

Register and the diachrony of Post-classical and Early Byzantine Greek

Klaas Bentein

Abstract

This article consists of three main parts. In the first part, I critically discuss two approaches to the diachronic study of Ancient Greek. I argue for the importance of not confining ourselves to spoken-like, 'authentic' texts, but applying a comparative, register-based perspective. This perspective is illustrated in the second part, where I explore the relevance of Markopoulos' (2009) 'sociolinguistic parameter of grammaticalization' to the diachrony of periphrastic constructions with εἰμι "I am" in Post-classical and Early Byzantine Greek. I close the article by discussing some of the difficulties and prospects associated with this approach, in the light of further research.

Résumé

eng: Ancient Greek, historical linguistics, register, verbal periphrasis

Citer ce document / Cite this document :

Bentein Klaas. Register and the diachrony of Post-classical and Early Byzantine Greek. In: Revue belge de philologie et d'histoire, tome 91, fasc. 1, 2013. Antiquité - Ouheid. pp. 5-44;

doi : <https://doi.org/10.3406/rbph.2013.8407>

https://www.persee.fr/doc/rbph_0035-0818_2013_num_91_1_8407

Fichier pdf généré le 18/04/2018

Register and the diachrony of Post-classical and Early Byzantine Greek

Klaas BENTEIN

Ghent University (Belgium)/Macquarie University (Australia)

1. Introduction

1.1. *The diachrony of Ancient Greek: two approaches*

The difficulties associated with studying the diachrony of Ancient, Post-classical (3^d c. BC – 6th c. AD) and Byzantine (7th – 15th c. AD) Greek in particular, have often been noted.⁽¹⁾ Next to the fact that text editions may be outdated, and that lexical and grammatical studies are scarce (much more so than is the case for Classical Greek), various scholars refer to the nature of our primary sources. In an attempt to ‘reconstruct’ the spoken language, Browning for example notes that “in spite of the large number of texts surviving from all periods, it is often difficult to trace the development of the language as it was actually used in most situations. The real process of change is masked by a factitious, classicizing uniformity”, characterizing our written sources as “mixtures of living speech and dead tradition”⁽²⁾. In this context, Browning observes that there is a great amount of variability not only *between* but also *within* texts: most often there are various (lexical/morphological/syntactic) variants for one and the same notion, and it may be very hard to decide which one(s) was/were actually used in the spoken language, and which are “borrowings from the purist language”⁽³⁾. More recently, this issue has come to be known as the ‘authenticity question’, which Joseph describes as follows⁽⁴⁾:

“one problem that repeatedly faces any scholar examining a language through the medium of written texts is what may be called the ‘authenticity’ question. Of specific concern is whether a feature found in a

(1) I would like to thank Wolfgang de Melo, Trevor Evans, Mark Janse and John Lee, as well as an anonymous referee of *Revue Belge de Philologie et d'Histoire*, for their helpful comments on previous versions of this article. Parts of the article were presented at the *Macquarie University Ancient History Research Seminar* (Macquarie, May 4, 2012) and the Contact Forum *The Vocabulary of the Zenon Archive and the Language of the Greek Papyri* (Brussels, September 11-12, 2012). My work was funded by the *Special Research Fund* of Ghent University (grant no. 01D23409). I also gratefully acknowledge funding for a long stay abroad (March – May 2012) as a visiting scholar at Macquarie University from the *Fund for Scientific Research – Flanders* (grant no. V400712N).

(2) BROWNING, 1983, p. 4-5.

(3) BROWNING, 1983, p. 6

(4) JOSEPH, 2000, p. 310.

given text or corpus corresponds in some way to a linguistically real and linguistically significant generalization about the language and about its speakers' competence, thereby qualifying as an 'authentic' feature. By contrast, an inauthentic feature would have no basis in actual usage and would instead be an artificial aspect of the language of a given text".

Scholars have tried to overcome this difficulty by focusing almost exclusively on 'authentic', 'spoken-like'⁽⁵⁾ texts. Browning, for example, singles out the following types of documents as apt for diachronic linguistic research (next to negative evidence, i.e. grammarians instructing their pupils what not to do): *the non-literary papyri, world chronicles, tales of ascetics, and lives of saints*⁽⁶⁾. Other 'non-authentic' texts are then given very little attention: Markopoulos, for example, argues that since historical linguistic investigation is "necessarily focused on change in the spoken language as reflected in vernacular texts", most of the surviving material from the Hellenistic to the Late Medieval period "is of little – if any – help"⁽⁷⁾. As Wahlgren notes, in this line of research texts of a higher linguistic level are simply equated with Ancient (i.e. Classical) Greek, and considered devoid of any linguistic development⁽⁸⁾.

It may be clear that such an approach is not unproblematic. Firstly, the proposed 'reconstruction' of the spoken language must remain approximative, a fact which is recognized by most of the above-mentioned scholars. As Herring, van Reenen & Schøsler write, "even 'authentic' data are necessarily limited: text languages, by definition, are written, and can provide no direct evidence of spoken communication"⁽⁹⁾. Markopoulos similarly acknowledges that "even the investigation of all appropriate texts cannot guarantee that we acquire a complete picture of the contemporary vernacular"⁽¹⁰⁾. A second problem faced by the proponents of this approach is that they assume that the spoken language, which they try to reconstruct, forms a coherent, homogeneous entity (free from any variation). However, it is doubtful whether 'the' spoken language actually exists. As Manolossou points out⁽¹¹⁾, "spoken medieval language must also have presented considerable variation, and it too must have contained archaisms and dialecticisms". In other words, variation pervades both the written and the spoken language.

In recent years, a number of scholars have opted for an alternative approach, arguably under the influence of recent findings in variationist linguistics (see §1.2). These scholars recognize the impossibility of reconstructing the spoken language, and approach Ancient Greek as a 'corpus language'⁽¹²⁾. Furthermore, they acknowledge the importance of variation, and of comparing

(5) HERRING, VAN REENEN & SCHØSLER, 2000, p. 18 (with regard to the diachrony of the Greek verb, see e.g. MIRAMBEL, 1966, p. 169-70; MOSER, 1988, p. 17)

(6) BROWNING, 1983, p. 5.

(7) MARKOPOULOS, 2009, p. 15-6.

(8) WAHLGREN, 2002, p. 202.

(9) HERRING, VAN REENEN & SCHØSLER, 2000, p. 3.

(10) MARKOPOULOS, 2009, p. 17.

(11) MANOLESSOU, 2008, p. 73.

(12) FLEISCHMAN, 2000.

different ‘registers’ to each other, including the high register⁽¹³⁾. One important representative of this view is Horrocks, who in his history of the Greek language takes an approach which differs radically from that of Browning and others. He describes the work of his predecessors as follows:

“many histories of the Greek language treat the archaizing written language as an artificial construct devoid of interest for historical linguistics, a ‘zombie’ language that was incompetently handled by its practitioners throughout its pseudo-history, and which persistently stifled creativity because of its even greater remoteness from the realities of spoken Greek”⁽¹⁴⁾.

Horrocks attributes this view to an anachronistic projection of (near-) contemporary language issues in the Ancient and Medieval world, and sets his own goals as follows:

“ideology apart, there is no good reason to assign a uniquely privileged position to the development of the spoken language of the illiterate ... this book will therefore look at Greek in all its varieties, and in the context of the changing social and historical circumstances of its speakers/writers. In this way it is possible not only to explain, summarize and exemplify the principal facts of change, but also to render comprehensible a long-term language situation that has often been dismissed as the product of reprehensible folly and slavish imitation on the part of those fortunate enough to have enjoyed the benefits of a proper education”⁽¹⁵⁾.

1.2. Variationist linguistics: linguistic and social mechanisms of change

As I have already mentioned, this second, more recent approach to the diachrony of Ancient Greek is likely to have been stimulated by recent findings in variationist linguistics (the work of William Labov in particular), which have greatly enhanced our understanding of the linguistic and social mechanisms of change. In this section I briefly recapitulate two key findings, and discuss their application to the diachrony of Ancient Greek in greater detail.

One key finding concerns *variation*: scholars have come to realize that from a synchronic point of view variation is ubiquitous and reflects change in progress. As Guy puts it, “linguistic variation is the inevitable synchronic face of long-term change”⁽¹⁶⁾. Croft, for example, has proposed a model of diachronic change which recognizes three distinct types of ‘replication’, called ‘normal replication’, ‘altered replication’ and ‘differential replication’⁽¹⁷⁾. With the first of these three types, there is *stasis*, rather than change: speakers

(13) See e.g. O’DONNELL, 2000; WAHLGREN, 2002; MANOLESSOU, 2008; TOUFEXIS, 2008; LEE, 2013.

(14) HORROCKS, 2010, p. 4.

(15) HORROCKS, 2010, p. 4.

(16) GUY, 2003, p. 370.

(17) CROFT, 2000.

mostly conform to convention. Consciously or unconsciously, however, speakers may break convention by coining new expressions (what Croft calls altered replication), resulting in variation (e.g. the syntactic expressions *there are* ~ *there's* ~ *it's a lot of people there*⁽¹⁸⁾). Inevitably, such variation leads to competition. In a third stage, one of the variants *may* be propagated (though it should be stressed that not all variation leads to change), leading to the elimination or functional/pragmatic specialization of the remaining variants.

The work of Labov and others has also shed new light on the social mechanisms of language change. The most important finding here is that the spread of a given variant happens in an orderly way, not only within language itself (a given variant being particularly often used in certain linguistic environments, and spreading from there to other linguistic contexts), but also within the speech community (a given variant being particularly often used in certain social contexts (i.e. a particular group of speakers), and spreading from there). The spread of an innovation (when successful) usually takes the form of an S-curve: it catches on gradually, then gains in momentum, and finally runs its course⁽¹⁹⁾.

Up until now, these findings have been applied predominantly to change that is ongoing in the spoken language, which can be very accurately observed, described and analyzed. Its application to written documents (from the past) remains disputed and has been given relatively little attention, perhaps because Labov himself has shown a negative attitude to historical linguistics, which he characterizes as “the art of making the best use of bad data”⁽²⁰⁾. One of the scholars to have opposed this view is Romaine, who in her pioneering work on *socio-historical* linguistics, observes that “variation also occurs in written language in, one can assume, a patterned rather than a random way”⁽²¹⁾. Romaine even turns the tables in explicitly asking “whether theories which cannot handle all the uses/forms in which language may manifest itself in a given speech community over time are actually acceptable”⁽²²⁾ and arguing that a sociolinguistic theory which cannot handle written language is very restricted in scope and application and cannot claim to be a theory of ‘language’ (p. 122). She furthermore suggests that sociolinguistic work in the spoken language also has to deal with a ‘constraint on observability’ (p. 126), in that the language of interviews is not identical to everyday usage either. Romaine herself proposes to study the diachrony of relative markers in its social context by relating these markers to different ‘stylistic levels’, which she compares with the stylistic continuum in present-day spoken Scots (this stylistic continuum being related to the social class continuum⁽²³⁾).

It may be clear that these findings have far-reaching implications for the ancient languages: instead of trying to circumvent variation, scholars

(18) I borrow this example from MUFWENE, 2008, p. 69.

(19) ROMAINE, 1994, p. 143.

(20) LABOV, 1994, p. 11.

(21) ROMAINE, 1982, p. 13. She adopts (p. 122) the so-called ‘uniformitarian principle’, which states that “the linguistic forces which operate today and are observable around us are not unlike those which have operated in the past”.

(22) ROMAINE, 1982, p. 18.

(23) ROMAINE, 1982, p. 24, 123.

are stimulated to describe the entire set of variants at different stages of the language, looking at how particular variants remain in use, disappear or become established, as a reflection of (potentially) changing community norms. In this spirit, Milroy finds that “one of the advantages of studying Middle English is that its written forms are highly variable”, as it allows him to apply variationist methods and to explore some of the constraints on variation that might have existed⁽²⁴⁾. For Milroy, variation constitutes a resource, rather than an obstacle⁽²⁵⁾. While relatively little work has been done on the social diffusion of linguistic innovations in written texts, the topic was recently taken up by Markopoulos in his book on the development of future periphrases with ἔχω, θέλω and μέλλω in Ancient Greek, where he observes the following:

“the rise in the frequency of use and the establishment of a construction in a specific register almost without exception follows the demise of another in the same register, so that a situation whereby two or more AVCs [= auxiliary verb (‘periphrastic’) constructions, KB] are equally frequent in a genre or in all contexts in a period never obtains”⁽²⁶⁾.

Markopoulos furthermore posits a so-called ‘fifth, sociolinguistic parameter of grammaticalization’, predicting that “the further grammaticalized an AVC [auxiliary verb (‘periphrastic’) construction, KB] becomes, the higher up it rises in terms of sociolinguistic (register) acceptability”⁽²⁷⁾. In the second part of this article, it is my intention to argue for the importance of taking a socio-historical perspective when studying the diachrony of Ancient Greek, as well as to contribute to this approach, by further exploring the validity of Markopoulos’ hypothesis⁽²⁸⁾. To be more specific, I will apply it to the diachrony of periphrastic constructions consisting of a form of the verb εἶμι and the perfect, present or aorist participle. Before doing so, however, it will be useful to have a closer look at the notion that is central to Markopoulos’ hypothesis, that is, ‘register’.

1.3. Register

A register can be broadly described as “a variety associated with a particular situation of use (including particular communicative purposes)”, presenting a set of typical linguistic features⁽²⁹⁾. Biber & Conrad note that one can also study a text from a genre or a style-perspective, but that these perspectives are more specialized (“a register analysis seeks to characterize a variety of language – not a particular text or an individual writer’s style”⁽³⁰⁾). Registers

(24) MILROY, 1992, p. 131.

(25) MILROY, 1992, p. 132.

(26) MARKOPOULOS, 2009, p. 226.

(27) MARKOPOULOS, 2009, p. 232.

(28) For the need for further investigation, see Markopoulos (2009, p. 232). Furthermore note that Markopoulos’ interests primarily lay with the low/middle register.

(29) BIBER & CONRAD, 2009, p. 6.

(30) BIBER & CONRAD, 2009, p. 2, 10.

can be defined at various levels of specificity⁽³¹⁾, depending on the number of ‘situational characteristics’ one takes into account⁽³²⁾. One influential model is that of Halliday, who recognizes three main register-variables, called ‘field’ (what the language is being used to talk about), ‘tenor’ (the interactants and their relationships) and ‘mode’ (the role language is playing in the interaction)⁽³³⁾.

Perhaps the most well-known classification of registers in Post-classical Greek is that proposed by Porter and O’Donnell⁽³⁴⁾, who take into account four general groups: ‘vulgar’ (e.g. papyri concerned with personal matters), ‘non-literary’ (e.g. official business papyri, Epictetus), ‘literary’ (e.g. Philo, Josephus, Polybius) and ‘atticistic’ (e.g. Dionysius of Halicarnassus, Plutarch). For the purposes of this article, I will make use of a threefold distinction between ‘low’, ‘middle’, and ‘high’⁽³⁵⁾. Whether we recognize four or three registers, we must realize that these constitute points on a continuum⁽³⁶⁾. Two authors (or even one and the same) can both write high-level texts, but differ in degree of atticism.

2. The case of verbal periphrasis in Ancient Greek

2.1. Preliminary remarks

In what follows, I give a register-based overview of the diachronic development of three periphrastic constructions with εἰμί (with perfect, aorist and present participle)⁽³⁷⁾ from the 3^d c. BC to the 8th c. AD. It is my intention to explicitly compare my own findings with those of the (older) standard works, that is, Björck, Aerts and Dietrich, so as to show the benefits of the approach advocated here⁽³⁸⁾. Based on a suggestion by Lee⁽³⁹⁾, I divide the period under analysis into four subperiods, called ‘Early Post-classical Greek’ (EPG; 3^d – 1st c. BC), ‘Middle Post-classical Greek’ (MPG; 1st – 3^d c. AD), ‘Late Post-classical Greek’ (LPG; 4th – 6th c. AD) and ‘Early Byzantine Greek’ (EBG; 7th – 8th c. AD).

As for aspectual semantics, I assume the existence of universal, cross-linguistically attested aspectual categories⁽⁴⁰⁾, which can be used to describe

(31) BIBER & CONRAD, 2009, p. 32-3; WILLI, 2010, p. 304.

(32) For an overview of such characteristics, see BIBER & CONRAD, 2009, p. 40.

(33) HALLIDAY, 1978.

(34) PORTER, 1989, p. 152-3; O’DONNELL, 2000, p. 277.

(35) Following the recent studies of Høgel, 2002 and Markopoulos, 2009.

(36) Cf. BIBER & CONRAD, 2009, p. 33: “while register differences can be regarded as a continuum of variation, genre differences are more concrete”.

(37) Note that the construction of εἰμί with future participle does not occur (cf. REGARD, 1918, p. 112).

(38) BJÖRCK, 1940; AERTS, 1965 and DIETRICH, 1973a, b. For the need for this type of comparative analysis, see HERRING, VAN REENEN & SCHÖSLER, 2000, p. 24.

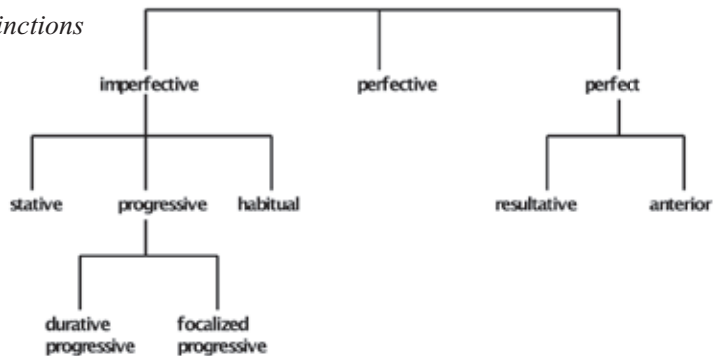
(39) LEE, 2007, p. 113. See also EVANS & OBBINK, 2010, p. 12.

(40) See esp. BYBEE & DAHL, 1989; BYBEE, PERKINS & PAGLIUCA, 1994.

synthetic and periphrastic tenses alike⁽⁴¹⁾. This is not to say, of course, that these are entirely equivalent from a semantic and pragmatic point of view. The three main aspectual categories, called ‘perfective’, ‘imperfective’ and ‘perfect’ aspect, can be defined in terms of boundedness⁽⁴²⁾: while perfective verbs denote bounded events, imperfective verbs denote unbounded ones. Perfect verbs are an intermediary category: they denote an (unbounded) state, and may additionally focus on a bounded event of which this state is the result. These three broad aspectual categories can be further subdivided into a number of aspectual subcategories or ‘functions’ (such subdivisions being less common for perfective aspect, which looks at an event as a whole, without regard for its internal composition).

The functional domains of imperfective and perfect aspect are particularly relevant for the subject of periphrasis⁽⁴³⁾. I subdivide the perfect into a ‘resultative’ and an ‘anterior’ function: while the former focuses on a present state, the latter denotes the current relevance of a past event (contrast e.g. resultative ὄλωλα “I am destroyed” with anterior ὄλώλεκα τὴν πόλιν “I have destroyed the city”). As for imperfective verbs, I make a threefold distinction between a ‘stative’, ‘progressive’ and ‘habitual’ function: statives denote a situation which remains constant over time (e.g. πλουτεῖ “he is rich”)⁽⁴⁴⁾, progressives an event which is ongoing (e.g. ἀποκτείνει αὐτόν “he is killing him”), and habituais a repeatedly occurring event (καθ’ ἡμέραν ταῦτ’ ἔπραττεν “he did that every day”). As for the progressive function, it will be useful to further distinguish between ‘durative’ and ‘focalized’ progressives⁽⁴⁵⁾: while focalized progressives denote an ongoing event which is narrowly connected to a so-called ‘focalization point’, durative progressives

Figure 1:
Aspectual distinctions



(41) Compare Hagège’s ‘paraphrastic principle’: “within one language, two or several different syntactic structures can correspond to the same, or roughly the same, semantic content. This is an important and universal property of human languages, which I will call the paraphrastic principle (PP)” (Hagège, 1993, p. 46).

(42) CROFT, 2012, esp. ch. 3.

(43) Cf. BYBEE & DAHL, 1989, p. 56.

(44) Somewhat confusingly, the term ‘stative’ is used in the literature both in reference to lexical aspect (or *Aktionsart*) and grammatical aspect (see BENTEIN, 2012b for further discussion and references).

(45) See BERTINETTO, EBERT & DE GROOT, 2000; BENTEIN, 2012b.

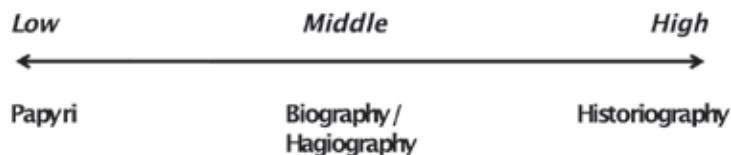
do not (the latter type often denotes the continuation of an event in a broader time-frame; contrast e.g. ὅτε ἔγραφον τὰδ' εἶπεν: “when I was writing, he said the following” with ἐγεώργουν τὴν γῆν ἔτη τρεῖς “they cultivated the land for three years”). A schematic overview of these aspectual distinctions is given in figure 1.

In testing Markopoulos’ hypothesis, it will be necessary to make an initial, though crucial modification: for Markopoulos, the basic unit of description is ‘the auxiliary verb construction’, such as θέλω with aorist infinitive or μέλλω with future infinitive. While this formulation may be viable for future periphrases, I believe it is too crude to assume general validity, as it is entirely morphosyntactically oriented (as perhaps is most sociolinguistic research) and does not allow for diachronic *semantic* change. I take it that the true unit of description should be a ‘construction’ in a much broader sense, that is, a pairing of form and (aspectual) meaning⁽⁴⁶⁾. To take the example of εἰμί with present participle, I would argue we are actually dealing with four (sub)constructions: (a) εἰμί with present participle with a stative function, (b) εἰμί with present participle with a durative progressive function, (c) εἰμί with present participle with a focalized progressive function, and (d) εἰμί with present participle with a habitual function. Each of these may rise independently in terms of frequency and sociolinguistic acceptability (as I will show below). The real competition is always between constructions of this sort.

2.2. Corpus

I have compiled a corpus consisting of texts belonging to three main groups⁽⁴⁷⁾, (1) non-literary (documentary) papyri, (2) biographical/hagiographical texts, and (3) historiographical texts, covering the period from the third century BC to the eighth century AD (what is sometimes called the ‘papyrological millennium’⁽⁴⁸⁾). Generalizing, the non-literary papyri can be located towards the left side of the register continuum, the biographical/hagiographical texts towards the middle, and the historiographical texts towards the right side, as shown in figure 2:

Figure 2: *The register continuum*



(46) Cf. e.g. Croft & Cruse’s 2004 *Cognitive Construction Grammar*.

(47) The only text which is less easily classified under one of these three groups is the Septuagint, which I have also included in the investigation (being one of the major linguistic sources for the Early Post-classical period).

(48) A full overview of the literary texts is given in BENTEIN, 2012c, p. 268-75). For this article, I have additionally taken into account Flavius Josephus’ *Bellum Iudaicum*.

In what follows, I discuss each of these groups in greater detail, with particular attention to three main situational characteristics, namely (a) author, (b) addressee, and (c) content/ communicative purpose (cf. Halliday's register variables of 'field' and 'tenor'). We will see that with each of them it is necessary to bring some nuance to their proposed position on the register continuum: figure 2 only provides a necessary starting point, and can be considered a crude generalization (for further discussion, see §3.2).

1. *Non-literary (documentary) papyri*. Contrary to biography/hagiography and historiography, the papyri are non-literary, which (to a large extent) explains why we find them at the left of the continuum. Conventionally, the documentary papyri are divided into two main groups (and then further subdivided⁽⁴⁹⁾) on the basis of addressee: 'private' (e.g. private communications, records of transactions, documents of piety) versus 'public' (e.g. petitions to officials, tax receipts, pronouncements of the government/administration). While the private documents are generally taken to be written by ordinary people in an unpretentious language, we must be very careful not to overgeneralize. For one thing, private documents with an 'official' character were often written in a more formal register⁽⁵⁰⁾. Moreover, even in the case of the private letters, the educational level of the author could greatly vary.

2. *Historiographical texts*. At the other end of the continuum, we find the historiographical texts. Indeed, the differences with regard to the three above-mentioned situational characteristics could not be greater: the authors of these texts were well educated, writing about the glorious political/military deeds of the past, directing their work at an 'educated, international public'⁽⁵¹⁾. Again, however, some nuance is necessary. A distinction which is commonly made⁽⁵²⁾ is that between (more traditional) historiographical works, which in the line of Herodotus and Thucydides try to give an impartial treatment of shorter periods of time, and so-called 'chronicles', which start with the creation of the world and continue to the time of the author, often with the purpose of showing the hand of God in historical events⁽⁵³⁾. Works of the second type (in our case, the chronicles of John Malalas and Theophanes Confessor, next to the so-called *Paschal Chronicle*) were generally written in a less elevated language than the (often) classicizing histories⁽⁵⁴⁾. Even with the first type of texts, however, there were some authors who wrote in a lower register (Polybius being a well-known example⁽⁵⁵⁾).

(49) See PALME, 2009.

(50) In this context, Mandilaras (1972, p. 10), discussing the language of the papyri, makes a broad distinction between two main types of language, 'the official language' (official and business documents) and the 'popular language' (private letters), observing with regard to the former that "this form of the language is in general artificial, characterized by repetitions, and built on stereotyped expressions which are always found in the bureaucratic system".

(51) ADRADOS, 2005, p. 196.

(52) See e.g. ROSENQVIST, 2007, p. 10-13.

(53) According to Rosenqvist (2007, p. 10), so-called 'church histories' constitute a third type, but this will not further concern us here.

(54) See ROSENQVIST, 2007, p. 18 with regard to Malalas.

(55) See e.g. HORROCKS, 2010, p. 96.

3. *Biographical/Hagiographical works*. The third group, which I have situated towards the middle of the register continuum, is the most disparate with regard to the above-mentioned situational characteristics. In comparison with historiography, biographical/hagiographical texts did not aim at recounting the glorious events of the past, but rather focused on a single personality⁽⁵⁶⁾. Since most of these texts are written in a much lower register than the historiographical ones⁽⁵⁷⁾, it seems that they were directed at a much broader audience (readers and listeners!), including people from the general populace⁽⁵⁸⁾. Their authors could belong to the lower strata of the society, but the picture is diverse (in any case, we must take into account that these authors were literate, which was a privilege *in se*): they were written by followers of the saints, monks, deacons, and occasionally even by people with a very high social position, such as the patriarch Athanasius⁽⁵⁹⁾.

Several remarks are in order. Firstly, the corpus also contains a selection of Plutarch's pagan biographies, which were written in the high register (since Plutarch adopted the 'chronological' rather than the 'topical' mode for his biographies⁽⁶⁰⁾, his work is much closer to historiography anyway). Secondly, biography/hagiography does not constitute a uniform genre: the corpus contains *acts*, *apocalypses*, *encomia*, *gospels*, *homilies*, *miracles*, *laudations*, *lives*, and *passions*. Of these, especially the encomia, homilies and laudations (i.e. subgenres concerned with praise) are more rhetorically elaborated⁽⁶¹⁾ and hence positioned more to the right of the register continuum. Thirdly, the genre itself was subject to diachronic changes: when in the fourth century Christianity received imperial support, the Cappadocian fathers (who were highly educated) did not write 'simple language', but adopted the "style, form and vocabulary of their own earlier training", even in hagiography⁽⁶²⁾. As a result, biographical/hagiographical texts "ranged over the entire literary spectrum and appealed to readers of all educational levels"⁽⁶³⁾.

Data from these texts have been collected on the basis of two online (lemmatized) databases, the *Thesaurus Linguae Graecae* (TLG)⁽⁶⁴⁾ (biography/hagiography and historiography) and the *Duke Databank of Documentary Papyri* (DDBDP, version 2010)⁽⁶⁵⁾ (papyri). While these are invaluable resources for large-scale diachronic research, it must not be forgotten that they have their limitations. The main disadvantage of working with the TLG will be discussed further on in this article (§3.4). A limitation of the DDBDP is that it does not mention the number of words for each text (which, undoubtedly,

(56) See already Plutarch, *Pompeius* 8.6. COX, 1983, p. 12.

(57) See HØGEL, 2002, p. 25 : "an idea of simplicity permeated hagiography".

(58) HØGEL, 2002, p. 30.

(59) HØGEL, 2002, p. 29.

(60) See COX, 1983, p. 56.

(61) See HØGEL, 2002, p. 22.

(62) CAMERON, 1991, p. 111. As Høgel (2002, p. 27) notes, however, high-register hagiographical texts are mostly confined to the fourth and seventh/eighth centuries (with authors such as Sophronius, Gregory the Presbyter, Ignatius the Deacon, and Stephan the Deacon).

(63) CAMERON, 1991, p. 147.

(64) At <http://stephanus.tlg.uci.edu> (University of California).

(65) At <http://www.papyri.info> (Duke University).

should be attributed to the nature of these documents), as a result of which it will not be possible to provide normed rates of occurrence⁽⁶⁶⁾ when discussing the papyri. To get a rough image of the number of papyri per period studied, we can rely on the study of Habermann⁽⁶⁷⁾, according to whom the Early Post-classical papyri represent 20% of the total number of papyri, the Middle Post-classical ones almost 50%, the Late Post-classical ones 23% and the Early Byzantine ones only 7% (the low percentage of Early Byzantine papyri being due to the fact that Egypt fell into Arab hands in the seventh century AD, whereby Arabic became the dominant language in the region).

2.3. *The diachrony of verbal periphrasis with εἰμί*⁽⁶⁸⁾

2.3.1. *εἰμί with perfect participle*

Throughout its history, Ancient Greek has greatly varied in its morphosyntactic expression of perfect aspect. As shown by Haspelmath among others⁽⁶⁹⁾, its primary exponent, the synthetic perfect, underwent a considerable semantic development: first appearing in Homeric Greek with a stative/resultative function (as in πέπηγα “I am stuck”), it developed into an anterior perfect in Classical Greek (though maintaining its earlier resultative function), a semantic shift which increased its past-orientatedness (now denoting the current relevant of a past event, as in ταῦτα ἀκηκόατε “you have heard this”). This tendency continued in Post-classical Greek, where the synthetic perfect even came to be used as a perfective past.⁽⁷⁰⁾ This brought it in direct competition with the synthetic aorist, eventually leading to its disappearance (though continuing to be used in the high register).

The precise relationship of the periphrastic perfect (more in particular the construction of εἰμί with perfect participle) to the synthetic perfect is still under debate: while some scholars have argued that semantically the periphrastic construction remained stative/resultative throughout its history⁽⁷¹⁾, others have suggested that it did develop an anterior function, to a much greater extent than is commonly believed (Gerö & von Stechow even claim that one of the factors leading to the demise of the synthetic perfect was the existence of competing periphrastic constructions which could take over⁽⁷²⁾). Of the three standard works mentioned above, Aerts is the only one to have treated the diachrony of

(66) I borrow the term ‘normed rate of occurrence’ from BIBER & CONRAD, 2009 (see e.g. p. 62: “it is important to compute ‘normed’ rates of occurrence – that is, the rate at which a feature occurs in a fixed amount of text”). The fixed amount of text chosen for in this article is 10000 words.

(67) HABERMANN, 1998. For further discussion, see DICKEY, 2003.

(68) The findings presented in this section were first discussed in Bentein, 2013.

(69) HASPELMATH, 1992.

(70) See e.g. passages such as καὶ εἴληφεν ὁ ἄγγελος τὸν λιβανωτὸν, καὶ ἐγέμισεν αὐτὸν (Rev. 8.5) “and the angel took the censer and filled it”, where the perfect is co-ordinated with an aorist form.

(71) See e.g. MOSER, 1988, p. 229, observing that the construction is stative/resultative in Homeric Greek as well as in present-day Greek.

(72) GERÖ & VON STECHOW, 2003, p. 288.

the construction in some detail, though mainly concentrating on the Archaic/Classical evidence⁽⁷³⁾. Björck and Dietrich pay no attention whatsoever to the construction, the former scholar explicitly writing that the construction is of no interest to his study of verbal periphrasis⁽⁷⁴⁾.

With regard to Archaic/Classical Greek, Aerts argues that the construction was predominantly used with a stative/resultative (what he calls ‘situation-fixing’) function, with the participle expressing an adjective-like value (as in *κεκλιμένοι ἦσαν πάντες* (Thuc. 5.7.5) “they were all closed”)⁽⁷⁵⁾. More recently, I have shown that Aerts’ view must be nuanced⁽⁷⁶⁾: the construction indeed started out as a resultative perfect in Archaic Greek, but already in fifth-century Classical Greek came to be used as an anterior perfect, both in the passive and the active voice⁽⁷⁷⁾. In fourth-century Classical Greek such (active) anterior periphrastic perfects became even more common, in some authors surpassing the number of resultative periphrastic perfects (see specially Plato, Xenophon and Demosthenes)⁽⁷⁸⁾.

Aerts’ treatment of the Post-classical and Byzantine period is much briefer (consisting of only six pages), and mainly concentrates on the Middle Post-classical period (though he claims his findings are valid for the period from 300 BC to 1000 AD). Aerts’ main conclusion is that “the character of the perfect periphrases remains the same as in ancient Greek, i.e. intransitive and situation-fixing”⁽⁷⁹⁾, though he does recognize the existence of ‘a few’ anterior (present/past) perfects. Moreover, he notes that the frequency of the construction is rather low, and that in writers such as John Malalas it occurs less frequently than *εἰμί* with aorist participle (a construction to which I turn in §2.3.2). In what follows, I will show that Aerts oversimplifies matters by not properly distinguishing between different periods and authors/texts, and that a more nuanced account can be given by adopting a register-based perspective (in combination with the proposed subperiodization of Post-classical & Byzantine Greek). As for frequency, my own (corpus-based) research shows that the construction occurs only slightly less frequently than in Classical Greek⁽⁸⁰⁾.

(73) AERTS, 1965, p. 36-51, 91-6.

(74) BJÖRCK, 1940 and DIETRICH, 1973a, b. Cf. Björck (1940, p. 99): “durch die Nichtberücksichtigung der Perfektperiphrase wird unsere Untersuchung nicht gefährdet, denn der am wenigsten gebrauchte Tempusstamm kann auf das Präsens und den Aorist in keinem nennenswerten Masse vorbildend gewirkt haben”. Björck’s lack of interest was criticized by Aerts (1965, p. 36): “it may, indeed, be considered a flaw in the otherwise admirable work of Björck that he rigorously eliminated the perfect participle from his discussions on periphrasis”.

(75) AERTS, 1965, p. 51.

(76) BENTEIN, 2012a.

(77) See e.g. *διεφθαρμένοι εἰσιν ὑπὸ Μεγαρέων* (Thuc. 1.114.1) “they have been slaughtered by the Megarians”; *ἄρρωθήσας μὴ κοινῷ λόγῳ οἱ ἕξ πεποιηότες ἔωσι ταῦτα* (Hdt. 3.119.1) “fearing that the six had done this by common consent” (tr. Godley).

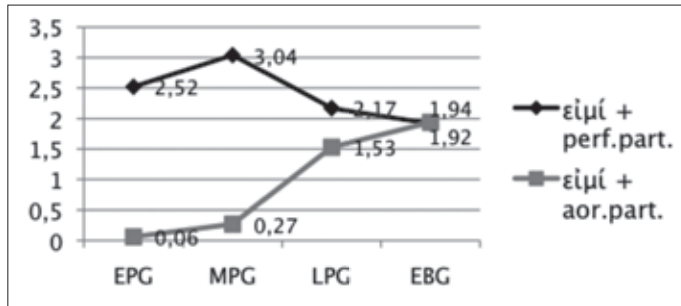
(78) This is also the time when the construction extends to the future tense, the subjective and optative mood, and (to a limited extent) persons other than the third (singular/plural) (see BENTEIN, 2012a, p. 198-201).

(79) AERTS, 1965, p. 91.

(80) At present, I am unable to provide detailed statistics for Classical Greek. However, if we take into account that there are about 120 examples of the construction in an author such as Demosthenes (BENTEIN, 2012a, p. 199) (normed rate of occurrence

A decrease in frequency is most noticeable in LPG and EBG, as illustrated in figure 2 (where I have calculated the normed rate of occurrence ('NRO') per 10000 words; this figure does not include the evidence from the papyri). We must keep in mind though that until LPG εἰμί with perfect participle remains the dominant perfect periphrasis (its main competitor being εἰμί with aorist participle).

Figure 3: *NRO (/10000 words) of εἰμί with perfect and aorist participle (from EPG to EBG)*



The overall vivacity of εἰμί with perfect participle in EPG is particularly clear in the papyri, for which I have found 282 examples (accounting for 55% of all papyrological examples of the construction!), many of which (active) anterior perfects. It is true that the high number of examples is influenced by the occurrence of the construction in closing formulas of the type τοῦτου γὰρ γενομένου, ἔσομαι, βασιλεῦ, τῆς παρὰ σοῦ βοηθείας τετευχώς (P.Enteux.54, l. 12-3 [218 BC]) “when this has happened, o king, I will have obtained your help”⁽⁸¹⁾, but the large number of content verbs used in this type of construction (to name only some: βοηθέω, εὐεργετέω, εὐγνωμονέω, σφίζω, φιλανθρωπέω, χαρίζω etc.)⁽⁸²⁾ attests to the productivity of the periphrastic perfect.

The first clear signs of a functional specialization towards the resultative function can be found in MPG: in middle-register texts εἰμί with perfect participle is used with a resultative function in up to 75% (= 111/148) of all examples (mostly with the participle in the passive voice)⁽⁸³⁾. In texts

or ‘NRO’ 4.0 per 10000 words), and that this is one of the authors in whose work the construction occurs most frequently, I would expect the NRO for the entire Classical Greek period to lie somewhere between 3 and 4 per 10000 words (though I should stress that this is only an estimation).

(81) This particularly concerns the petitions. As White (1972, p. xii) notes, reference to “anticipated justice the petitioner will receive if the request is granted” was a structural part of petitions.

(82) Note that we also find various verbs of neglect (e.g. ἀδικέω, ἀποστρέφω, λυπέω, παροράω etc.), which are mostly negated and passivized (“I will not have been ...”).

(83) For some examples, see e.g. ὁ τόπος ἐν ᾧ ἦσαν συνηγμένοι (Acts 4.31) “the place in which they were gathered”; Φαλκονίλλα ἣν τεθνεώσα (*A. Paul. et Thecl.* 28.8) “Falconilla was dead”; ἣν ἡ πύλη κεκλεισμένη (*Apoc. Bar.* 11.2) “the gate was closed”; ἣν αὐτῶν ἡ καρδία πεπωρωμένη (*Mc.* 6.52) “their heart was hardened”.

from the high register, on the other hand, where the overall frequency of the construction is admittedly lower, the construction continues to be used with both aspectual functions (both in the active and the passive voice) (in Plutarch, 46% (19/41) are anterior, 54% (22/41) resultative, in Cassius Dio, 62% (36/58) anterior, 38% (22/58) resultative). In the papyri a tendency towards functional specialization is less clear as well, as the construction continues to be used in formulaic expressions of the type mentioned above.

In LPG and EBG essentially the same situation obtains in the middle register: the construction of εἰμί with perfect participle is predominantly used with a resultative function (with 80% (104/130) of the examples in LPG and 76% in EBG [90/119]), again mostly in the passive voice⁽⁸⁴⁾. Authors writing in the high register, on the other hand, though using the construction less frequently, seem to resist this change (similarly to what we have seen in MPG): in LPG only 54% (55/101) of the examples are used with a resultative function. Here we continue to find formations with an anterior function, though mostly in the passive voice⁽⁸⁵⁾. In EBG the situation changes in that the construction becomes highly infrequent in the high register (with only 14 examples; NRO 0,8 per 10000 words); the earlier mentioned decrease in frequency of εἰμί with perfect participle in LPG and EBG should thus be attributed specifically to a ‘loss of interest’ from the part of the high register (or more correctly, authors adopting this register). In the papyri as well, we see a quite spectacular decrease in frequency (282 examples in EPG, 206 in MPG versus 21 in LPG and zero in EBG), but for both periods we must take into account the lesser availability of witnesses (see §2.2.).

In summary, I have argued that the functional specialization of εἰμί with perfect participle towards the resultative function should be located in MPG in the middle register, where the construction is used with a more or less stable frequency throughout the entire period under analysis. Such change was resisted by the high register until LPG, after which the construction virtually disappears. In the low register the construction frequently occurs with both aspectual functions especially in EPG, a situation which changes quite drastically in LPG and EBG.

2.3.2. *εἰμί with aorist participle*

The second periphrastic construction which I turn to is that of εἰμί with aorist participle. The diachrony of this construction was previously treated by Björck and Aerts⁽⁸⁶⁾. Both scholars argue that the construction should be

(84) For some examples, see e.g. κεκολλημένον γὰρ ἦν τὸ ἱμάτιον αὐτοῦ (Anton. Hag., *V. Sym. Styl. Sen.* 8.2) “his garment was stuck fast”; ἡ γὰρ φύσις αὐτῶν ἐστὶν ἡγοιωμένη (A. Phil. (Xen. 32) 3.2) “their nature is bewildered”; ἡν ἀποκεκλεισμένη ἡ δέσποινα Βηρίνα (Jo. Mal., *Chron.* 387.4) “the lady Verina was imprisoned”; νηφάλιος ἦν σφόδρα καὶ ἐστυμμένος (V. Pach. 117.2) “he was very sober and strict”.

(85) For some examples, see e.g. θεῶ τὰ ἀρεστὰ διαπεπραγμένοι εἴητε ἂν (Eus., *V.C.* 3.12.5) “you will have brought about what pleases God”; αὐτῷ ταῦτα ἦν εἰρημένα (Eustrat., *V. Eutyph.* 1036) “that had been said by him”; καὶν ἁμαρτίας ἢ πεποιηκώς (Eustrat., *V. Eutyph.* 1270) “even if he has committed sins”; ἡν αὐτοῖς πλοῦτος συνειλεγμένος (Zos., *H.N.* 5.1.4) “wealth had been gathered by them”.

(86) BJÖRCK, 1940, p. 74-85; AERTS, 1965, p. 27-35, 76-90.

considered semantically similar to the synthetic pluperfect (according to Björck already in Classical Greek), which it came to replace in Post-classical Greek (hence the increase in frequency with respect to Classical Greek). Björck and Aerts characterize the construction as a pluperfect periphrasis, rather than a general (i.e. present/past/future) perfect periphrasis, on the basis of the fact that it occurs predominantly with εἰμί in the imperfect tense (next to some examples in the subjunctive/optative mood). They find the first Post-classical instances of the construction in MPG (according to Björck in the NT (Lc. 23.19), while according to Aerts (who rejects Lc. 23.19) in the first/second century AD⁽⁸⁷⁾).

While I do not want to dispute that the disappearance of the synthetic pluperfect stimulated the occurrence of periphrastic constructions, characterizing εἰμί with aorist participle as a pluperfect periphrasis may not be entirely correct. It is worth making the following critical remarks. Firstly, and this was already noticed by Aerts⁽⁸⁸⁾, Björck's characterization of εἰμί with aorist participle in the Classical literature as a pluperfect periphrasis must be dismissed: at this stage of the language, it is best to think of the construction as an innovative extension of the more frequently occurring constructions of εἰμί with perfect and present participle, without a fixed (perfect) aspectual value⁽⁸⁹⁾. Secondly, neither of these scholars explicitly characterizes the construction as an *anterior* pluperfect periphrasis, though from their discussions it would seem that this is what they are aiming at. However, if εἰμί with aorist participle really came to 'replace' the synthetic pluperfect, then we would expect it to function both with a resultative and an anterior function, similarly to the synthetic pluperfect. Thirdly, neither Björck nor Aerts checked the tense usage of εἰμί with perfect participle in its anterior function. My own research shows that in the indicative mood, up until 80% of the examples have εἰμί in the imperfect tense (81% [60/74] in EPG, 82% [56/68] in MPG [based on literary texts]). Thus, it would seem that the use of the imperfect is a general characteristic of the anterior perfect (especially in narrative texts). This seems natural, since the main function of the anterior perfect is to provide additional information to storyline events⁽⁹⁰⁾, which in narrative texts are mostly situated in the past themselves⁽⁹¹⁾. Fourthly, Aerts considers examples with εἰμί in the present tense 'extremely rare', if not non-existent⁽⁹²⁾ (Björck makes no mention of

(87) BJÖRCK, 1940, p. 77; AERTS, 1965, p. 81, 90.

(88) AERTS, 1965, p. 27-35, 77.

(89) Consider cases such as λέξον τίν' αὐδὴν τήνδε γηρυθείσ' ἔσση (Aesch., *Suppl.* 460) "say what words these are that you are going to utter" (tr. Sommerstein); οὐδέ τι νεώτερόν εἰμι ποιήσας νῦν (Hdt. 4.127.1) "I am not doing any differently now"; οὔτε γὰρ θρασὺς οὔτ' οὖν προδείσας εἰμι (Soph., *OT* 89-90) "so far I am neither bold nor fearing prematurely"; ἦν φύσεως ἰσχὺν δηλώσας (Thuc. 1.138.1) "he had shown proofs of his mental strength".

(90) Compare with what I have called the 'relational' or 'explanatory' function of the anterior perfect; BENTEIN, 2012a, p. 201-3.

(91) On the basis of my own earlier study (BENTEIN, 2012a), I have calculated that in Archaic/Classical Greek (only) 52% of the anterior perfects occur in the imperfect tense (in the indicative mood). This relatively low percentage may be explained by the fact that I have also included non-narrative texts in the corpus.

(92) AERTS, 1965, p. 88-9.

such forms whatsoever). While admittedly rare, such cases can be found⁽⁹³⁾. Since we also have (a few) examples with εἰμί in the future tense⁽⁹⁴⁾, we may be justified after all in speaking of a general (i.e. present/past/future) perfect periphrasis (though mostly occurring as an anterior past perfect).

In what follows, I present an alternative perspective to the diachrony of εἰμί with aorist participle by relating it more narrowly to that of εἰμί with perfect participle, as well as by taking into account register. My own account of the use of εἰμί with aorist participle in Post-classical Greek starts somewhat earlier than those of Björck and Aerts. Both scholars seem to have overlooked the fact that various instances of the construction can already be found in EPG, in texts such as Polybius' *Histories*, Dionysius of Halicarnassus' *Roman Antiquities* and the *Life of Adam and Eve*⁽⁹⁵⁾. The first period in which this construction is attested with some frequency is MPG, mainly in the low and middle register⁽⁹⁶⁾. While the construction could be used both with a resultative and an anterior aspectual function (a fact which has been completely overlooked by the standard accounts)⁽⁹⁷⁾, we find that it is predominantly used as an anterior perfect. This can be connected to the diachrony of εἰμί with perfect participle, as sketched above: the fact that the latter construction became functionally specialized towards the resultative function, especially in the middle register, must have stimulated the development of an anterior periphrastic perfect construction with the aorist participle in the same register (undoubtedly, this process was further stimulated by the syncretization of the synthetic perfect and aorist in the indicative mood). The fact that the

(93) See e.g. ἔστι δέ τι καὶ δημωφελὲς ὑπ' αὐτοῦ πραχθέν (Cassius Dio, *H.R.* 72.7.4) "there has also been done something of public use by him"; οὐκ ἀγαθόν τι εἰσὶν ἐργασάμενοι (Jo. Mal., *Chron.* 131.14) "they have not done anything good"; εἰσὶν Ἕλληνες πλείονα τούτου σοφίαν κτησάμενοι καὶ πλείονας αὐτοῦ βίβλους συγγραψάμενοι (Leont. N., *V. Sym. Sal.* 86.15-6) "the Greeks have gathered more wisdom than he and have written more books than he"; (ἡ ἐπιστολή) πρὸς τὸν ἔσχατον γενόμενόν ἐστιν (Thphn., *Chron.* 77.20) "the letter has been addressed to the latter".

(94) See e.g. πολλοὶ ἔσονται μεθυσθέντες (*A. Phil.* (Xen. 32) pass. 36.24) "many people will be drunk"; ἔσῃ χάριν μεγάλην πο[ι]ήσας (P.Bad.2.33, l. 9-10 [II AD?]) "you will have done a great favor"; ἔσει μοι [χαρι]ς ἄμενος (P.Oxy.42.3067, l. 11-2 [III AD]) "you will have done me a favor".

(95) See e.g. ἦσαν ὑπ' αὐτῶν ἀποδειχθέντες (Dion. Hal., *Ant. Rom.* 9.60.1) "they had been appointed by them"; ἦσαν πρεσβευταὶ πεμφθέντες ὑπὸ τῶν Ἀχαιῶν (Pol., *Hist.* 38.10.2) "they had been sent as envoys by the Achaeans"; ἦν γὰρ οἰκισθεῖσα ἡ γῆ εἰς τρία μέρη (*V. Ad. et Ev.* 5.4) "for the earth was divided into three parts".

(96) See e.g. οὐδέπω γὰρ ἦσαν δεξάμενοι τὸ ἐπισφράγισμα τῆς σφραγίδος (*A. Thom.* 27.4-5) "they had not yet received the added sealing of the seal"; ἡ γὰρ λέαινα ἐξελθοῦσα ἦν ἐπὶ τὴν ἑαυτῆς τροφήν (*A. Xanthipp.* 26.24-5) "for the lioness had gone forth for her food"; θεασάμενος ἦν ὅσα ἀγαθὰ ἐποίησεν (*Ev. Petr.* 23.2-3) "he had seen the many good things he had done"; ἐὰν ᾗς λαβὼν τὰς (δραχμὰς) ρ, δὸς αὐτῇ (P.Oxy.58.3919, l. 11-2 [188 AD]) "if you have received the 100 drachmae, give (them?) to her"; εἰ μὲν εἴημεν διασεισθέντες ὑπὸ Φιλέου (P.Oxy.10.1252, l. 29-30 [289/90 AD]) "if we had suffered extortion from Phileas".

(97) For an example of the construction with the resultative function, see καθαροὺς χορὴ εἶναι καὶ πάσης λύπης καὶ φροντίδος ἀπαλλαγέντας (*A. Thom.* 126.11-2) "it is necessary to be pure and free from all grief and care".

construction is much less prominent in the high register can be explained by the fact that εἰμί with perfect participle was still used with both a resultative and an anterior function.

In LPG and EBG, εἰμί with aorist participle further gains in frequency (cf. again figure 3), still being predominantly used with an anterior function (85% (150/177) in LPG and 87% (123/141) in EBG)⁽⁹⁸⁾. As noted before, the construction mostly occurs in the imperfect tense, and is very often accompanied by particles such as γάρ, οὖν or δέ (cf. the ‘relational’ or ‘explanatory’ function of the anterior perfect mentioned above). The further rise of the construction should be connected to the middle register (with 135 examples in LPG (NRO 2,4 per 10000 words) and 123 (NRO 2,4 per 10000 words) in EBG). In the high register, on the other hand, where εἰμί with perfect participle constitutes the dominant perfect periphrasis for both the resultative and the anterior function (at least until LPG, see above), the construction does not gain firm ground, with only 28 examples in LPG (NRO 0,5 per 10000 words) and 12 (NRO 0,7 per 10000 words) in EBG. The papyri contain surprisingly few examples⁽⁹⁹⁾ (14 in LPG and 6 in EBG, versus 20 in MPG), but again we must take into account the lesser availability of witnesses in these periods.

In summary, I have argued that εἰμί with perfect participle and εἰμί aorist participle should be considered diachronically interrelated: while in EPG εἰμί with perfect participle is the dominant perfect periphrasis (for both the resultative and the anterior function) in all registers, starting from MPG the construction becomes functionally specialized in the middle register for the resultative function. This must have stimulated the rise of εἰμί with aorist participle as an anterior perfect periphrasis in this same register. In the high register, on the other hand, the construction never gains firm ground, which can be related to the fact that (at least until LPG) εἰμί with perfect participle remains the dominant perfect periphrasis for both functions. As for the low register, the MPG period shows clear signs of the development of εἰμί with aorist participle, though for LPG and EBG we have only few examples, due to a lack of witnesses.

(98) Again, though, we find examples with a resultative function (mostly with the passive aorist participle of lexically telic content verbs), as in εἶδον τὸ αἷμα καὶ ἰδοὺ ἦν πεπηγὸς καὶ τυρωθὲν ὡς γάλα (*V. Sym. Styl. Jun.* 166.8) “and I saw the blood, and behold it was coagulated and curdled as milk”.

(99) See e.g. φήμης δὲ πρόωγ [δια]δοθείσης ὥς εἶη τελευτήσας (*P. Ammon.1.12*, l. 27 [348 AD]) “a rumour had just been spread round saying that he (Harpocration) had died”; ἀναγκαίως δὲ καὶ ἡμεῖν ἐπίστειλον ὅτι εἰ ἦς ἐπιδημήσασα (*P.Oxy.14.1682*, l. 8-9 [IV AD]) “and do you by all means send word to us whether you have arrived”; οἶδες γάρ ὅτι εἰ μὴ ἦς προσφωνήσας οὐκ ἐδίδω τὰς χλαμύδας (*P.Oxy.48.3404*, l. 9-12 [IV AD]) “for you know that if you had not reported I would not have given the cloaks”; τὸ πόσον τῆς προτελείας ἥσπερ ἡμεν γράψαντες πρὸς σὲ προτελεῖσαι α[ὐ]τ[ῷ] (*P.Lond.4.1360*, l. 8-9 [710 AD]) “the amount of the *proteleia* of which we had written to you to pay it beforehand to him”.

2.3.3. εἰμί with present participle

The third and final construction I turn to here is that of εἰμί with present participle. Of the three constructions dealt with in this article, the diachrony of εἰμί with present participle is undoubtedly the most debated. According to Aerts⁽¹⁰⁰⁾, the construction first appears in Classical Greek, where it was (almost)⁽¹⁰¹⁾ never used with a progressive function, being confined to the stative function. Aerts finds the first true progressives in Post-classical Greek, more in particular in the Septuagint (henceforth LXX), the New Testament (henceforth NT), and the subsequent Christian (hagiographical) literature. Aerts considers the progressive periphrasis “a good example of such a manner of expression that is possible in Greek but is essentially not Greek”⁽¹⁰²⁾: its presence in the LXX can be explained through the influence of Hebrew, that in the NT (especially Luke) through the wish for imitation of the LXX, and that in the Christian literature through the wish for imitation of the NT. Aerts’ main argument for this (bold) claim is that the construction appears nowhere in the papyri⁽¹⁰³⁾.

Björck and Dietrich present an entirely different view⁽¹⁰⁴⁾: Dietrich in particular argues that examples of εἰμί with present participle with a progressive function can be found in Classical and even Archaic Greek. Both scholars attribute much less importance than Aerts did to the influence of Hebrew⁽¹⁰⁵⁾. Dietrich believes that there ‘may have been’ direct or indirect influence on the use of the periphrastic progressive, but that this question is “nicht von entscheidender Bedeutung für die Feststellung ihrer Existenz und ihrer Kontinuität in der griechischen Sprachgeschichte”⁽¹⁰⁶⁾. They recognize that the construction is most frequently used in the New Testament and the subsequent Christian literature, while much less so in the papyri, but this is attributed to the peculiar nature of the former as ‘Volkserzählung’⁽¹⁰⁷⁾. The papyri, on the other hand, contain only few truly descriptive passages⁽¹⁰⁸⁾.

As far as Archaic/Classical Greek is concerned, the truth seems to lie somewhere in the middle⁽¹⁰⁹⁾: examples with a progressive function are not *entirely* absent⁽¹¹⁰⁾, though it is undeniably true that statives are much

(100) AERTS, 1965, p. 5-26.

(101) An exceptional example would be ἃ μεταπεμπόμενοι ἦσαν (Thuc. 3.2.2) “the things they were sending for”.

(102) AERTS, 1965, p. 75.

(103) Cf. AERTS, 1965, p. 56: “the remarkable fact is that the progressive periphrasis can not be demonstrated in the common Koine-usage”.

(104) BJÖRCK, 1940, p. 41-73; DIETRICH, 1973a, b.

(105) This is most outspoken in BJÖRCK, 1940, p. 67-9.

(106) DIETRICH, 1973a, p. 187.

(107) BJÖRCK, 1940, p. 67.

(108) BJÖRCK, 1940, p. 66-67; DIETRICH, 1973a, p. 211; see below.

(109) For more detailed discussion, see BENTEIN, 2012b.

(110) See especially Herodotus and the dramatists, as in δαρόν ἡμεν ἡμενοι χρόνον (Eur., *IT* 1339) “we were sitting (there) for a long time”; ταῦτα δὲ ἦν γινόμενα ἐν Μιλήτῳ (Hdt. 1.147.1) “these things were happening in Miletus”; δοὼν γὰρ ἦν τοιαύτ’ (Soph., *Aj.* 1324) “he was doing such things”.

more common at this stage⁽¹¹¹⁾. As noted above, the use of εἰμί with present participle with a (durative) progressive function becomes more common in EPG: in the LXX alone we find more examples than in the entire Archaic and Classical literature combined (I count 137 cases). The existence of a structurally similar construction in Hebrew (with the verb הָיָה (*hāyāh*) “be”) must have stimulated this development. In this period, the use of εἰμί with a stative function (especially with participles of impersonal verbs such as δέον “necessary”, προσήκον “fitting” and συμφέρον “beneficiary”) is common in all registers, and can be considered a continuation of Classical Greek. Contrary to what especially Aerts (1965) would have us believe, however, texts from the low and high register are not entirely limited to such stative cases⁽¹¹²⁾.

My own research confirms the observation that in MPG the progressive construction occurs predominantly in the middle register (87% [= 104/120]), though again not exclusively: some examples can be found in the papyri as well as high-register texts⁽¹¹³⁾. The presence of such cases both in EPG and MPG undermines Aerts’ claim that the construction cannot be found in common Koine-usage. Another important observation (attesting to the relative independence of the NT vis-à-vis the LXX) concerns the percentage of focalized progressives: while in the LXX these represent 15% (20/137) of the total number of progressive cases, in the NT they represent up to 40% (27/68)⁽¹¹⁴⁾. As in EPG, εἰμί with present participle is frequently used with its stative function in texts from all registers.

With regard to LPG and EBG, scholars have tended to stress the decline of the construction. Björck, for example, relates the development of the construction to the decline of the (active) present participle and notes that while after the New Testament the construction can be found in Christian ‘Volksliteratur’ and Byzantine chronicles, “die Frequenz ist indessen ... im Ganzen

(111) See e.g. τὰ δ’ ὄργι’ ἐστὶ τίν’ ἰδέαν ἔχοντά σοι; (Eur., *Bacch.* 471) “what appearance do your rites have?”; ταῦτα μὲν καὶ ἔτι ἐς ἐμὲ ἦν περιέοντα (Hdt. 1.92.1) “during my lifetime these things were still left over”; ἃ ἦν ὑπάρχοντα ἐκεῖνῳ ἀγαθὰ (Lys. 13.91) “the wealth that was at hand for him”; τάδ’ ἐστ’ ἀρέσκονθ’ (Soph., *OT* 274) “these things are pleasing”.

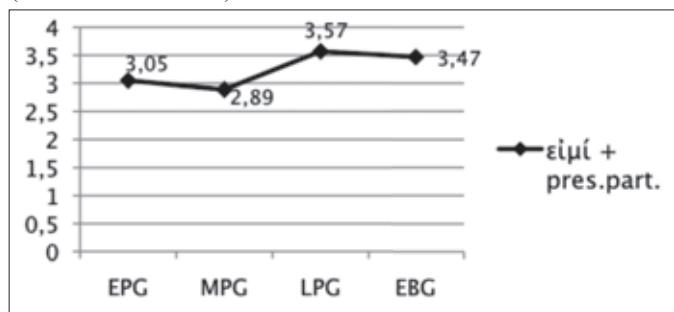
(112) For some examples of εἰμί with present participle with a progressive function, see e.g. ἔστι διαβάλλον (P.Cair.Zen.1.59037, l. 11 [258/257 BC]) “he is talking scandal”; καθημένῃν καὶ οὐ κινουσα (UPZ.1.79, l. 12-3 [159 BC]) “she was sitting and not moving”; ἦν χωροῦν ἐπὶ τὸν ἀγῶνα (Dion. Hal., *Ant. Rom.* 6.2.1) “it (the population) was entering the struggle”.

(113) See e.g. ἔσται τελῶν (P.Dura.23, l. 7 [134 AD]) “he will be delivering”; ἐμοῦ ὄντος ἐργαζομένου (P.Mich.5.229, l. 7-8 [48 AD]) “while I was working”; ἦσαν δ’ οὐκ ὀλίγοι παρεδρεύοντες αὐτῷ τῶν μαθησάντων (Flav. Jos., *Bell. Jud.* 1.78) “many of his students were sitting beside/attending to him”.

(114) For some examples from the NT, see e.g. ἦσαν δὲ τινος Σκευᾶ Ἰουδαίου ἀρχιερέως ἑπτὰ υἱοὶ τοῦτο ποιοῦντες. ἀποκριθὲν δὲ τὸ πνεῦμα τὸ πονηρὸν εἶπεν αὐτοῖς (Acts 19.14-5) “seven sons of a Jewish high priest named Sceva were doing this, when an evil spirit said to them”; ἦν δὲ Σίμων Πέτρος ἐστὼς καὶ θερμαινόμενος. εἶπον οὖν αὐτῷ (John 18.25) “Simon Petrus was standing and warming himself. So they said to him ...”; πάντων οἱ ὀφθαλμοὶ ἐν τῇ συναγωγῇ ἦσαν ἀτενίζοντες αὐτῷ. ἤρξατο δὲ λέγειν πρὸς αὐτοὺς (Lc. 4.20-1) “the eyes of all in the synagogue were looking intently at him. He began to say to them ...”.

eine abnehmende”⁽¹¹⁵⁾. As shown in figure 4, this turns out to be untrue: in LPG and EBG the construction slightly increases in frequency (again, this figure does not include the evidence from the papyri):

Figure 4: *NRO (/10000 words) of εἰμί with present participle (from EPG to EBG)*



When looking at the distribution of the different aspectual functions, we find that this increase in frequency is to be primarily attributed to the use of εἰμί with present participle with a durative function: being well established in the middle register in both LPG and EBG (with respectively 40% (110/273) and 50% (89/180) of the examples in this register being of the durative type), the use of the construction with a durative function spreads in the high register as well, especially in EBG (representing 51% (= 31/60) of the total number of examples in this register)⁽¹¹⁶⁾. In the low register, that is, the papyri, very few examples can be found (3 in LPG and zero in EBG), perhaps partly due to a lack of witnesses, though other elements may have played a role as well (on which, see §3.1). As for the other aspectual functions, statives remain in use throughout LPG and EBG, even in the papyri⁽¹¹⁷⁾, while focalized progressives are mainly limited to the middle register, remaining marginal in the high

(115) BJÖRCK, 1940, p. 66. For an even more outspoken claim, see ROSÉN, 1979, p. 64: “en réalité, les formes périphrastiques étaient mourantes en grec à notre époque; après le Nouveau Testament, on n’en trouve que très peu de traces dans quelque emploi que ce soit, seule la langue néotestamentaire a pu les maintenir jusqu’en pleine époque de la κοινή tardive grâce à l’appui apporté par l’araméen”.

(116) For some examples, see e.g. ἦν ἀκούων καὶ λαλῶν διαπαντός καὶ αἰνῶν τὸν θεόν (Eustrat., *V. Eutych.* 1312-3) “he was hearing and talking continually and praising the lord”; δι’ ὅλης τῆς νυκτὸς ἦν δοξολογῶν καὶ εὐχαριστῶν τῷ θεῷ (Jo. D., *Artem.* 50.9-10) “the entire night he was lauding and praying to the lord”; ἕως θανάτου οὕτως ἦν ὑπὸ τοῦ δαίμονος παιδευόμενος (Steph. Diac., *V. Steph.* 69.13-4) “but until his death he was thus being chastised by the demon”.

(117) For some examples, see e.g. ἐάν σοι δοκοῦν ἐστὶν ἀπόσιλον (P.Abinn.26, l. 30-1 [342-351 AD]) “if it seems good to you, send ...”; τὰ κατὰ σὲ διοίκησον ὡς πρέπον ἐστίν (P.Oxy.1.120, l. 23-4 [IV AD]) “see that matters are properly conducted on your own part”; οὐτε τοῖς [νόμοις] ἀκόλ[ου]θον ἀδικεῖαν τε [ἐ]χον ἐστίν (P.Oxy.9.1186, l. 7-8 [IV A.D.]) “it is against the laws and an injustice”; ἔση οὖν ἐπιστάμενος (P.Lond.4.1339, l. 17 [709 AD]) “so be knowing (aware) that”.

register (with 4 examples in LPG and 5 in EBG)⁽¹¹⁸⁾. In other words, the use of εἰμί with present participle with a focalized progressive function does not seem to have become sociolinguistically acceptable in the high register. As in all of the previous periods, the use of εἰμί with present participle with a habitual function is infrequent in all registers.

In summary, I have argued that εἰμί with present participle was used with a stative function throughout the entire period under analysis. In EPG, the construction also started to be used with a (durative) progressive function in the middle register. In this same register we witness the extension of the construction to a focalized progressive function in MPG. In LPG and EBG, the construction further gains in frequency, becoming more frequently used as a durative progressive in the high register as well (especially in EBG). This may be contrasted with the focalized progressive function, which remains marginal in the high register. While the papyri do not contain much examples, it cannot be maintained that there are no examples whatsoever of the construction in what Aerts calls the ‘common koine-usage’.

2.4. *Interim conclusion: Register & diachrony*

In the second part of this article, I have applied a register-based approach to the diachronic development of periphrastic constructions with εἰμί. While the older works treat the Post-classical (and Early Byzantine) period(s) as a monolithic whole, I have shown that by referring to register (in combination with a periodization of the period from the third century BC to the eighth century AD into four subperiods) we can reach a more detailed and insightful analysis. Such a re-evaluation of the standard works is needed, as their findings continue to be referred to⁽¹¹⁹⁾.

My own analysis confirms the viability of Markopoulos’ hypothesis with regard to the gradual spread of and competition between constructions. This is on condition, of course, that the unit of our analysis is not defined purely morphosyntactically (what Markopoulos calls an ‘auxiliary verb construction’), but rather as a pairing of (aspectual) meaning and form. In the case of εἰμί with perfect and aorist participle, we have seen that the former became functionally specialized for the resultative function in MPG in the middle register, stimulating the development of εἰμί with aorist participle with an anterior function in that same register. In the high register, on the other hand, εἰμί with perfect participle remained used for both functions (at least until LPG), thus blocking the development of εἰμί with aorist participle as an anterior perfect. The case of εἰμί with present participle is one of gradual

(118) For some examples from the middle register, see e.g. ὡς δὲ ταῦτα ἦν λέγων ὁ Φίλιππος, καὶ ἰδοὺ (*A.Phil.* (Vat.gr. 824) 128.1) “when Philip was saying these things, behold ...”; ὁ δὲ εἰς ἐξ αὐτῶν παρεμμένος ἦν σύρων τὸν ἕνα πόδα ... ὡς δὲ εἶδε τὸν ἅγιον παῖδα τοῦ Θεοῦ (*V. Sym. Styl. Jun.* 58.3-5) “one of them, weakened [by illness], was dragging his one foot ... when he saw the holy servant of the Lord ...”; ἦν δὲ Σέργιος καθημένος πρὸς Μαυρίαν, καὶ εἰσελθόντος Ἀνδρέου (*Tphn., Chron.* 349.6-7) “Sergius was seated in front of Maurias, and when Andrew entered ...”.

(119) See e.g. DRINKA, 2003, who bases her treatment of perfect periphrasis in Ancient Greek entirely on AERTS, 1965.

spread: we have seen how εἰμί with present participle was used with a stative function in all registers at all times, with a durative progressive function in the middle register starting from EPG and in the high register starting from LPG, and with a focalized progressive function in the middle register starting from MPG.

As for the high register, I hope to have shown that it cannot simply be equated with Classical Greek, and somehow considered ‘immune’ to diachronic change (as it is often represented). On the basis of the above discussed cases, one could conclude that the attitude of the high register (or more correctly authors writing in the high register) is one of ‘resistance’ to ongoing change, which would be in accordance with observations made elsewhere⁽¹²⁰⁾. It is important to realize, however, that the high register too may be the starting point for innovations⁽¹²¹⁾. For example, in the high register we find that the construction of ἔχω with aorist participle, which had disappeared in the fourth century BC, was being reintroduced (on a small scale)⁽¹²²⁾.

3. Discussion: difficulties (and prospects)

While I believe a register-based approach to the diachrony of the Greek language holds great promise⁽¹²³⁾, it should be stressed that what I have presented here is just a starting-point and that it is not without difficulty either. In what follows, I will single out five elements that are in need of further attention. The first two of these (§3.1 and §3.2) specifically concern the papyri. While various scholars have stressed the importance of the papyri as a source of information for the diachronic development of Ancient Greek⁽¹²⁴⁾, “language specialists have still barely begun to exploit the richness of the resource”, as Evans observes⁽¹²⁵⁾.

3.1. Register and genre

The first point which I would like to discuss here concerns the comparability of the papyri as a corpus of predominantly non-narrative documentary

(120) See e.g. ROMAINE, 1994, p. 146: “research indicates that formal styles and high registers are more conservative, while informal speech draws on the latest innovations”.

(121) Compare POUNTAIN, 2006.

(122) For some examples, see e.g. ὁ δὲ δὴ μάλιστα θαυμάσας ἔχω (Cassius Dio, *Hist. Rom.* 75.4.7) “but at what I have marvelled the most”; ταῦτ’ ἀληθεύσας ἔχεις (Dion. Hal., *Ant. Rom.* 1.82.6) “you have spoken the truth about these matters”; τινὰς τῶν εἰρημένων αἰρέσεων ἢ ἀρχηγούς ἢ σπουδαστὰς γενομένους ἐπαινέσας ἔχω (Soz., *H.E.* 3.15.10) “I have bestowed commendations upon the leaders or enthusiasts of the above-mentioned heresies”.

(123) As Wolfgang de Melo (p.c.) notes, one particularly promising field may be that of lexical variation. An interesting example from the Septuagint is mentioned by Lee (1983, p. 123-124): the everyday word for “to rain” is βρέχω, but in the speech of God one finds the more antiquated ὕω or the nominal periphrasis ἐπάγω ὑετόν (see LEE, 1985, p. 25 for examples from the New Testament, and compare with my discussion in §3.3).

(124) DICKEY, 2009, p. 149; EVANS & OBBINK, 2010, p. 1-3.

(125) EVANS, 2010, p. 197.

texts with narrative literary texts: to what extent should a register-based analysis anticipate genre-influences? A case in point would be the periphrastic progressive: both Björck and Dietrich explain the low frequency of occurrence of the construction in the papyri by referring to the fact that they contain few 'descriptive' passages⁽¹²⁶⁾. Aerts, on the other hand, believes that the low frequency of the construction in the papyri can be explained by the fact that we are dealing with a Semitism ('Septuagintalism')⁽¹²⁷⁾.

While Aerts' hypothesis cannot be upheld (as I have argued above), neither Björck nor Dietrich substantiates his claim with regard to the papyri. In order to check the validity of their intuitions with regard to the effects of genre, I have executed a small case-study of a collection of papyri contained in the first volume of Wilcken's monumental *Urkunden der Ptolemäerzeit*⁽¹²⁸⁾. The texts which I have investigated all date to the second century BC and are all related to the brothers Ptolemaios and Apollonios (the former working in the Serapeum in Memphis, and the latter being part of the military), and the (Egyptian) twin sisters Thauos and Taous (who probably did not know/could not write any Greek and were being assisted by Ptolemaios and Apollonios)⁽¹²⁹⁾. To be more specific, I have investigated the tense usage in these documents: it stands to reason that, if there are truly less descriptive passages in the papyri, this will be primarily reflected in the lesser occurrence of synthetic imperfects⁽¹³⁰⁾. As shown in table 1, this indeed turns out to be the case (since especially in the case of the present and aorist tense there are many infinite forms, I have indicated the number of finite forms separately): imperfects occur infrequently (representing only 3% of the total number of tense forms), much less so than the three main tenses present, aorist and perfect (representing respectively 51%, 32% and 11%).

(126) BJÖRCK, 1940; DIETRICH, 1973a, b. See e.g. BJÖRCK, 1940, p. 66: "gerade für unsere Zwecke sind aber diese Dokumente unergiebig, schon weil sie naturgemäss nicht sehr oft eine ausführliche Schilderung von Episoden enthalten".

(127) AERTS, 1965.

(128) WILCKEN, 1927. I have taken into account the following texts: UPZ.1.3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 31, 32, 33, 34, 35, 36, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 63, 65, 67, 68, 69, 70, 73, 74, 75, 76, 77, 78, 79, 80, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105.

(129) For more background, see WILCKEN, 1927, p. 104-16; LEWIS, 1986, p. 69-87; HOOGENDIJK, 1988.

(130) It is worth noting that some scholars have claimed that the synthetic aorist not only entered in competition with the perfect but also with the imperfect, which would mean that the lesser occurrence of imperfects is not necessarily (exclusively) related to a lesser occurrence of descriptive passages (see e.g. DIETERICH, 1898, p. 240: "nachdem so der schwache Aorist sowohl das Perfekt wie den starken Aorist paralysiert hatte, dehnte er seinen Einfluss auf das Imperf. aus"; see MAYSER, 1926, p. 134-9 with regard to the papyri). In my view, however, we must be careful not to overestimate the developmental parallel between the imperfect and perfect (as DIETERICH, 1898, p. 241 himself recognizes). It would seem that in Post-classical and Byzantine Greek the aorist became the default tense for the narration of past events, without there being a profound change to the aspectual function of the imperfect (EVANS, 2001, p. 208, 218-219).

Table 1: *Tense usage in a selection of UPZ-papyri*

Tense	Number of instances (general)	Number of instances (finite)
Present	902 (51%)	411 (52%)
Imperfect	53 (3%)	53 (7%)
Aorist	563 (32%)	190 (25%)
Future	40 (2%)	27 (3%)
Present perfect	194 (11%)	93 (12%)
Past perfect	4 (0,5%)	4 (0,5%)
Future perfect	5 (0,5%)	4 (0,5%)
Total	1761	782

What makes the UPZ-corpus particularly interesting is that it contains different types of texts, which are classified by Wilcken as follows: petitions (*Eingabe*), letters (*Briefe*), dreams (*Traume*) and bills (*Rechnungen*). Relating tense usage to these four categories further improves our analysis: it shows that imperfects are (virtually) absent in the bills and letters (with zero instances in the former and 1 instance in the latter), but less so in the petitions and especially dreams (in the dreams, imperfects represent up to 13% of the total number of verb forms [= 25/187]). Here, we do find descriptive passages lending themselves to the use of the imperfect, as illustrated in (1). Perhaps unsurprisingly then, in the dreams we also find two examples of the periphrastic progressive (καθημέν' ἦν καὶ οὐ κινούσα (UPZ.1.79, l. 12-3) “she was sitting and not moving”).

(1) τῇ ιδ ὥμην με ἐν Ἀλεξανδρίᾳ με εἶναι ἐπάνω πύργου μεγάλου. εἶχον πρόσωπον καλὸν {εἶχον} καὶ οὐκ ἤθελον οὐθενεῖ διξαί μου τὸ πόρσωπον διὰ τὸ καλὸν αὐτὸν εἶν[α]ι καὶ γραυ<ς> μοι παρε[]κάθητο καὶ ὄχλος ἀπὸ βορρᾶ μου καὶ ἀπὸ ἑπλευρῆς. κραζ[ουσι] ἡ[ν]θηρεῖσθαι ἄνθρωπον πολλαῖς <. . . ? > καὶ λέγει μοι “πρόσμινον βραχὺ καὶ ἄξω σε πρὸς τὸν δαίμονα Κνήφιν, <ίν>α [προ]σκυνήσης [α]ὐτόν” (UPZ.1.78, l. 28-35)

“on the 14th I seemed [in a dream] to be on a big tower in Alexandria. I had a handsome face and I didn’t want to show my face to anyone because it was so beautiful. An old woman sat down by my side and a crowd gathered to the north and east of me. They shout that a man had been burned to crisp, and the old woman says to me, ‘Wait a minute and I will lead you to the god Knephis, so you can kneel and worship him’” (tr. Lewis)

Our analysis could be improved even further by recognizing what in the literature are known as ‘discourse modes’⁽¹³¹⁾. Smith recognizes five different modes, called ‘narrative’, ‘report’, ‘description’, ‘information’ and ‘argument-commentary’. Each of these is associated with a number of distinct linguistic characteristics (the use of tense and aspect being one of the most important features). The first three modes, for example, are considered ‘temporal’, while the last two are ‘atemporal’: as a result, the former are characterized by a higher concentration of past tenses (perfective in the case of narrative

(131) CAENEPEEL, 1995; SMITH, 2003.

and report, imperfective in the case of description). While at present, these insights have not been applied to the analysis of Ancient Greek⁽¹³²⁾, it may constitute a promising alternative perspective to Wilcken's categorization (allowing an even more close analysis, as well as comparison between different of Wilcken's categories). To take the example of petitions, these documents show a bipartite structure, with a narrative/descriptive part setting out the circumstances, being followed by an argument-commentary part containing the request⁽¹³³⁾. The narrative descriptive part can be characterized by the use of the aorist, perfect and imperfect tense, while the argument-commentary part by the use of the present tense, mostly of the petition verbs ἀξιῶ and δέομαι (often in combination with particles such as οὖν or διό(περ)), followed by a present/aorist infinitive or imperative containing the request, and a present/aorist subjunctive, a future or future perfect containing a purpose or consequence.

3.2. *The papyri as a corpus*

The second point I would like to touch upon concerns the papyri as a corpus: as a number of scholars have pointed out, one cannot assume that the documentary papyri form a linguistically homogeneous (low-register) corpus⁽¹³⁴⁾. One extreme would be Rydbeck, who argues that⁽¹³⁵⁾:

“the papyri are to a very low degree documents of vernacular, vulgar, language; they range from extremely carefully written official documents, through correct business type letters, to really vulgar private letters, a minority among the otherwise quite carefully phrased private letters”.

On a more concrete, linguistic level, much remains to be done to determine the degree of (high) register influences in the papyri⁽¹³⁶⁾. Recent studies such as those of Evans and Luiselli have brought to light some interesting findings: the former shows that particles (the use of which seriously diminished in (low- and middle-register) Post-classical Greek) continue to be used in the Zenon archive, while the latter discusses the phenomenon of self-correction (authorial revision) to demonstrate ‘stylistic’ (or, as I would prefer, registerial) awareness among the educated elites in Egypt⁽¹³⁷⁾. In the UPZ-corpus too one finds such register differences. These are most clear in two cases: (a) texts which have been ‘improved’ by a second hand; (b) texts of which several (draft) versions exist. As an illustration of the second type, it is worth mentioning two petitions, UPZ.1.5 and UPZ.1.6. The contents of these documents are almost identical: Ptolemaius relates the invasion of the Serapeum (more

(132) With the exception of ALLAN, 2009.

(133) In his 1972 study, White in fact argues that petitions contain four major structural elements ((a) opening; (b) background; (c) request; (d) closing), various of which may be further subdivided.

(134) See e.g. LEE, 1985, p. 9; HORSLEY, 1994, p. 64-5.

(135) RYDBECK, 1991, p. 200.

(136) On atticism and the papyri, see HORSLEY, 1994, p. 64; LEE, 2013.

(137) EVANS, 2010; LUISELLI, 2010.

in particular the *Astartieion*) by Amosis and his companions, and asks the addressee for measures. Importantly, however, the two texts have a different addressee: UPZ.1.5 is directed to the στρατηγός Diodotus (as a *ὑπόμνημα*), while UPZ.1.6 to the king (as an *ἐντευξις*). The latter, UPZ.1.6, can be considered an *Umarbeitung* of UPZ.1.5, whereby Ptolemaius has linguistically ‘upgraded’ a number of his phrasings⁽¹³⁸⁾. Compare the following passages (my translations are based on UPZ.1.6):

(2) UPZ.1.5, l. 2-3: πα[ρὰ Πτολεμαίου] τοῦ Γλαυκίου Μακεδό[νος ὁ] ντος ἐν τῷ[ι με]γάλῳι Σαραπείῳι ἐν κατοχῇ ὧν ἔτη δ[έκα]

UPZ.1.6, l. 3-4: παρὰ [Πτολ]εμαί[ου τοῦ Γλ]αυκίου Μακ[εδὼν ἐνκατε]χομέ[νου ἐν τῷ Σαραπ[ι]εῖῳι Ἀσταρτιεῖῳι ἔτ]η δέκα

“from Ptolemaius, son of Glaucius, Macedonian, being (having been) in katochē in the great Serapeum for ten years”

Ptolemaius has replaced the use of εἰμί (in the participial form) with an adjunct of place in UPZ.1.5 by the present participle of a content verb (ἐνκατέχομαι) in UPZ.1.6.

(3) UPZ.1.5, l. 5-9: τῇις τοῦ Θῶυθ [Π]τολεμαί[ου τοῦ] καθεσταμένου διὰ τοῦ ἐν τῷ Ἀνουβι[εῖῳι] ἀρχιφυλ[ακίτου] καὶ Ἀμώσιος τοῦ παρὰ τοῦ ἀρχιερέ[ως] παραλαβόντες φυλακίτας εἰσῆλθον εἰς τὸ ἐν τῷ [μεγάλῳι] Σαραπ[ι]εῖῳι Ἀσταρτιεῖῳι

UPZ.1.6, l. 5-8: [τῇις τοῦ Θῶυθ] Πτολεμαίου τοῦ καθεστ[α]μένου δι[ὰ] τοῦ ἐν τῷ Ἀνουβιεῖῳι ἀρχιφυλακίτου καὶ Ἀμώσιος τοῦ παρὰ τοῦ ἀρχιερέως παραλαβόντων φυλακίτας καὶ εἰσελθόντων εἰς τὸ ἐν τῷ μεγάλῳι Σαραπείῳι Ἀσταρτιεῖῳι

“on the 16th Toth, Ptolemaius, representative of the head of police in the Anoubieion, and Amosis, assistant of the high priest, took with them a number of police officials and entered the Astartieion in the great Serapeum”

In UPZ.1.5 Ptolemaius starts his sentence with a genitive (indicating a genitive absolute construction), but then drops the construction and inserts a conjunct participle in the nominative case (παραλαβόντες) and a main verb (εἰσῆλθον). In UPZ.1.6 the genitive absolute is maintained (παραλαβόντων, εἰσελθόντων).

(4) UPZ.1.5, l. 24-27: <οὐκ> ἐντροπέντος δὲ τοῦ Ἀμώσιος κατεσφραγίσατο καὶ παρέθετο αὐτὸν Θέωνι Παῦτος καὶ εἰσελθόντες εἰς τὸ τῆς θεᾶς ἄδυτον ἐσκύλαν τὸν ναὸν

UPZ.1.6, l. 20-22: ἀλογήσας ὁ Ἀ[μ]ώσι[ς] καὶ τοῦτον κατασφραγισάμενος παρέθετο Θέωνι τινὶ τῷ Παῖτ[ος]. οὐ μὴν [ἀ]λλὰ καὶ εἰς τὸ ἄδυτον τῆς θεᾶς εἰσελθὼν ἐσκύλη[σε]ν τὸν ναὸν

(138) Compare Wilcken (1927, p. 127): “das *ὑπόμνημα* mit seinen ungeschickten Konstruktionen repräsentiert, wie gesagt, ein früheres Stadium gegenüber der *ἐντευξις*, die stilistisch eine wesentliche Verbesserung darstellt”. Wilcken (1927, p. 132) believes that UPZ.1.5 must have been preceded by earlier (even worse!) draft versions: “sicher sind noch schlichtere Entwürfe, wahrscheinlich mit noch kürzeren Sätzen, 5 [= UPZ.1.5, KB] vorangegangen”.

“without shame Amosis sealed up that too and deposited it [a jar with copper pieces, KB] with a certain Theon the son of Paes. He even went so far as to enter the most holy part of the goddess and plundered the holy shrine”

In UPZ.1.5 we have one long sentence in which three main verbs are co-ordinated (that is, *κατεσφραγίσατο*, *παρέθετο* and *ἔσκυλαν*). In UPZ.1.6 Ptolemaius splits this up into two sentences, so as to allow the insertion of the emphatic particle group *οὐ μὴν [ἀ]λλὰ καὶ*. Note that in UPZ.1.5 the subject of the genitive absolute and the main verbs is the same, which goes against classical usage.

(5) UPZ.1.5, l. 40-43: *πυθομένων δὲ ἡμῶν αὐτῶν· “τίνος χάριν ἐπ<ε>ισπορεύεσθε;” “Ἐνεχυράζοντες” ἔφησαν, “Ψυλιν ὁ ἐπὶ τῶν παστοφόρων ἀπέσταλκεν ἡμᾶς”*

UPZ.1.6, l. 29-31: *πυνθανομένων δ’ ἡμῶν τοῦ τίνος χάριν εἶσαν εἰσπεπορευμένοι, ἀπεκρίθησαν ἡμῖν φήσαντες ἐπ’ ἐνεχυρασίαν ἡκέναι καὶ ἀπ[ε]στάλθα[ι] ὑπὸ Ψούλιν τοῦ ἐπὶ τῶν παστοφόρων*

“when we asked them why they had entered, they answered us saying that they had come to confiscate property and that they had been send by Psulis, head of the pastophores”

In UPZ.1.5 Ptolemaius uses a direct question, while in UPZ.1.6 he prefers an indirect question introduced by *τοῦ τίνος χάριν*, followed by the periphrastic optative *εἶσαν εἰσπεπορευμένοι*. Note that while in the former the verb *πυνθάνομαι* is used in the aorist tense (*πυθομένων*), in the latter preference is given to the present tense (*πυνθανομένων*). Similarly, the answer is reported in UPZ.1.5 in direct speech, while in UPZ.1.6 Ptolemaius prefers indirect speech (note the use of the nominal periphrasis *ἐπ’ ἐνεχυρασίαν ἡκω* instead of *ἐνεχυράζω* and the passive perfect infinitive *ἀπ[ε]στάλθα[ι]*).

3.3. ‘Multi-register’ texts

In §3.2, we saw that the papyri do not constitute a linguistically homogeneous corpus. It could be argued that the same is true for (some) individual literary texts as well: in various cases we seem to be dealing with ‘multi-register’ texts, the existence of which has been reported for other languages as well⁽¹³⁹⁾.

For Classical Greek, the prototypical example is perhaps Aristophanes: Willi has argued that we can speak of the ‘languages’ of Aristophanes⁽¹⁴⁰⁾. The same is stressed by López Eire, who reports the existence of some very specific registers⁽¹⁴¹⁾ in Aristophanes’ plays, such as those of “jueces, políticos, magistrados, sacerdotes, filósofos, científicos, arquitectos, heraldos etc.”, which can be particularly well defined at the lexical level⁽¹⁴²⁾. Another Classical example would be Plato: Thesleff distinguishes as much as ten dif-

(139) See e.g. BIBER, 1994, p. 43 and POUNTAIN, 2006, p. 7 on English and Spanish respectively; good examples from Latin would be Plautus’ and Petronius’ works (WOLFGANG DE MELO, p.c.).

(140) WILLI, 2003.

(141) LÓPEZ EIRE, 2004, p. 116. On the description of register from different levels of generality, see BIBER, 1994, p. 32.

(142) LÓPEZ EIRE, 1999, p. 4; 2004, p. 137.

ferent ‘styles’: ‘colloquial’, ‘rhetorical’, ‘pathetic’, ‘intellectual’, ‘historical’, ‘legal’ etc., each of which can be identified by a number of ‘style markers’⁽¹⁴³⁾. For Post-classical Greek, we can think of large texts with multiple authors, such as the Septuagint or the New Testament⁽¹⁴⁴⁾. With regard to the New Testament, several authors have drawn attention to individual differences. Lee, for example, notes that⁽¹⁴⁵⁾:

“on the scale from vernacular to literary Mark, John and Rev. belong to the lower levels, Rev. being lowest of the three; Matt., Luke-Acts and the Epistles are decidedly higher, though with differences between them, the high point being marked by Hebrews”.

Importantly, even at a lower level there may be register differences. Especially noteworthy in this regard is Lee’s study on the use of the particle μέν in Mark (the use of which was in decline in Post-classical Greek): Lee shows that there is a tendency for features “having a formal, dignified tone”⁽¹⁴⁶⁾ (in other words, high-register features) to be situated specifically in the words of Jesus, as a sign of importance (Lee draws attention to the presence of other such features, among others the use of the adverb εὖ, the optative, the vocative particle ὦ etc.). Another source for register-differences within one and the same (Post-classical/Byzantine) text is the use of Biblical quotations: when investigating the high register from a linguistic point of view, one must take into account the influence of such quotations. As Browning writes with regard to the (written) language of the fourth-century church fathers⁽¹⁴⁷⁾:

“they had to give of their best, and their best meant the classicizing Hochsprache. A special place, however, had to be made for those Koine words and phrases which had been sanctified by use in the Septuagint or the New Testament. They were given full right of citizenship in the language of the Fathers”.

In my own investigation of the use of verbal periphrasis in the high register, I have encountered a number of these quotations containing a periphrastic form⁽¹⁴⁸⁾.

Further research is definitely needed on the phenomenon of multiple-register texts and its influence on linguistic research. I suspect that (a) in many/most of these cases it will still be possible to determine one dominant register⁽¹⁴⁹⁾; (b) some categories of texts (in terms of genre) will be more internally heterogeneous (in terms of register) than others⁽¹⁵⁰⁾.

(143) THESLEFF, 1967, p. 63-91.

(144) On the LXX, see HORSLEY, 1994, p. 68.

(145) LEE, 1985, p. 9.

(146) LEE, 1985, p. 24.

(147) BROWNING, 1978, p. 108.

(148) E.g. with the construction of εἰμί with present participle: Ἰερουσαλὴμ ἔσται πατουμένη ὑπὸ ἐθνῶν (Eus., *H.E.* 3.7.5) “Jerusalem will be overrun by foreign nations” (cf. Lc. 21.24); ἀπὸ τοῦ νῦν ἀνθρώπους ἔσῃ ζωγρῶν (Procl. CP, *Or.* 6, 3.6.5-6) “from now on you will be catching people” (cf. Lc. 5.10); ἐγὼ ἤμην παρ’ αὐτῷ ἀρμόζουσα (Thdt., *H.E.* 15.20) “I was by him, suiting myself to him” ((ambiguous), cf. *Prov.* 8.30).

(149) Compare O’DONNELL, 2000, p. 277, who notes that “on the whole, the New Testament is closest to the non-literary variety”.

(150) Cf. ROMAINE, 1982, p. 114.

3.4. *Manuscript variation*

Digital databases such as the TLG have made it much easier to conduct large-scale diachronic linguistic research, comparing texts from all registers. However, using the TLG also has its disadvantages, as (a) only one text edition is used, which is not necessarily the most recent one (and there is no indication of the quality of an edition), (b) the TLG does not display the critical apparatus, and (c) the TLG does not give any contextual information about the text and its author⁽¹⁵¹⁾. In the context of the renewed interest in variation in diachronic linguistics, various scholars⁽¹⁵²⁾ have drawn attention to the problematic nature of not paying due attention to the variation found in our manuscripts. Lass, for example, considers edited texts corrupted information sources, which are unduly trusted and considered sources of ‘data’ for diachronic research. For Lass, the ideal model for a corpus or any presentation of a historical text should be the archeological site or a crime-scene: “no contamination, explicit stratigraphy, and an immaculately preserved chain of custody”⁽¹⁵³⁾.

When it comes to Ancient Greek, the importance of manuscript variation for diachronic linguistic research has mostly been discussed with regard to Medieval Greek. Manolessou has advocated a return to the manuscript as ‘native speaker’, and called for a re-evaluation of past studies on Medieval Greek⁽¹⁵⁴⁾. Two specific dangers of working with edited texts are (a) that one attributes a non-existent phenomenon to a medieval text, or (b) that one fails to recognize a phenomenon that does exist in the text⁽¹⁵⁵⁾. Moreover, providing statistical data on linguistic innovations may be problematical. A case in point would be the diachrony of the participle⁽¹⁵⁶⁾: already in Post-classical Greek, we find innovative forms for the nom./acc. neuter sing. ending (in -οντα instead of -ον). In the 19th century edition of Leontius of Naples (sixth century), 6 examples with the innovative ending are printed, but, as Manolessou notes, three more can be found by checking the apparatus. In none of all of these cases, however, is the manuscript tradition unanimous. In similar vein, Toufexis has argued for the need to supplant printed editions by online editions⁽¹⁵⁷⁾, where there are no limitations of space, and all variants can be displayed (possibly even accompanied by images of the manuscripts)⁽¹⁵⁸⁾. Wahlgren, on the other hand, himself an editor of medieval Greek texts, has advocated a more ‘realistic’ perspective:

(151) Cf. TOUFEXIS, 2010, p. 110.

(152) See FLEISCHMAN, 2000 and LASS, 2004 with regard to (Old) French and (Old & Middle) English respectively.

(153) LASS, 2004, p. 46.

(154) MANOLESSOU, 2005; 2008.

(155) MANOLESSOU, 2008, p. 68.

(156) MANOLESSOU, 2005, esp. p. 247.

(157) TOUFEXIS, 2010.

(158) See e.g. TOUFEXIS, 2010, p. 114-115: “a technology-based approach can help us resolve this conflict: in a digital environment ‘economy of space’ is no longer an issue. By lifting the constraints of printed editions, a digital edition can serve the needs of both philologists and historical linguistics (or for that matter any other scholar who has an interest in approaching ancient texts). A ‘plural’ representation of ancient texts in digital form, especially those transmitted in ‘fluid’ form, is today a perfectly viable alternative to a printed edition”.

“it has often been claimed that we do not yet have adequate editions of Byzantine texts. I think we have. First, it is a mistake to believe that most new editions will change the picture to any extent, not at least as far as syntax is concerned. My own edition of the Chronicle of the Logothete will not add anything of importance to our grammatical knowledge. Nor does a grammar have to aim at completeness in the same way as a lexicon”⁽¹⁵⁹⁾.

In an attempt to determine the kind of insights one may gain from including the critical apparatus in one’s analysis, I have checked the manuscript variants of the four gospels as well as Acts by means of the edition of Swanson (listing all variant readings against the *Codex Vaticanus*), specifically with regard to verbal periphrasis. In what follows, I give some examples where working with the TLG-text is not entirely unproblematic⁽¹⁶⁰⁾:

(6) καὶ ἦλθεν κηρύσσων εἰς τὰς συναγωγὰς (Mc. 1.39)
 “he went preaching in their synagogues” (my translation)

The text is based on manuscript B (IV). Manuscripts C (V) and D (VI), however, as well as most of the other testimonies, read ἦν κηρύσσων “he was preaching”.

(7) καὶ αὐτὸς ἦν Ἰησοῦς ἀρχόμενος ὥσεί ἐτῶν τριάκοντα (Lc. 3.23)
 “and Jesus was, as he was beginning, about thirty years of age” (my translation)

This verse (based on **ⲛ** [IV] and B [IV]) has caused much confusion in the literature on periphrasis, various authors considering it periphrastic (see e.g. Drinka 2011:48: “and Jesus was beginning at about thirty years”), while others do not (including myself). Interestingly, the manuscripts themselves show considerable variation: A (V) has καὶ αὐτὸς ἦν Ἰησοῦς ὥσεί ἐτῶν τριάκοντα ἀρχόμενος (with ἀρχόμενος at the end), Θ (IX) καὶ αὐτὸς ἦν ὁ Ἰησοῦς ὥσεί ἐτῶν τριάκοντα ἀρχόμενος εἶναι (with an additional εἶναι), Γ (X) καὶ αὐτὸς ἦν ὁ Ἰησοῦς ἐτῶν τριάκοντα ἀρχόμενος (with the genitive dependent on ἀρχόμενος), and one manuscript (700 [XI]) even replaces ἀρχόμενος by ἔρχομενος.

(8) ὅστις ἦν διὰ στάσιν τινὰ γενομένην ἐν τῇ πόλει καὶ φόνον βληθεὶς ἐν τῇ φυλακῇ (Lc. 23.19)

“he was thrown into prison because of a certain rebellion which had occurred in the city and a murder” (tr. Porter)

Björck considers this the first example of Post-classical εἰμί with aorist participle⁽¹⁶¹⁾. Apart from the fact that examples can already be found at an earlier stage, as I have shown in §2.3.2, it is worth mentioning that most of the older testimonies (with the exception of B [IV]), such as A (V) and D (V/VI), actually have the perfect participle βεβλημένος.

(159) WAHLGREN, 2002, p. 294.

(160) ALAND *et al.*, 1968, without the critical apparatus. For my discussion, I have maintained the standard manuscript abbreviations used by SWANSON, 1995.

(161) BJÖRCK, 1940, p. 77.

Another interesting finding concerns one of the oldest testimonies, the *Codex Bezae Cantabrigiensis* (known as 'D', V/VI). In this manuscript, periphrastic (perfect) forms seem to be consistently more often used than in the text edited by Aland *et al.* For example, D has ἦν ... ἀποθνήσκουσα instead of ἀπέθνησκεν (Lc. 8.42) "she was dying", ἡριθμημένοι εἰσὶν instead of ἡριθμῶνται (Lc. 12.7) "they are counted", ἐγένετο ἄνθρωπος ἀπεσταλμένος παρὰ θεοῦ ἦν instead of ἐγένετο ἄνθρωπος ἀπεσταλμένος παρὰ θεοῦ (John 1.6) "there came a man sent from God", ἦν προσδοκῶν αὐτοὺς καὶ συγκαλεσάμενος instead of ἦν προσδοκῶν αὐτοὺς, συγκαλεσάμενος (Acts 10.24) "he was waiting for them, having called together ...", ἦν ἐσχισμένον instead of ἐσχίσθη (Acts 14.4) "it was divided", ἦ(ν) γεγραμμένον instead of ἐπεγέγραπτο (Acts 17.23) "it was written (on)", ἦσαν συνήγμενοι instead of παρεγένοντο (Acts 21.18) "they were present". In this manuscript we also find a tendency to use (periphrastic) combinations of a postural verb and a participle: we find ἔξω ἐστήκασιν ζητοῦντες σε instead of ἐστήκασιν ἔξω ἰδεῖν θέλοντές σε (Lc. 8.20) "they are standing outside wanting to see you" (note the position of ἔξω with regard to the verbal group) and ἐπαιτῶν ἐκάθητο παρὰ τὴν ὁδὸν instead of ἐκάθητο παρὰ τὴν ὁδὸν ἐπαιτῶν (Lc. 18.35) "he sat by the road, begging" (note the position of παρὰ τὴν ὁδὸν with regard to the verbal group). These observations fit within a broader tendency towards greater freedom of the manuscript vis-à-vis other versions⁽¹⁶²⁾.

3.5. Applying a register-based perspective to Classical Greek?

Few scholars have applied questions of register to Classical Greek⁽¹⁶³⁾, and even fewer have made the comparison between Post-classical and Classical Greek. It is interesting to note, for example, that in Markopoulos' 2009 book, where, as we have seen, register and diachrony are explicitly related, no systematic reference is made to register when it comes to Classical Greek⁽¹⁶⁴⁾. Rather, data are presented on the basis of what are traditionally considered generic categories⁽¹⁶⁵⁾.

The difference between these two periods seems to lie with the fact that in terms of register the situational characteristics of our Post-classical textual witnesses diverge to a much greater extent than what is the case for Classical Greek (making Post-classical Greek more suitable for diachronic (register-based) linguistic research), as noted by Dover⁽¹⁶⁶⁾:

(162) See METZGER & EHRLMAN, 2005, p. 71: "no known manuscript has so many and such remarkable variations from what is usually taken to be the normal New Testament text".

(163) WILLI, 2010, p. 310.

(164) Markopoulos does seem to recognize the existence of different registers in Classical Greek. See e.g. Markopoulos (2009, p. 17): "the corpus for the brief investigation of the classical period (5th-3rd c. BC) consists of texts representative of different genres (historiography, philosophical writings, tragedy and comedy), which correspond to both low and high registers of use, since in this period formal diglossia had not yet become an issue".

(165) See e.g. p. 41, where data are presented for 'orators', 'dramatists', 'historians' and 'philosophers'.

(166) DOVER, 1987, p. 17. Cf. also MORALEJO, 1978, p. 84.

“in the case of classical Attic literature (and no doubt in the case of some other past literatures as well) a further difficulty is created by the fact that, judged by the standards of modern conversation (whether English or Modern Greek), such of it as has been transmitted to us is technically sophisticated and structurally elaborate”

While some work has been done on the identification of ‘colloquialisms’ in tragedy (especially in Euripides⁽¹⁶⁷⁾), the identification of these ‘vulgarisms’ often seems rather subjective⁽¹⁶⁸⁾, partly because no attempt is made to define other registers. To my mind, the most important work on register in Classical Greek (in general) has been done by scholars working in the Spanish tradition, such as Adrados, Moralejo and especially López Eire⁽¹⁶⁹⁾. The first of these authors has even attempted a comparison of registers in Classical and Post-classical Greek, which I have reproduced (in English) here in table 2⁽¹⁷⁰⁾:

Table 2: *Registers in Archaic, Classical and Hellenistic Greek* (from ADRADOS, 1981, p. 329)

	Archaic	Classical	Hellenistic
‘cultivated’		Herodotus, Socratics, Lysias	Epicureans, Peripatetics, Menander
‘popular’	Iambographers	Aristophanes	Cynics, N.T., LXX Papyri
‘vulgar’	Hipponax		Cynics

While I can hardly claim to possess Adrados’ erudition, this overview seems to me somewhat selective in that it has no upper layer in the ‘cultivated’ register (while we do have many testimonies, e.g. the dramatists in Classical Greek, the historiographers in Hellenistic Greek), and that the vulgar register is also hardly represented (surely at least some papyri could be considered vulgar).

Perhaps the most important observation made by all these scholars is that the place to look for the low(er) register is comedy, more in particular Aristophanes⁽¹⁷¹⁾. As noted by Lopez-Eire, it is exactly the purpose of comedians to

(167) See COLLARD, 2005 for a recent overview article.

(168) See COLLARD, 2005, p. 358: “inherent and natural in all scholarly discussions of the colloquial is an individual subjectivity”.

(169) ADRADOS, 1975, 1981; MORALEJO, 1977 and especially LÓPEZ EIRE (a.o. 1996, 1999, 2004).

(170) Adrados makes a threefold distinction between ‘cultivated’, ‘popular’ and ‘vulgar’ language. For a different proposal, see MORALEJO, 1978, p. 68.

(171) See e.g. López Eire (2004, p. 113): “hay que admitir que en la Comedia aristofánica se percibe claramente un esfuerzo de su autor por reproducir la lengua hablada, la oralidad del ático, el coloquio”. On the value of the inscriptions as testimonies of low-register language, see e.g. Martínez Hernández (1988, p. 378): “todas las inscripciones de cierta extensión son documentos públicos, redactados por la cancillería del estado: tratados, leyes, plebiscitos, contratos, etc. Estos documentos tienen un estilo especial y rígido, arcaizante, diferenciado claramente de la lengua variable de la vida diaria” (cf. similarly MORALEJO,

represent human life in all its diversity, so as to create a humorous effect⁽¹⁷²⁾:

“la comedia deriva su efecto cómico del contraste, y, como emplea lenguaje, aunque sea en verso, es de esperar que abunden en ella numerosas modalidades contrastivas de lenguaje empleadas con el fin de hacer reír a los espectadores”.

In his recent investigation of the language(s) of Aristophanes, Willi explicitly refers to the topic of verbal periphrasis (with εἰμί, that is). In his opinion, the development of periphrastic constructions is not to be connected to the low(er) register. Rather, he considers it an innovation of the sophistic movement, which deeply affected the development of fifth-century Athenian culture⁽¹⁷³⁾. Willi believes the arrival of this movement not only initiated the study of language, but also stimulated linguistic developments: “since the wealth of new themes, thoughts, and concepts could only be adequately expressed if traditional language was substantially reshaped and enriched, it was probably also the first time that Greek underwent such fundamental linguistic changes within a few decades only”⁽¹⁷⁴⁾. To be more specific, Willi discerns a trend for nominalization and typicalization⁽¹⁷⁵⁾, exponents of which are verbal compounds in -εω/-αω, verbal nouns in -σις, the transitive perfect, the articular infinitive, and verbal periphrasis.

Willi's hypothesis is an attractive one, as it offers an overarching perspective to a number of related linguistic phenomena, next to the fact that the rise of nominalization has been associated with the scientific register in other languages as well⁽¹⁷⁶⁾. On the other hand, it clearly has its disadvantages too: (a) it is very difficult to prove the influence of this tendency⁽¹⁷⁷⁾; (b) periphrasis can hardly be considered a sophistic ‘innovation’, as Willi would have it: periphrases can already be found in Archaic Greek, and are first attested with some frequency in Herodotus. At most, it could have stimulated the development of verbal periphrasis; (c) verbal periphrasis does not constitute a

1977, p. 74; ADRADOS, 1981, p. 312-313; WILLI, 2003, p. 2). For a general overview of our sources for the ‘colloquial stratum’, see DOVER (1987).

(172) LÓPEZ EIRE, 2004, p. 104; compare WILLI, 2003, p. 2.

(173) WILLI, 2003, p. 118.

(174) WILLI, 2003, p. 118-9.

(175) WILLI, 2003, p. 118-56. Typicalization is a less common term. It refers to a process whereby ‘verbal’ categories such as mood, aspect, tense, diathesis, person and case complements are unspecified, as a result of which the thought of a proposition is generalized or de-individualized. Willi (2003, p. 121) gives the examples of Σωκράτης γράφει γῆς περίοδον “Socrates is drawing a world map (for himself)” and Σωκράτης γῆς περίοδον γραφεύς ἐστί “Socrates is one who draws a world map”: the former describes a specific action in the present, while the latter only indicates that Socrates belongs to a certain category (type). As Willi (2003, p. 122) notes, there is an implicational relationship between typicalization and nominalization: “while typicalization does not necessarily take the form of nominalization, nominalization necessarily implies typicalization”.

(176) See e.g. HALLIDAY, 1988 and EGGINS, 1994, p. 59 on nominalization in English; compare WILLI, 2003, p. 153-5.

(177) Willi (2003, p. 119-120) himself notes that the linguistic features he analyzes as ‘sophistic’ (on the basis of Aristophanes’ *Clouds*) “are frequently employed elsewhere in comedy without any stylistic saliency”.

prototypical case of nominalization⁽¹⁷⁸⁾. Moreover, from a diachronic point of view, εἰμί with perfect participle shows a tendency to denote less stative-like events (εἰμί develops from a copula into a ‘true’ auxiliary), thus becoming an even less prototypical case of nominalization; (d) that Aristophanes (possibly) associated verbal periphrasis with the sophists, does not necessarily mean that this is correct from a diachronic point of view; (e) Willi does not attempt to explain the spread of other types of periphrasis (e.g. that with ἔχω), which can be less easily classified as instances of nominalization.

Further research is needed to determine the validity of Willi’s hypothesis. In any case, it constitutes a laudable attempt to apply a sociolinguistic perspective to Classical Greek, one which could improve considerably upon the older works⁽¹⁷⁹⁾.

3.6. *Interim conclusion*

In this third part of my article, I have drawn attention to various elements which need to be taken into account when investigating texts from a register-based perspective: the influence of genre, register-variation in the papyri as well as individual literary texts, and the importance of manuscript variation. Moreover, I have also discussed some of the difficulties and prospects associated with approaching Classical Greek from a register-based perspective.

I should specify that I do not expect these suggestions to be implemented in large-scale diachronic research any time soon: at this stage, what would be needed are more extensive studies on each of the points I have singled out (focusing on specific smaller sub-corpora⁽¹⁸⁰⁾), as well as others, which at some point may lead to the construction of a large sociolinguistically sensitive database.

4. CONCLUSION

In the first part of this article, I have discussed two quite distinct approaches to the diachrony of Ancient (Post-classical/Byzantine) Greek: one which in an attempt to ‘reconstruct’ the spoken language and trace ‘authentic’ linguistic features confines itself to ‘spoken-like’ texts, and another, more recent approach, which explicitly compares texts from different linguistic levels, so as to come to a comprehensive understanding of the variation found. I have argued in favor of the second approach, showing that the first approach faces

(178) I would argue that it does not constitute a prototypical case of typicalization either, since in some cases the use of periphrasis instead of a synthetic tense allows for finer aspecto-temporal distinctions (e.g. in the case of the future tense, which was aspectually neutral: the use of εἰμί with present versus aorist participle allows to specify aspect in the future).

(179) Compare with AERTS, 1965, p. 51, who notes that “the differences in literary styles are, of course, reflected in the use of the periphrastic constructions”, without further comments.

(180) For one such initiative, see PORTER & O’DONNELL, 2010.

some serious methodological difficulties. I have furthermore suggested that this second, more recent approach may have been stimulated by recent findings in variationist linguistics.

I have further explored this alternative perspective by applying a hypothesis recently brought forward by Markopoulos⁽¹⁸¹⁾ (under the heading of the ‘fifth parameter of grammaticalization’) to the subject of verbal periphrasis in Ancient Greek. This hypothesis suggests that the spread of innovations (as reflected by our written texts) proceeds gradually, one register at a time, and that the establishment of a variant in any given register will lead to the loss of another variant. I have shown that while Markopoulos’ hypothesis must be modified so as to allow for semantic change, it contributes a great deal to our understanding of the diachrony of the three periphrastic constructions I have investigated, that is, εἰμί with perfect, aorist and present participle. It allows a multi- rather than a unilinear account of diachronic change. In the case of εἰμί with present participle, for example, I have found that the use of the construction with a stative function was attested in all registers during the entire period under analysis, its use with a durative progressive function first in the middle register and only afterwards in the high register, its use with a focalized progressive function only in the middle register, and its use with a habitual function in no register at all. This may be contrasted with the (much more rigid) standard account of Aerts, according to whom we are dealing with “a manner of expression that is possible in Greek but is essentially not Greek”⁽¹⁸²⁾.

In the third and final part of the article, I have highlighted some areas of considerable potential for further research. These include the influence of genre on register, the heterogeneity of the papyri as a corpus, the existence of multi-register texts, manuscript variation, and the application of a register-based perspective to Classical Greek. Undoubtedly, clarifying these issues will further improve our understanding of Ancient Greek and its diachrony.

Bibliography

- ADRADOS, 1975 = F.R. ADRADOS, *La lengua del teatro greco* in *Estudios sobre los géneros literarios*, vol. 1, Salamanca, 1975, p. 29-48.
- ADRADOS, 1981 = F.R. ADRADOS, *Sociolinguística y griego antiguo* in *Revista Española de Lingüística*, 11, 1981, p. 311-329.
- ADRADOS, 2005 = F.R. ADRADOS, *A history of the Greek language: From its origins to the present*, Leiden, 2005.
- AERTS, 1965 = W.J. AERTS, *Periphrastica: An investigation into the use of εἶναι and ἔχειν as auxiliaries or pseudo-auxiliaries in Greek from Homer up to the present day*, Amsterdam (diss.), 1965.
- ALAND *et al.*, 1968 = K. ALAND, M. BLACK, C.M. MARTINI, B.M. METZGER & A. WIKGREN, *The Greek New Testament*, Stuttgart, 1968².
- ALLAN, 2009 = R.J. ALLAN, *Towards a typology of the narrative modes in Ancient Greek: Text types and narrative structure in Euripidean messenger speeches* in S.J. BAKKER & G.C. WAKKER (eds.), *Discourse Cohesion in Greek*, Leiden & Boston, 2009, p. 171-204.

(181) MARKOPOULOS, 2009.

(182) AERTS, 1965, p. 75.

- BENTEIN, 2012a = K. BENTEIN, *The periphrastic perfect in Ancient Greek. A diachronic mental space analysis* in *Transactions of the Philological Society*, 110 (2), 2012, p. 171-211.
- BENTEIN, 2012b = K. BENTEIN, *PROG imperfective drift in Ancient Greek? Reconsidering eimi 'be' with present participle* in *Transactions of the Philological Society*, 110 (3), 2012, In press.
- BENTEIN 2012c = K. BENTEIN, *Perfect periphrases in Post-classical and Early Byzantine Greek. An ecological-evolutionary approach* in *Journal of Greek Linguistics*, 12, 2012, p. 205-275.
- BENTEIN 2013 = K. BENTEIN, *Be-Periphrases in Post-Classical and Early Byzantine Greek. A Register-Based Approach*, in *Cambridge Classical Journal*, 59, 2013, in press.
- BERTINETTO, EBERT & DE GROOT, 2000 = P. M. BERTINETTO, K.H. EBERT & C. DE GROOT, *The progressive in Europe* in Ö. DAHL (ed.), *Tense and aspect in the languages of Europe*, Berlin & New York, 2000, p. 517-558.
- BIBER, 1994 = D. BIBER, *An analytical framework for register studies* in D. BIBER & E. FINEGAN (eds.), *Sociolinguistic perspectives on register*, New York, p. 31-56.
- BIBER & CONRAD, 2009 = D. BIBER & S. CONRAD, *Register, genre, and style*, Cambridge, 2009.
- BJÖRCK, 1940 = G. BJÖRCK, Ἡν διδάσκων. *Die periphrastischen Konstruktionen im Griechischen*, Uppsala (diss.), 1940.
- BROWNING, 1978 = R. BROWNING, *The language of Byzantine literature* in S. VRYONIS (ed.), *The 'past' in Medieval and Modern Greek culture*, Malibu, CA, 1978, p. 103-133.
- BROWNING, 1983 = R. BROWNING, *Medieval and modern Greek*, Cambridge, 1983².
- BYBEE & DAHL, 1989 = J. BYBEE & Ö. DAHL, *The creation of tense and aspect systems in the languages of the world* in *Studies in Language*, 13, 1989, p. 51-103.
- BYBEE, PERKINS & PAGLIUCA, 1994 = J. BYBEE, R. PERKINS & W. PAGLIUCA, *The evolution of grammar: Tense, aspect, and modality in the languages of the world*, Chicago (Ill.), 1994.
- CAENEPEEL, 1995 = M. CAENEPEEL, *Aspect and text structure*, in *Linguistics*, 33, 1995, p. 213-253.
- CAMERON, 1991 = A. CAMERON, *Christianity and the rhetoric of empire: The development of christian discourse*, Berkeley (Calif.), 1991.
- COLLARD, 2005 = C. COLLARD, *Colloquial language in tragedy: A supplement to the work of P.T. Stevens* in *The Classical Quarterly*, 55, 2005, p. 350-386.
- COX, 1983 = P. COX, *Biography in Late Antiquity: A quest for the holy man*, Berkeley (Calif.), 1983.
- CROFT, 2000 = W. CROFT, *Explaining language change: An evolutionary approach*, Harlow, Essex, 2000.
- CROFT, 2012 = W. CROFT, *Verbs: Aspect and causal structure*, Oxford, 2012.
- CROFT & CRUSE, 2004 = W. CROFT & A.D. CRUSE, *Cognitive linguistics*, Cambridge, 2004.
- DICKEY, 2003 = E. DICKEY, *Latin influence on the Greek of documentary papyri: An analysis of its chronological distribution* in *Zeitschrift für Papyrologie und Epigraphik*, 145, 2003, p. 249-257.
- DICKEY, 2009 = E. DICKEY, *The Greek and Latin languages in the papyri* in R.S. BAGNALL (ed.), *Oxford handbook of papyrology*, New York, 2009, p. 149-169.
- DIETERICH, 1898 = K. DIETERICH, *Untersuchungen zur Geschichte der griechischen Sprache: Von der hellenistischen Zeit bis zum 10. Jahrhundert n. Chr.*, Leipzig, 1898.
- DIETRICH, 1973a = W. DIETRICH, *Der periphrastische Verbalaspekt in den romanischen Sprachen*, Tübingen, 1973.

- DIETRICH, 1973b = W. DIETRICH, *Der Periphrastische Verbalaspekt im Griechischen und Lateinischen* in *Glotta*, 51, 1973, p. 188-228.
- DOVER, 1987 = K. DOVER, *The colloquial stratum in Classical Attic prose*, in K. DOVER (ed.), *Greek and the Greeks, collected papers*, vol. 1, Oxford, 1987, p. 16-30.
- DRINKA, 2003 = B. DRINKA, *The formation of periphrastic perfects and passives in Europe: An areal approach* in B. BLAKE & K. BURRIDGE (eds.), *Historical Linguistics 2001*, Amsterdam & Philadelphia, 2003, p. 105-128.
- DRINKA, 2011 = B. DRINKA, *The sacral stamp of Greek: Periphrastic constructions in new testament translations of latin, gothic and old church slavonic* in E. WELO (ed.), *Indo-European syntax and pragmatics: Contrastive approaches*, *Oslo Studies in Language*, 3, 2011, p. 41-73.
- EGGINS, 1994 = S. EGGINS, *Introduction to systemic functional linguistics*, London, 1994.
- EVANS, 2001 = T.V. EVANS, *Verbal syntax in the Greek Pentateuch: Natural Greek usage and Hebrew interference*, Oxford, 2001.
- EVANS & OBBINK, 2010 = T.V. EVANS & D.D. OBBINK, *Introduction* in T.V. EVANS & D.D. OBBINK (eds.), *The language of the papyri*, Oxford, 2010, p. 1-12.
- EVANS, 2010 = T.V. EVANS, *Standard Koine Greek in third century BC papyri* in T. GAGOS (ed.), *Proceedings of the Twenty-Fifth International Congress of Papyrology* (Ann Arbor, July 29-August 4, 2007), Ann Arbor, 2010, p. 197-206.
- FLEISCHMAN, 2000 = S. FLEISCHMAN, *Methodologies and ideologies in historical linguistics: On working with older languages* in S.C. HERRING, P. VAN REENEN & L. SCHØSLER (eds.), *Textual parameters in older languages*, Amsterdam, 2000, p. 33-58.
- GERÖ & VON STECHOW, 2003 = E.-C. GERÖ & A. VON STECHOW, *Tense in time: The Greek perfect* in R. ECKARDT, K. VON HEUSINGER & C. SCHWARZE (eds.), *Words in time: Diachronic semantics from different points of view*, Berlin, 2003, p. 251-294.
- GUY, 2003 = G. GUY, *Variationist approaches to phonological change* in B. JOSEPH & R. JANDA (eds.), *The handbook of Historical Linguistics*, Oxford, 2003, p. 369-400.
- HABERMANN, 1998 = W. HABERMANN, *Zur chronologischen Verteilung der papyrologischen Zeugnisse* in *Zeitschrift für Papyrologie und Epigraphik*, 122, 1998, p. 144-160.
- HAGÈGE, 1993 = C. HAGÈGE, *The language builder: An essay on the human signature in linguistic morphogenesis*, Amsterdam, 1993.
- HALLIDAY, 1978 = M. HALLIDAY, *Language as social semiotic*, London, 1978.
- HALLIDAY, 1988 = M.A.K. HALLIDAY, *On the language of physical science* in M. GHADDESSY (ed.), *Registers of written English: Situational factors and linguistic features*, London, 1988, p. 162-177.
- HASPELMATH, 1992 = M. HASPELMATH, *From resultative to perfect in Ancient Greek* in J.L. ITURRIOZ LEZA (ed.), *Nuevos estudios sobre construcciones resultativos (= Función, 11-12)*, Universidad de Guadalajara, 1992, p. 187-224.
- HERRING, VAN REENEN, & SCHØSLER, 2000 = S.C. HERRING, P. VAN REENEN, & L. SCHØSLER, *On textual parameters and older languages* in S.C. HERRING, P. VAN REENEN, & L. SCHØSLER (eds.), *Textual Parameters in Older Languages*, Amsterdam, 2000, p. 1-31.
- HØGEL, 2002 = C. HØGEL, *Symeon Metaphrastes: Rewriting and canonisation*, Copenhagen, 2002.
- HOOGENDIJK, 1988 = F.A.J. HOOGENDIJK, *Ptolemaios: een Griek die leeft en droomt in een Egyptische tempel* in P.W. PESTMAN (ed.), *Familiearchieven uit het land van Pharao*, Zutphen, 1988, p. 47-69.

- HORSLEY, 1994 = G.H.R. HORSLEY, *Papyrology and the Greek Language. A fragmentary ABECEDARIUS of desiderata for future study* in A. BÜLOW-JACOBSEN (ed.), *Proceedings of the 20th international congress of papyrologists*, Copenhagen, 1994, p. 48-70.
- HORROCKS, 2010 = G. HORROCKS, *Greek: A history of the language and its speakers*, Oxford & Malden, 2010².
- JOSEPH, 2000 = B. JOSEPH, *Textual Authenticity: Evidence From Medieval Greek* in S.C. HERRING, P. VAN REENEN & L. SCHÖSLER (eds.), *Textual parameters in older languages*, Amsterdam, 2000, p. 309-329.
- LABOV, 1994 = W. LABOV, *Principles of linguistic change. 1: Internal factors*, Oxford, 1994.
- LASS, 2004 = R. LASS, *Ut custodiant litteras: Editions, corpora and witnesshood* in M. DOSSENA & R. LASS (eds.), *Methods and data in English historical dialectology*, Bern, 2004, p. 21-48.
- LEE, 1983 = J.A.L. LEE, *A lexical study of the Septuagint version of the Pentateuch*, Chico (Calif.), 1983.
- LEE, 1985 = J.A.L. LEE, *Some features of the speech of Jesus in Mark's Gospel in Novum Testamentum*, 27, 1985, p. 1-26.
- LEE, 2007 = J.A.L. LEE, 'Εξαποστέλλω in J. JOOSTEN & P. J. TOMSON (eds.), *Voces Biblicae: Septuagint Greek and its significance for the New Testament*, Leuven, 2007, p. 99-113.
- LEE, 2013 = J.A.L. LEE, *The Atticist Grammarians* in S.E. PORTER & A.W. PITTS (eds.), *The language of the New Testament: Context, history and development*, Leiden, 2013.
- LEWIS, 1986 = N. LEWIS, *Greeks in Ptolemaic Egypt: Case studies in the social history of the Hellenistic world*, Oxford, 1986.
- LÓPEZ EIRE, 1996 = A. LÓPEZ EIRE, *La lengua coloquial de la comedia Aristofánica*, Murcia, 1996.
- LÓPEZ EIRE, 1999 = A. LÓPEZ EIRE, *Quince rasgos de los lenguajes científico-técnicos del griego antiguo* in *Humanitas*, 51, 1999, p. 3-21.
- LÓPEZ EIRE, 2004 = A. LÓPEZ EIRE, *Registros lingüísticos en la comedia aristofánica* in A. LÓPEZ EIRE & A. RAMOS GUERREIRA (eds.), *Registros lingüísticos en las lenguas clásicas*, Salamanca, 2004, p. 103-147.
- LUISELLI, 2010 = R. LUISELLI, *Authorial revision of linguistic style in Greek papyrus letters and petitions (AD I - IV)*, T.V. EVANS & D.D. OBBINK (eds.), *The language of the papyri*, Oxford, 2010, p. 71-96.
- MANDILARAS, 1972 = B.G. MANDILARAS, *Studies in the Greek language. Some aspects of the development of the Greek language up to the present day*, Athens, 1972.
- MANOLESSOU, 2005 = I. MANOLESSOU, *From participles to gerunds* in M. STAVROU & A. TERZI (eds.), *Advances in Greek generative syntax*, Amsterdam, 2005, p. 241-283.
- MANOLESSOU, 2008 = I. MANOLESSOU, *On historical linguistics, linguistic variation and Medieval Greek* in *Byzantine and Modern Greek Studies*, 32, 2008, p. 63-79.
- MARKOPOULOS, 2009 = T. MARKOPOULOS, *The future in Greek. From Ancient to Medieval*, Oxford, 2009.
- MARTÍNEZ HERNÁNDEZ, 1998-9 = M. MARTÍNEZ HERNÁNDEZ, *Generalidades sobre el lenguaje coloquial griego* in *Philologica Canariensis*, 4-5, 1998-1999, p. 369-392.
- MAYSER, 1926-1938 = E. MAYSER, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, Berlin & Leipzig, 1926-1938.
- METZGER & EHRLMAN, 2005 = B.M. METZGER & B.D. EHRLMAN, *The text of the New Testament: Its transmission, corruption, and restoration*, New York, 2005⁴.

- MILROY, 1992 = J. MILROY, *Linguistic variation and change*, Oxford, 1992.
- MIRAMBEL, 1966 = A. MIRAMBEL, *Essai sur l'évolution du verbe en grec byzantin* in *Bulletin de la Société Linguistique de Paris*, 61, 1966, p. 167-190.
- MORALEJO, 1977 = J.J. MORALEJO, *Dialectos y niveles de lengua en griego antiguo* in *Revista Española de Lingüística*, 7, 1977, p. 57-85.
- MOSER, 1988 = A. MOSER, *A history of the perfect periphrases in Greek*, (diss.), University of Cambridge, 1988.
- MUFWENE, 2008 = S. MUFWENE, *Language evolution: Contact, competition, and change*, London, 2008.
- O'DONNELL, 2000 = M.B. O'DONNELL, *Designing and compiling a register-balanced corpus of Hellenistic Greek for the purpose of linguistic description and investigation* in S.E. PORTER (ed.), *Diglossia and other topics in New Testament linguistics*, Sheffield, 2000, p. 255-297.
- PALME, 2009 = B. PALME, *The range of documentary texts: Types and categories* in R.S. BAGNALL (ed.), *Oxford handbook of papyrology*, New York, 2009, p. 358-394.
- PORTER, 1989 = S.E. PORTER, *Verbal aspect in the Greek of the New Testament, with reference to tense and mood*, New York (diss. Sheffield), 1989.
- PORTER & O'DONNELL, 2010 = S.E. PORTER & M.B. O'DONNELL, *Building and examining linguistic phenomena in a corpus of representative papyri* in T.V. EVANS & D.D. OBBINK (eds.), *The language of the papyri*, Oxford, 2010, p. 287-311.
- POUNTAIN, 2006 = C.J. POUNTAIN, *Towards a history of register in Spanish*, in *Spanish in Context*, 3, 2006, p. 5-24.
- REGARD, 1918 = P.F. REGARD, *La phrase nominale dans la langue du Nouveau Testament*, Paris, 1918.
- ROMAINE, 1982 = S. ROMAINE, *Socio-historical linguistics: Its status and methodology*, Cambridge, 1982.
- ROMAINE, 1994 = S. ROMAINE, *Language in society: An introduction to sociolinguistics*, London, 1994.
- ROSÉN, 1979 = H.B. ROSÉN, *L'hébreu et ses rapports avec le monde classique: Essai d'évaluation culturelle*, Paris, 1979.
- ROSENQVIST, 2007 = J.O. ROSENQVIST, *Die byzantinische Literatur: Vom 6. Jahrhundert bis zum Fall Konstantinopels 1453*, Berlin & New York, 2007.
- RYDBECK, 1991 = L. RYDBECK, *On the question of linguistic levels and the place of the New Testament in the contemporary language milieu* in S.E. PORTER (ed.), *The language of the New Testament: Classic essays*, Sheffield, 1991, p. 191-204.
- SMITH, 2003 = C.S. SMITH, *Modes of discourse: The local structure of texts*, Cambridge, 2003.
- SWANSON, 1995 = R.J. SWANSON, *New Testament Greek manuscripts: Variant readings arranged in horizontal lines against Codex Vaticanus*, Sheffield, 1995.
- THESLEFF, 1967 = H. THESLEFF, *Studies in the styles of Plato*, Helsinki, 1967.
- TOUFEXIS, 2008 = N. TOUFEXIS, *Diglossia and register variation in Medieval Greek in Byzantine and Modern Greek Studies*, 32, 2008, p. 203-217.
- TOUFEXIS, 2010 = N. TOUFEXIS, *One era's nonsense, another's norm: Diachronic study of Greek and the computer* in G. BODARD & S. MAHONY (eds.), *Digital research in the study of classical antiquity*, Farnham, 2010, p. 105-118.
- WAHLGREN, 2002 = S. WAHLGREN, *Towards a grammar of Byzantine Greek in Symbolae Osloenses*, 77, 2002, p. 201-204.
- WHITE, 1972 = J.L. WHITE, *The form and structure of the official petition: A study in greek epistolography*, Missoula (Mont.), 1972.
- WILCKEN, 1927 = U. WILCKEN, *Urkunden der Ptolemäerzeit (Ältere Funde)*, Berlin, 1927.
- WILLI, 2003 = A. WILLI, *The languages of Aristophanes: Aspects of linguistic variation in Classical Attic Greek*, Oxford, 2003.
- WILLI, 2010 = A. WILLI, *Register variation* in E.J. BAKKER (ed.), *The Blackwell companion to the Ancient Greek Language*, Oxford, 2010, p. 29

ABSTRACT

This article consists of three main parts. In the first part, I critically discuss two approaches to the diachronic study of Ancient Greek. I argue for the importance of not confining ourselves to spoken-like, ‘authentic’ texts, but applying a comparative, register-based perspective. This perspective is illustrated in the second part, where I explore the relevance of Markopoulos’ (2009) ‘sociolinguistic parameter of grammaticalization’ to the diachrony of periphrastic constructions with εἰμί “I am” in Post-classical and Early Byzantine Greek. I close the article by discussing some of the difficulties and prospects associated with this approach, in the light of further research.

Keywords: Ancient Greek, historical linguistics, register, verbal periphrasis