῆς ὁποίας ἂν βούληται, εἶναι

kai p^hulēs hōpoiās àn bouílētai, eînai

‘and should he be member of the tribe he would be (member)’¹⁸

The type of (25) is attested in texts in Koiné from different Thessalian poleis, for instance,¹⁹ in Argousa (2nd ct. BC), *SEG* 29: 500.2: και φυλης ειναι ης αν βουληται ‘id.’

The manumission formula ο φαμενος απειλευθερουσθειν ‘(the one) who declares to have been set free’ (with indication of the manumitter) one who manumits and its variants (all 2nd/1st ct. BC) is well attested, with some variants, in

¹⁷ Cf. also Larissa (217/6 BC), *LAR* 1.20 . . . φυλας **ελομε/νοικ εκαστου** ποιας κε βελλ/ειται ‘. . . after **having chosen** . . .’ (: Att. *φυλῆς ἐλομένοις ἐκάστῳ ὁποίας ἂν βούληται).

¹⁸ Cf. also with 3rd person plural βελλουνθαι (: Att. βούλωνται) in MOPS no. 8.10 και φυλας ποιας κε **βελλουνθαι**.

¹⁹ Also *SEG* 502. 8 (Atrax 8: ca. 187 BC), 33: 448.3–4 (Atrax 9: 3rd/2nd ct. BC); 36: 549 (PHARS, 300–250).

dialect and in Koiné:²⁰ ο φάμενος απειλευθερουσθαι απο with genitive (for the manumitter) beside ὁ φάμενος ἀπηλευθερώσται ὑπὸ with genitive (for the manumitter).²¹ In other regions, other verbs and formulas are used in manumissions (ἀφέθη ἐλεύθερος ‘was released/set free’ in Calymna and Cos (e.g. οἱ ἀφρωθέντες ἐλεύθεροι / καὶ ἀνατεθέντες ἱεροῖ τῶι / Ἄσκληπιῶι ‘those who have been set free and set up an offering in the temple of Asclapios’: . . . οἱ ἀφρωμένοι / ἐλεύθεροι καὶ ἀνατεθέντες ἱεροῖ τῶι / Ἄσκληπιῶι in Bouthrotos in Illyria, also active ἀφίεντι ἐλεύθερον ‘[lit.] they release (him) free’ and οἱ ἀφέντες ἐλευθέρους ‘[lit.] those who have released (them) free’). This suggests that the formula with ὁ φάμενος is a specifically Thessalian expression, either dialectal or of the Koiné in the region, but the Thessalian character of the formula can only be established with certainty once all the evidence for phraseology in Greek manumissions has been taken into account – which goes beyond the scope of the present contribution.

As to (ii), the antithetic expression consisting of και παθοντ- και δρασαντ- ‘both passive and active subjects’ (both aorist participles) in different cases (and preceded by ἰσοτιμιαν ‘equality of rights’) is attested in Larissa and Mopsion in decrees written in dialect (3rd–2nd ct. BC), namely in dative plural (και παθοντεσσι και δρασαντεσσι ‘to both passive and active subjects’²² Larissa 513.3–4, MOPS no. 2.17–18), in accusative and dative singular (και παθοντα και δρασαντα MOPS no. 4.7–8, και πα[θο]ντι και δρασαντι MOPS no. 5.10–11, no. 7.10–11 ; also no. 6.2–3 [fragmentary]). The expression may be a calque from the Koiné formula και παθοῦσι και δράσασι(ν) (Atrax, Matropolis).²³ In fact, the antithesis παθοντ- . . . δρασαντ- has, at least, literary parallels, also with παθοντ- . . . ποιησαντ- (and perfect πεποιηκοτ-), e.g.:

20 With indicative ἔφα (1x: ος εφα <α>πει/λευθερουσθαι), with a passive participle, either aorist (απελευθερεσθεν[σα], απελευθερεσθεντες : Att. απελευθερωθεισα, οἱ απελευθερωθέντες) or perfect (Att. οἱ απελευθερωμένοι), also with indicative (Att. [ῶ]ἐλευθερώθη), cf. García Ramón (2008: 204–205), Minamimoto (2015).

21 The middle inflection of φάμενος (cf. Hom. φάτο ‘he said’) was isolated in Greek prose and inscriptions till the attestation of φατοι in an Arcadian decree (Mantineia, early 4th ct. BC: sympoliteia between Helisson and Mantineia: SEG 37: 340.21–2), cf. Hom. (ἐ)φάμην, (ἐ)φάτο ‘he said’ . . . beside (ἐ)φη ‘he said’.

22 “dans la soumission à l’autorité et dans l’exercice de l’autorité (scil. le fait de jouir de ses privilèges)” (Helly 1970: 184; García Ramón et al. 2007: 85).

23 I Atrax 10.4/5 (2nd ct. BC) [και δρα[σασι] ‘to those who act’) (Helly et al. 2016).

(26) Arist. *EN* 9.7.5–6 (1168a)

χαίρειν ἐν ᾧ τοῦτο, τῷ δὲ παθόντι οὐδὲν καλὸν ἐν τῷ δράσαντι, ἀλλ' εἴπερ, συμφέρον. . . τῷ μὲν οὖν πεπονηκότη μένει τὸ ἔργον (. . .), τῷ δὲ παθόντι τὸ χρήσιμον παροίχεται

k^háirein en^hoí tou̓to, tōi dē pat^hónti oudèn kalòn en tōi drāsanti, all' eíper, sum^héron. . . tōi mèn oún pepoiēkóti ménei tò érgon (. . .), tōi dē pat^hónti tò k^hrésimon paroí^hetai

'for the one who experienced (the benefit) there is nothing beautiful in the one who did it, but only some advantage . . . for the one who has done it/the beneficiary, his work remains . . . but for the recipient, the advantage (of the benefit) passes'.²⁴

As to (iii), the well-known formula κεν ταγα κεν αταγα²⁵ in the so-called inscription from Sotairos (THEΤ, 5th ct. BC) is specifically Thessalian: it is the counterpart of Att. ἐν πολέμῳ καὶ ἐν εἰρήνῃ *en polémōi kai en eirēnēi* 'both in war and in peace', which occurs in texts in Koiné from Thessaly (e.g. ἐμ πολ/[εμω]ι και εν ειρη[νη]ι . . . MOPS no. 9.7–8) and, with mere local colouring in decrees written in Thessalian, e.g. ἐμ πο(λ)/εμου και εν ιρεινα (MOPS no. 2.12–13), or, in genitive, και πολεμοιο και ιρεινας (MOPS nr 8. 9 : Att. και πολέμου και εἰρήνης).

Another interesting formula is that in (27), which has, as far as I know, no direct match in the Thessalian texts:

(27) Mopsion, MOPS no. 2.11–12

(και) αυτου και γενεαι

(kai) autou kai geneāi

'for him and his descendance'

In Thessalian the regular form is (και) αυτου και εσγονοις (e.g. MOPS no. 5.9–10), which perfectly reflects the pandialectal formula καὶ αὐτῷ καὶ ἐγγόνοις (actually attested in MOPS no. 9.5 *et al.*), attested also in the literary texts, e.g. (28):

²⁴ Cf. Eur. Fr. 12.227 δρᾶσαι δὲ μηδὲν εὖ παθόντα πρὸς σέθεν 'and to do nothing if I am well off from you', Pl. *Leg.* 833e ἃ δὲ τὸν μὴ παθόντα ἢ ποιήσαντα δεῖ νικᾶν καὶ ὅποσα. . . 'concerning what is necessary for the experiencer or the agent to be victorious, and to what extent . . . ' (also Arist. *EN* 1241a *et al.*).

²⁵ On Thess. ταγά as "service armé" cf. Helly (1995: 33–5).

(28) Lycurg. in *Leocr.* 88

τῷ δὲ Κλεομάντει τῷ Δελφῷ ἡ πόλις **αὐτῷ τε καὶ ἐκγόνοις** ἐν Πρυτανείῳ
αἰδίων σίτησιν ἔδοσαν

*tōi dē Kleománteī tōi Delphōi hē pólis **autōi te kai ekgónois** en Prutaneíōi
aídion sitēsīn édosan*

‘to Cleomantes the Delphian gave the polis, **to him and to his descents**,
public maintenance for ever in the Prytaneion’.²⁶

Thus, the formula *καὶ αὐτοῦ καὶ γενεᾶ* turns out to be specifically Thessalian, even if the term *γενεά* ‘family, descent’ is not (it is attested in Homer, Ionic, Attic as well).

7 Koiné and Dialect on Inscriptions Written in Thessalian: Hybrid Forms and Hyperdialectalisms. Two Instances

“Hybrid” forms, which are neither Thessalian nor Attic nor of Koiné, and hyperdialectal forms could occur in every text. In each case, they have a different motivation: they may be due to a deliberate attempt to dialectalize the text, or to a lack of dialectal competence of the lapicide, but also simply to a distraction. Two characteristic instances are provided below

(i) Nom.pl. *ακαίνναι* (*ἄκαινα* ‘sting, thorn’, used as a technical term) in an Archaic dedication from Magnesia (29) written in dialect, is an instance of hybrid form:

(29) Magnesia (5th/4th ct. BC), *SEG* 37: 49

Θέμιστι *π/ροστειθιδ/ια* τοι *ιερο/ι ακαίννα/ι δεκα* πῶς.

*T^hemisti p/rosteit^hid/ia tōi ^hierō/i **akainna/i deka** pōs*

Attic:

Θέμιστι *προσθηθίδια* τοῦ *ἱεροῦ ἄκαιναι δέκα* (καὶ) πούς

T^hémisti prostē^hídiā tou^hierōū ákainai déka (kai) pous

‘for Themis, as the space in front of the façade of the temple, 10 *ákainai* (and) 1 foot’ (García Ramón & Helly in García Ramón 2007a: 106–108).

²⁶ Cf. also Pl. *Leg.* 715a ... ὥστε ἀρχῆς μηδ’ ὀτιοῦν μεταδιδόναί τοις ἡττηθεῖσιν, μήτε αὐτοῖς μήτε ἐκγόνοις ‘...so that they did not give the least bit of power to the defeated ones, neither to them nor to their descents’.

The term ἄκαινα used as a measure (a ten-foot rod)²⁷ is attested in this very form in the dialectal decree (30) and at least in one text in Koiné (31):

- (30) Scottoussa (ca. 197–185 BC) SCOT B21.43

ακαιναι εξ και πῶς
akainai^heks kai pōs
 ‘six *akainai* and a foot’

- (31) Larissa, (2nd/1st ct. BC) SEG 43: 283

τερμων των ταφων ακαιναι εβδομηκοντα τεσσαρες ημυσυ
termōn tōn tap^hōn akainai^hebdomēkonta tessares^hēmusy
 ‘the border of the thombs – seventy four ἄκαιναι and half’.

The spelling ακαινναι can only be a compromise between dialectal *ακανναι and Att. ἄκαινα (*ακη-ια-).

(ii) The preposition εννεκα ‘on account of, because of, in order to’ (: Att. ἔνεκα), with non etymological <vv> is a prominent instance of hyperdialectal form in Thessalian, which occurs (32) on a stone with three decrees, two of them in dialect (lines 1–34, 35–56):

- (32) Larissa (2nd ct. BC), SEG 50: 6.13

εννεκα του σχολαξειν
enneka tou sk^holaksein
 Attic:
 ἔνεκα τοῦ σχολάσαι
^héneka tou^hsk^holásai
 ‘on account of his being at leisure’

The syntagm is obviously Attic (cf. ἔνεκα τοῦ σῶσαι ‘in order to save’ Dem. 60.27), but its phonetic and morphological shape is dialectal, like the whole decree in which it occurs, whereas the double <vv> of εννεκα is surely artificial. It does not conceal the phonological outcome of a putative *-νη-, which is in fact not a correct reconstruction, inasmuch as Myc. *e-ne-ka*, not *te-ne-we-ka* unmistakably points to **enekḡ*, not to **enḡekḡ*. Moreover, even if **enḡekḡ* had really existed in Proto-Greek, it would have yielded εννεκα in Thessalian, with dropping of /w/ (as in well attested Thess. προξενος *proksenos* ‘public guest’, κορα

²⁷ Cf. Schol. *ad A R. 3.1323* ἄκαινα δέ ἐστι μέτρον δεκάπουν Θεσσαλῶν εὔρεμα ‘... is a measure of the feet, an invention of Thessalians’.

kora ‘young woman’ from **ksenuo-*, **koruā-* respectively). It follows that the form written εννεκα in (32) is the Thessalian(ized) version of Hom.Ion. εἴνεκα (with <ει-> noting the compensatory lengthening of /e-/) with a hyperdialectal spelling (García Ramón 2007b), which is as artificial as that of Lit.Lesb. ἔννεκα (Alc. fr. 43, Sa. fr. 67a.5): nonetymological geminates (<μμ> for /m/, <νν> for /n/) are characteristically frequent in inscriptions in Thessalian, e.g. μναμμειον 427.3 (Pherai) or μναμμας LAR 6.19, [χρ]εμμματα SEG 33: 460.13 (LAR), infinitive κατθεμμεν LAR 1.44 beside κατθεμεν LAR 1.21, or the theonyms Δαμματερι 1235.1 (PHAL), Δαμματερος 1235.16 instead of Thess. μνᾶμ-, χρεμματα, ὀθεμεν, Δᾶμᾶτερ- respectively. Very instructive is the case of ἐνόδιος ‘in/on the way’, ἔνοδος ‘entry’ which occur in a regulation of sanctuaries in LAR 3 (Helly 1970a): the appellative is written without a geminate (genitive plural ενοδουν LAR 3.13 : Att. ἐνόδων), the divine by-name with a nonetymological geminate, cf. dat. Εννοδιαι LAR 3.28 (: lit. Att. Εἰνοδία, cf. Hom. *Il.* 16.260 εἰνοδίοις; εἰν- by metrical lengthening). Nonetymological geminates have been created, or at least written, on the model of “lautgesetzlich” geminates of the type εμμεν ‘to be’, μειννος ‘(in the) month’, περρατει ‘he attempts’ (: Att. εἶναι, μηνός, πειράται) for */esmV-/, */me:nsos/, */perja(:)/. Whether nonetymological geminates reflect a constitutive feature of the dialect or an occasional misspelling, which reflects the aim of giving a local colouring, may remain open at this point.

8 A Thessalian Text

The following text reproduces the first letter of King Philip V of Macedonia to the Larissaeans in a decree of registering of new citizens (the so-called great inscription of Larissa IG IX 2, 517: LAR 1, 217/6 BC). The letter is written in Attic Koiné (lines 3–9) and is paraphrased in *oratio obliqua* in dialect (lines 11–17). For the sake of clarity, both texts are presented conventionally in 9 lines, in dialect and in Koiné (33b), according to a cola-based structure, which makes it possible to determine the matches between dialect and Koiné word by word, followed by the translation of the Thessalian version.²⁸

A distinction will be made between (A) elements with dialectal appearance (or dialectal colour) reflecting contact with the Koiné (marked underlined) and (B) elements which turn out to be irreducibly dialectal (marked in **bold**)

²⁸ For our purposes, it is unnecessary to enter into the detail of the dialectalisms of the Thessalian version, which is carefully written (the only exception being the surprising spelling <ος κε> instead of ους κε : Att. ὡς ἄν).

(33a) Larissa (217/6 BC)

- 1 ... · Φιλιπποι τοι βασιλειος γραμματα πεμφαντος ποτ τος ταγος και ταν πολιν
διεκι Πετραιος και Αναγκιππος και /Αριστονοος, ους ατ τας πρεισβειας
εγενονθο,
- 3 ενεφανισσοεν αυτου **ποκκι** και α αμμεουν πολις διε τος πολεμος πο/
τεδεετο πλειονουν τουν κατοικεισονται·
μεσποδι κε ουν και ετερος επινοεισομεν αξιος τοι παρ' αμμε /
πολιτευματος,
ετ τοι παρεοντος κρεννεμεν ψα[φ]ιξασθει[ν α]μμε οσκε τοις κατοικεντεσσι
- 6 παρ αμμε Πετθ[α]λουν και τουν αλλουν Ελλαουν δοθει α πολιτεια·
τοινεος γαρ συντελεσθεντος και συνμεναντουν παν/τουν διε τα
φιλανθρουπα
πεπειστειν αλλα τε πολλα τουν χρεισιμουν εσσεσθειν και ευτου και τα
πολι και / ταν
- 9 χουραν μαλλον εξεργασθεισεσθειν·
- 1 ... · *P^hilippoi toi basileios grammata pempantos pot tos tagos kai t^hn polin
dieki Petraios kai Anagkippos kai / Aristonoos, ^hous at t^hs preisbeias
egenont^ho,*
- 3 *enep^hanissoen autou **pokki** kai ^ha ammeoun polis die tos polemos po/te-
deeto pleionoun
toun katoikeisontoun:*
mespodī ke oun kai ^heteros epinoeisoumen aksios toi par' amme /
politeumatōs,
et toi pareontos krennemen psā[p^h]iksast^hei[n a]mme ^hoske tois katoikentessi
- 6 *par amme Pet^h[a]loun kai toun alloun ^hEllānoun dot^hei ^hā politeiā*·
toineos gar suntelest^hentos kai sunmennantoun pan/toun die ta
p^hilant^hroupa
pepeistein alla te polla toun k^hreisimoun essest^hein kai eutou kai t^ha poli
kai / t^hn
- 9 *k^hourān mallon eksergast^heisest^hein* ·
- 1 ... Βασιλεύς Φίλιππος Λαρισσαίων τοῖς ταγοῖς καὶ τῇ πόλει χάριεν·
Πετραῖος καὶ Ἀνάγκιππος καὶ Ἀριστόνους ὡς ἀπὸ τῆς πρεσβείας
ἐγένοντο,
- 3 ἐνεφάνιζόν μοι **ὅτι** καὶ ἡ ὑμετέρα πόλις διὰ τοὺς πολέμους προσδεῖται
πλεόνων οἰκητῶν·
ἕως ἄν οὖν καὶ ἐτέρους ἐπινοήσωμεν ἀξίους τοῦ παρ' ὑμῖν πολιτεύματος,
ἐπὶ τοῦ παρόντος κρίνω ψηφίσασθαι ὑμᾶς ὅπως τοῖς κατοικοῦσιν

- 6 παρ' ὑμῖν Θεσσαλῶν ἢ τῶν ἄλλων Ἑλλήνων δοθῆι πολιτεία.
 τούτου γὰρ συντελεσθέντος καὶ συνμεινάντων πάντων διὰ τὰ φιλόανθρωπα
 πέπεισμαι ἕτερα ἢ τε πολλὰ τῶν χρησίμων ἔσεσθαι καὶ ἐμοὶ καὶ τῇ πόλει
 καὶ τῇ
- 7 χώραν μᾶλλον ἐξεργασθήσεσθαι.
- 1 ... *Basileús P^hílippos Larisaíōn toís tagoís kai tēi pólei k^háirein:*
Petraíos kai Anágkippos kai Aristónous^h ὅς ἀπὸ τῆς presbeías egénonto,
 3 *enep^hánizón moi^h ὅτι kai^h ἔ^humetérā pólis dià toús polémous prosdeítai*
pleónōn oikētōn:
^héōs an oún kai^h etérous epinoésōmen aksíous tou^h par^humîn politeúmatos,
epì tou paróntos krínō psēp^hísasthai^h umâs^h ὅπως toís katoikoúsin
 6 *par^humîn T^hessalōn ē tōn álōn^h Ellénōn dot^hēi politeiā.*
τούτου γὰρ suntelest^héntos kai sunmeínántōn pántōn dià τὰ p^hilánt^hrōpa
pépeismai^h ἕτερα ἢ τε pollà tōn k^hrēsímōn ésest^hai kai emoi^h kai tēi pólei kai
tēn
- 9 *k^hóran mállon eksergast^héset^hai.*
- 1 'Philip the king, having sent a letter to the tagoi and the city,
 [reporting] that that Petraios and Anankippos and Aristonoos, when
 they came from the embassy,
- 3 declared to him that our town also, due to the wars, was in need of more
 inhabitants coming;
 and until we can think of others worthy of citizenship among us,
 for the present he decides that we will decree that to those who are
 resident
- 4 among us, Thessalians and other Greeks, citizenship be granted.
 for if/once this is done and all stand together due to friendship,
 he is confident that there will be many other benefits both to him and
 to the city and
- 9 that the land will be better cultivated'

(A) Elements with Thessalian form (particles, constructions, lexicon, phraseology) which actually reflect patterns of Attic Koiné, as the reflex of Greek literary phraseology and/or common expressions. In what follows a schematic presentation (line by line) of the Thessalian-coloured Koiné structures is given.

Line 1: γραμματα πεμφαντος ... διεκι ... ενεφανισσοεν ... (subsumes επιστολαν α/π]υστελλαντος ‘having sent a letter’ in the preceding lines LAR .2–3). Compare the full parallel in (34) and, with ἐπιστολήν for γράμματα (35):²⁹

(34) X. HG 1.7.17

πέμπειν γράμματα τῆ τε βουλῆ καὶ ὑμῖν **ὄτι** ἐπέταξαν
pémphein grámmata tēi te boulēi kai^h umîn **hóti** epétaksan
 ‘to send letters to the council and to you (**informing**) that they imposed’

(35) X. An. 1.6.3

ὁ δ’ Ὀρόντας ... γράφει **ἐπιστολήν** παρὰ βασιλέα **ὄτι** ἥξει
^ho d’ Oróntas ... gráp^hei **epistolēn** parà basiléa **hóti** **héksoi**
 ‘Orontas writes a letter to the King (**informing**) that he will arrive...’
 (ἥξει **héksoi**, equivalent to ἥξει ^héksoi).

Line 2: ους ατ τας πρεισβειας εγενονθο (... ἐνεφανίσοεν)

The construction of γίνεσθαι *gínes^hai* with ἀπό *apó* (and ἐκ *ek*) with genitive with the meaning ‘to have done’, with imperfect in the main clause, is attested since Herodotus, e.g. (36):

(36) Hdt. 1.50

ὥς δὲ **ἐκ** τῆς θυσίης **ἐγένετο**, ... ἐξήλαυνε
^hos δὲ **ek** tēs t^husíēs **egéneto**, ... **eksélaune**
 ‘and once he was ready with the sacrifice, did beat out ...’.

The expression ἀπό τῆς πρεσβείας *apò tēs presbeías* ‘from the embassy’, frequently occurring with ἦκω *hékō* ‘I come’, is found in Attic literary texts as well, e.g. (37):

(37) Aeschin. *de falsa leg.* 13

ἐπειδὴ δὲ **ἐπανῆκε** δεῦρ’ ἀπὸ τῆς πρεσβείας ... ἀπήγγειλε ...
 epeidē dē **epanēke** deūr’ apò tēs **presbeíās** ..., apéggeile ...
 ‘and once he came hither back from the embassy ... he announced ...’
 (also Plb. 30.30.7 ... ἦκοντες ἀπὸ τῆς πρεσβείας ... ^hékontes apò tēs *presbeíās* ‘back from the embassy’).

²⁹ As a synonym of ἐπιστολή ‘letter’, γράμματα is well attested with πέμπω, cf. Pl. *Ep.* 310d γράμματα πέμφαντα but 323b πέμπετε ... ἐπιστολήν.

Line 3: The construction *ενεφανισσοεν ποκκι ποτεδεετο* *enep^hanissoen pokki potedeeto*, which would match in Attic **ἐνεφάνιζον διότι προσεδεῖτο* *enep^hánizon dióti prosedeíto*, is an instance of the so-called “oblique” imperfect,³⁰ which also is attested twice with the plusquamperfect in an inscription from Larissa recently published (38):

(38a) Larissa (a. 170/169), LAR 4.42–46.

ενεφα[νισσ]/ε ποκκι . . . εξαγγρεμενος εις
enep^ha[niss]/e pokki . . . eksaggremenos eis

Attic:

ἐνεφάνιζε ὅτι . . . ἐξηρημένος ἦν
enep^hánize^h óti . . . eksēirēménos ên

‘he declared that he had liberated (him)’

(38b) Larissa, LAR.4. 44–5

εμφανισσοντος διεκι . . . εδουλευε
emp^hanissontos dieki . . . edouleue

Attic:

ἐμφανίζοντος διότι . . . ἔδούλευε
emp^hánizontos dióti . . . edóuleue

‘declaring that he was living as a slave’

The construction of *ἐμφανίζω ὅτι* with the imperfect (39) is attested since Xenophon, and is relatively frequent with *ὅτι*, *διότι* in Hellenistic Greek, also with the indicative present³¹ or perfect (40):³²

30 Ruipérez (1972), with reference to Hom. *Il.* 22.438 οὐ γάρ οἱ τις . . . ἤγγειλ’ ὅτι ρά οἱ πόσις ἔκτοθι μίμνε πυλάων *ou gár^h oí tis . . . éggeil’^h ótti r^há^h oí éktothi mímne puláōn* ‘none had come to her and told her how her husband had held his ground there outside the gates’.

31 Cf. also Ael. [. . .] 4.9 αὐτό γε μὴν τοῦτο ἐνεφάνισεν αὐτοῖς, ὅτι καλεῖται Πλάτων ‘the very same thing he reported to them, namely that he is called Platon’.

32 Also with perfect indicating the state (i.e. equivalent to a present), cf. further instances in Plb. 16.11.5 ἐπεὶ δὲ προσπέμφας ὁ Φίλιππος ἐνεφάνιζε διότι πρὸς δύο πλέθρα τοῦ τείχους αὐτοῖς ἐξήρειστα ‘but when Philip sent to inform that about two hundred feet of their wall had been underpinned’, Plb. 30.32.3–4 παρήσαν . . . ἐμφανίζοντες διότι τὸ μὲν ἔθνος οὔτε δικαιολογουμένων ἀκήκοε τῶν κατηγιαμένων οὔτε κρίσιν οὐδεμίαν πεποιήται περὶ αὐτῶν, τὴν δὲ σύγκλητον ἀξιοῖ . . . ‘they appeared . . . pointing out (ἐμφανίζοντες διότι) that the league had neither heard (ἀκήκοε) the defense of the accused nor pronounced (πεποιήται) any judgement on them, and they now begged (ἀξιοῖ) the senate . . .’.

(39) X. Cyr. 8.1.26

ἐμφανίζων δὲ καὶ τοῦτο ὅτι περὶ πολλοῦ ἐποιεῖτο . . .

emp^hanízōn dè kai toûto ^hóti perì pollou̇ epoieito . . .

‘and declaring also this, that he gave great importance to . . .’

(40) Plb. 1.32.2

ἐνεφάνισε διότι συμβαίνει . . . αὐτοὺς δ’ ὑφ’ αὐτῶν ἡττᾶσθαι

enep^hánise dióti sumbaínei . . . autoùs d’ hup^h, h^hautōn h^hettást^hai‘he reported that they (*scil.* the Carchedonians) . . . were defeated by themselves’

The construction with oblique optative is not attested for ἐμφανίζω, as far as I know.

α αμμεουν πολις ‘the polis of ours’. This expression, corresponding to a possible *ἡ ἡμῶν πόλις, may be assumed for Postclassical Greek in view of τὸ πάτριον ἡμῶν πολίτευμα ‘our ancestral citizenship’ (D.H. 11.7.2).³³ In any case, the current expression in Attic is with an adjective, namely ἡ ἡμετέρα πόλις ‘our polis’ (Xen. *HG* 4.8.4, Pl. *Crit.* 52c, also ἡ ὑμετέρα πόλις ‘your polis’ Xen. *HG* 3.5.15, 6.55.44).

διε τος πολεμος ‘because of the rebellions and the wars’ and ποτεδεετο πλειονουν τουν κατοικεισονται ‘he was in need of more inhabitants coming’. These expressions (or the like) are in fact attested in literary texts (41), (42):

(41) D.C. 41.37.1

. . . πολλῶν χρημάτων διὰ τε τὰς στάσεις καὶ διὰ τοὺς πολέμους προσδεόμενοι

. . . pollōn k^hrēmátōn diá te tàs stáseis kai diá toùs polémous prosdeómēnoi

‘being in need of many resources because of the rebellions and the wars’.

(42) Plb. 11.13.17

τυραννίς δ’ ὅσῳ μειζόνων ἐφίεται, τοσοῦτῳ πλειόνων προσδεῖται μισθοφόρων

turanñis d’ h^hósōi meizónōn ep^híetai, tosoútōi pleiónōn prosdeítai mist^hop^hórōn

‘but a tyranny, the more ambitious its aims, requires all the more mercenaries’.

³³ On this expression in New Testament Greek cf. Gianollo (2010: 105).

Line 4: μεσποδι κε ουν και ετερος επινοεισουμεν αξιος τοι παρ' αμμε / πολιτευματος:

The επινοησωμεν '(until) we think of' with an animate as object has, as far as I know, no parallel, as επινοέω 'think on/of, intend, purpose' (Hdt.+) normally has an inanimate object or an infinitive. It may, however, be better understood as a term of Koiné (at least of Thessaly) than as a specifically dialectal future.

τοι παρ' αμμε / πολιτευματος 'of citizenship among us'. The expression is surely literary, also with πολιτεία, cf. (43). The neuters in -μα are very productive in Hellenistic Greek:

(43) D. 14.19

συγκινδυνεύειν τι τήν παρ' ἡμῖν πολιτείαν

sugkinduneúein ti tēn par' hēmīn politeían

'that **our political system** incur danger along with others',

Cf. also D.H. 3.10.4 ... τοῦ παρ' ἑαυτοῖς πολιτεύματος 'of our political system'.

Line 5: ετ τοι παρεοντος κρεννεμεν with infinitive as complement. The fairly authoritative expression is attested in literary texts of Hellenistic times:

(44) D.S. 18.15.6

οὔτος δὲ κρίνας ἐπὶ τοῦ παρόντος ἡσυχίαν ἔχειν

h'outos dē krínas epì tou paróntos hēsukhían

'and this, **having decided for the present** to remain quite',

Cf. also 18.28.3 ἔκρινε γὰρ ἐπὶ τοῦ παρόντος εἰς μὲν Ἄμμωνα μὴ παρακομίζειν *ékrine gàr epì tou paróntos eis mēn Ámmōna mē parakómizein* 'as **he decided for the present** not to convey over to Ammon'.³⁴

The expressions ψα[φ]ιξασθει[ν α]μμε οσκε (?) δοθει, and τοις κατοικεντεσι ... παρ αμμε Πετθ[α]λουν occur in literary texts as well (45),(46):

(45) X. Cyr. 2.2.20

ψηφίσασθαι ἂν τὸ πλῆθος συνελθὸν ὥστε μὴ ἴσων ἕκαστον τυγχάνειν

psēp h'isast h'ai ἂn tò plēthos sunelthōn h'oste mē ἴsōn h'ékaston tugk h'ánein

'... the multitude in assembly **decree that** everyone does not **obtain** the same',

³⁴ The expression ἐπὶ τοῦ παρόντος is itself well attested, cf. Plb. 3.64.3 ... καὶ μηδεμίαν μὲν εἰληφότας πείραν ἐπὶ τοῦ παρόντος τῶν ὑπεναντίων '... even if they had had **for the present** no experience of the enemy'.

(46) D. *de cor.* 115**τοῖς κατοικοῦσιν** Ἀθηναίων τὴν νῆσον**toîs katoikouîsin** At^hēnaîōn tēn nēson**'to those** among the Athenians who **dwelt** in the island'³⁵

Line 6: (ος κε ...) δοθει α πολιτεια 'that citizenship be granted'. The expression is well attested:

(46) X. *HG* 1.2.11Σελινουσιούς δέ, ἐπεὶ ἡ πόλις ἀπωλώλει, καὶ **πολιτείαν ἔδωσαν***Selinousiōis dé, epei^h ē polis apōlōlei, kai politeiān édosan***'to the Selinountians, once their polis had been destroyed, they granted citizenship'**

Line 7: τοινεος γαρ συντελεσθεντος 'for once this is done' (with dialectal genitive singular : Att. τούτου, of Thessalian ονε: Att. οὔτος) συνμειναντων 'holding together' and διε τα φιλανθρωπα 'due to friendship' reflects expressions of Attic and literary Koiné, cf. respectively (47), (48), (49):

(47) Plb. 8.28.4

τούτου δὲ συντελεσθέντος, σβέσαι τὸ πῦρ ἔδει**τούτου δὲ suntelest^héntos**, sbésai tò pûr édei**'This having been done, (Hannibal) was to put out the fire'**

(48) Isoc. 4.148

... καὶ τῶν στρατιωτῶν **συμμεινάντων**... *kai tôn stratiōtōn summeinántōn***'and as the troops hold together'**³⁶

(49) Plb. 12.11.5

... πρῶτον μὲν φησι τὴν τε πολιτείαν καὶ τὰ λοιπὰ **φιλάνθρωπα** τοῖς
Λοκροῖς ἀμφοτέροις... *prōton mén p^hēsi tēn te politeiān kai tà loipà p^hilánt^hrōpa* toîs Lokroîs
amp^hotérois

³⁵ Cf. also Arr. Fr. 130 ὁ δὲ πίστιν ἔδωκε **τοῖς κατοικοῦσι** 'and he gave confidence **to the residents**', Is. 4.150 τῶν **παρ' ἡμῖν οἰκετῶν** 'to those **who dwell among us**'.

³⁶ Cf. also X. *Hell.* 7.1.2 οὔτω ... μάλιστα συμμένομεν ἄν 'this way ... we could hold together in the highest degree'.

‘he tells us in the first place that the constitution and **friendship** of both these Locrians (are similar)³⁷

Line 8: The construction πεπεισται . . . εσσεσθαι, and the expressions *ἀλλὰ τε πολλὰ τὸν χρῆσιμον* and *καὶ εὐτοῦ καὶ τὰ πολὶ* reflect patterns of Postclassical Greek, namely *πέπεισμαι* with future infinitive (50), *πολλὰ τῶν χρησίμων* (51), *αὐτῷ τε καὶ τῇ πόλει* (52) respectively:

(50) Plb. 18.23.6

πέπεισμαι ταῦτό τέλος ἀποβήσεσθαι τῆς παρουσίας μάχης
πέπεισμαι ταῦτό τέλος ἀποβήσεσθαι τῆς παρουσίας μάχης
‘I am confident that this battle will end like the former ones’.³⁸

(51) Plb. 3.17.11

αὐτός τε πολλὰ τῶν χρησίμων . . . κατειργάσατο
αὐτός τε πολλὰ τῶν χρησίμων . . . κατειργάσατο
‘he himself . . . managed to accomplish many things of much service to him’.³⁹

(52) Pl. ep. 331d

τὰ ἀγαθὰ αὐτῷ τε καὶ τῇ πόλει
τὰ ἀγαθὰ αὐτῷ τε καὶ τῇ πόλει
‘the things convenient for himself and for the polis’.⁴⁰

Line 9 *ταν χουραν μαλλον εξεργασθαισεσθαι*. The expression is attested since Herodotus, cf.:

³⁷ Cf. also Plb. 9.31.6 *τὰ . . . πρὸς Ἀντίγονον καὶ Φίλιππον ὑμῖν ὑπάρχοντα φιλόανθρωπα* παρεγράφη τότε ‘your friendly relations with Antigonus and Philip were cancelled’, as well as D. *de cor.* 187 *καὶ ἕτερα πολλὰ ἡμῖν ὑπάρχει φιλόανθρωπα* . . . πρὸς Θηβαίους ‘and we have many other friendly relations with the Thebans’ (also D.S. 30.2.1, D.H. 5.22.1).

³⁸ Also Plb. 3.5.8 *πέπεισμαι μὲν γὰρ . . . οὐκ ἀργήσῃ τὴν ὑπόθεσιν οὐδ’ ἀπορήσῃ* . . . ‘as I am confident that . . . the project will not be left undone nor be at loss’, 3.111.11 . . . *βεβαιώσῃ ὑμῖν πέπεισμαι τὰς ἐπαγγελίας* ‘I am confident that I shall fulfill my promises forthwith’, 18.33.6 *εἰ πέπεισται* διαλύσεις ποιησάμενος πρὸς Φίλιππον ἢ Ῥωμαίους τὴν εἰρήνην ἢ τοῖς Ἕλλησι τὴν ἐλευθερίαν βέβαιον ἀπολειψῃ ‘if he is confident that by coming to terms with Philip he would ensure either peace for the Romans or liberty for the Greeks’ (further instances in 9.30.7, D.S. 23.14.1).

³⁹ Cf. also D.S. 1p.1 . . . *καὶ πολλὰ τῶν χρησίμων* μαθόντες ‘having learnt many things of much service’.

⁴⁰ Cf. also D.H. 5.12.2 *ἐαυτῷ τε καὶ τῇ πόλει* (= And. *In Alc.* 23), X. *HG* 1.4.12 *καὶ αὐτῷ καὶ τῇ πόλει*, as well as Isocr. 2.36 *καὶ σαυτῷ καὶ τῇ πόλει*.

- (53) Hdt. 6.137.5
 (τὴν χώραν) ... ταύτην ... ἐξεργασμένην εὔ
 (tên k^hōrēn) ... taútēn ... eksergasménēn eū
 ‘this land well cultivated’⁴¹

(B) The elements which cannot be understood as reflexes of a supradialectal Koiné or of literary patterns with Thessalian coloring and may thus be recognized as specifically dialectal are very few, namely the genitive singular of the pronoun τοινεος (: Att. τούτου) in line 7 and (47), and the conjunctions ποκκι ‘that’ (line 3) and μεσποδι ‘until’ (line 4):

Line 3: ποκκι ‘that’ (: Att. ὅτι, διότι), a conflation of Thess. ποτι ‘to, in direction of’ (: Att. πρὸς) and κι ‘what’ (: Att. τι), i.e. Proto-Greek *pod-k^hid, is a local variant of Att. (also Koiné) διότι. The conjunction introduces a completive clause after εμφανισσοεν i.e. ‘they declared that’. It coexists with (and is equivalent to) Thess. διεκι ‘that’ (διε, κι), a calque from Att. διότι ‘that’ (διά, ὅτι). In spite of its dialectal phonetics, ποκκι reflects a characteristic feature of Postclassical Greek and Koiné, namely the reinforcement of conjunctions modelled on the stem of the relative pronoun by a preposition (García Ramón 1993: 143–4)

Line 4: μεσποδι ‘until’ (: Att. ἕως) is a specific Thessalian form, which goes back to *mes-pod-i, originally a prepositional construction ‘until (the foot of)’. It has a precise parallel in the synonymous μέχρις with genitive ‘until (the hand of)’ (*me(s?)-g^h(e)sri). Thess. μες^o is actually attested as a preposition with the genitive ‘until’, (54):

- (54) Larissa (ca. 160–150 BC), LAR 2.6
 μες τας πετραδος τοι Ομολουιοι
 mes tas petrados toi Omolouioi
 Attic:
 μέχρι τῆς τετράδος τοῦ Ὁμολῶιου
 mék^hri tēs tetrádos tou^h Omolōiου
 ‘until the fourth day of the month Homoloios’

This glance over the two versions of the letter of King Philip to the Lariseans that ends here shows beyond any doubt that texts written in Thessalian dialect reflect only a dialectal coloring of grammatical and lexical structures of

⁴¹ Cf. also, with γῆ ‘land, earth’, cf. Th.1.82 τὴν γῆν ... οὐχ ἦσσαν ὄσω ἀμεινον ἐξεργασται
 tēn gēn ... oukh^hēsson^hōsōi ameinion ekseirgastai ‘the land is not less valuable the better cultivated it is’.

the Koiné. It is no longer the question whether the Thessalian forms can be non-dialectal proper, but rather whether they reflect structures and constructions which are directly attested in literary texts of Classical and Postclassical Greek.

9 Conclusions and Final Remarks

The present contribution has focused on the evidence for the interrelations between local dialects and supradialectal languages, namely the Attic-Ionic Koiné (and local variants in some regions) in Postclassical Greek. The coalescence of dialect and Koiné (or Koinaí) does not lead to the same situation in all regions of Greece, but a series of peculiarities of the official texts written in local dialect allow one to state some characteristic patterns at the different levels of grammar and lexicon, which bear witness to a strong presence of Attic and/or Koiné in dialectal texts.

On the one hand, plenty of apparent dialectal forms and structures turn out merely to reflect supradialectal patterns, as it is the case with some cross-regional formulaic complexes consisting of a series of elements, which are combined according to patterns varying from one region to the other. On the other hand, the coexistence of dialect and Koiné/Koinaí may lead to the creation of forms and structures which reflect a conflation of dialectal and Attic-Hellenistic patterns, and of hyperdialectal forms.

The different manifestations of the contact between local dialect and supradialectal Koiné (and Koinaí) and the possibilities and limitations of their study have been set forth by means of some characteristic issues taken from the dialectal inscriptions of regions like Aeolis or Crete, among others, and by the regional variants of the honorific formula to express that the acknowledgement of the polis to its benefactors should be more than evident. These possibilities have been exemplified more precisely in the case of the inscription from Thessaly at the time between 3rd and 1st centuries BC.

Finally, a close look at the letter in Koiné of King Philip to the Lariseans (the so-called great inscription of Larissa, 217/6 BC), and at its Thessalian version, confirms the overwhelming presence of the Koiné underlying the text written in a Thessalian, in spite of its impeccable dialectal shape: practically all the constructions, coherently written in perfect Thessalian, turn out to have precise parallels in Attic, in Hellenistic Greek and in Koiné, whereas the dialectal element was limited to a pronominal form and to two conjunctions.

Further research along these lines, jointly taking into account the texts in dialect and in Koiné of each region and, additionally, the literary texts, can expand our knowledge of the degree of authenticity of the dialects used in official documents of the Hellenistic period.

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