

# MINOR COMPLEMENTATION PATTERNS IN POST-CLASSICAL GREEK (I – VI AD)

## *A Socio-historical Analysis of a Corpus of Documentary Papyri*

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**Abstract:** Classical Greek (V – IV BC) is known for the complexity of its complementation system, involving infinitival, participial and finite verb forms. In Post-classical Greek (III BC – VI AD), a simplification of this system takes place, whereby finite complementation becomes much more frequent, and ὅτι is used as a ‘generic’ complementiser. This article analyses to what extent complementation patterns other than ὅτι with a finite verb form and the accusative with infinitive are still used in the Post-classical period (I – VI AD), focusing on documentary sources (that is, letters and petitions). I show that various ‘minor’ complementation patterns are (still) attested; some of them are known from Classical Greek, while others are entirely new formations. I furthermore argue that ‘factivity’ and ‘formality’ are two key factors in explaining the distribution of these patterns.

**Keywords:** Complementation, Post-classical Greek, factivity, formality

## 1 Introduction

As Horrocks (2007, 620-1) observes, one of the most striking characteristics of Classical Greek (V – IV BC), even in its more ‘colloquial’ manifestations, is its complexity of complementation<sup>1</sup> patterns,<sup>2</sup> ‘involving the use of participles, infinitives, and the interplay of indicative, subjunctive and optative verb forms’.<sup>3</sup> Even from a cross-linguistic point of view, such complexity is rare: complementation systems with two, three or four members<sup>4</sup> can be found much more frequently across the languages of the world.<sup>5</sup>

Three complementation patterns stand out (in terms of frequency) during the Classical period: the accusative with infinitive, the accusative with participle, and ὅτι with the indicative. Next to these ‘major’ complementation patterns, Classical Greek also had a variety of less frequently used, ‘minor’ complementation patterns: the standard grammars<sup>6</sup> mention, among others, ὥς with the indicative/subjunctive/optative (after

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<sup>1</sup> For a discussion of the notion ‘complementation’ with regard to Ancient Greek, see Crespo (2014). From a more general point of view, see Noonan (1985).

<sup>2</sup> Another characteristic mentioned by Horrocks (2007, 620) is its freedom of word order.

<sup>3</sup> For a similar observation, see Joseph (1987, 433).

<sup>4</sup> ‘Members’ here simply refers to the use of different moods.

<sup>5</sup> Noonan (1985, 133-5). English too has a five-member complementation system, with an indicative, a (moribund) subjunctive, an infinitive, a nominalization, and a participle (Noonan 1985, 133).

<sup>6</sup> See e.g. Kühner & Gerth (1976[1904], 354-99); Smyth (1984[1920], 496-503); Rijksbaron (2002, 50-60).

verbs of communication, perception, knowledge, and occasionally verbs of effort), ὅπως with the indicative/subjunctive/optative (after verbs of effort, and occasionally verbs of fearing), and μή with the subjunctive/optative (after verbs of fearing).

Modern Greek does not preserve this broad variety of complementation patterns. During the Post-classical period (III BC – VI AD), there was a restructuring of the grammar, which in many ways can be considered a simplification. This restructuring also affected complementation:<sup>7</sup> finite complementation patterns such as ὅτι with the indicative became much more frequently used,<sup>8</sup> while infinitival and participial constructions decreased in usage;<sup>9</sup> moreover, in the area of finite complementation, the optative was abandoned. As Joseph (1987, 434) notes, ‘the spread of finite complementation is complete ... in Modern Greek, and there are no instances of non-finite complementation remaining’.<sup>10</sup>

In both Ancient and Modern Greek, the notion of ‘factivity’<sup>11</sup> has been shown to be a major factor determining the choice of complementation pattern.<sup>12</sup> Cristofaro (1995, 1996, 2008, 2012),<sup>13</sup> for example, has argued that in Ancient Greek ὅτι with a finite verb form and the accusative with participle are used when the speaker is committed to the truth of the complement proposition, whereas the accusative with infinitive is used for non-factual complements.<sup>14</sup> With regard to Standard Modern Greek, scholars<sup>15</sup> have

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<sup>7</sup> On the simplification of the complementation system, see Cristofaro (1996, 132, 152-3, 156).

<sup>8</sup> On the advantages of ὅτι with the indicative over infinitival or participial complements, see James (2001-5, 154-5).

<sup>9</sup> Joseph (1987, 433-4); Horrocks (2007, 623).

<sup>10</sup> Kavčić (2005, 11) notes that non-finite complementation patterns can still be found in the Greek dialects spoken in Southern Italy.

<sup>11</sup> For a definition of factivity, see Kiparsky & Kiparsky (1970, 147): ‘the speaker presupposes that the embedded clause expresses a true proposition, and makes some assertion about that proposition’. Kiparsky & Kiparsky (1970, 147) furthermore make the important observation that ‘the following things should be clearly distinguished: (1) propositions the speaker asserts, directly or indirectly, to be true (2) propositions the speaker presupposes to be true. Factivity depends on presupposition and not on assertion’. For further discussion of factivity, with references, see Seuren (2006).

<sup>12</sup> Cristofaro (1996) also draws attention to the notion of ‘event integration’ or ‘binding’ with regard to Ancient Greek (see e.g. Givón 1980, 2001 from a cross-linguistic point of view). This will not further concern us here.

<sup>13</sup> Compare Kühner & Gerth (1976[1904, 357]); Schwyzler & Debrunner (1950, 395-6); Rijksbaron (2002, ch. 3). Huitink (2009:28) argues for the need to distinguish between ‘semantic’ and ‘pragmatic’ presupposition, and claims that both are needed to account for the distribution of complement clauses. I will not go further into this complex matter here.

<sup>14</sup> Some verbs can be followed by more than one complementation pattern: for example, the communication verb λέγω “I say” can be followed by both ὅτι with a finite verb form (factual) and the accusative with infinitive (non-factual). In this case, there is a change in the meaning of the sentence when one or the other complementation pattern is chosen (Cristofaro 2008, 573-82).

<sup>15</sup> See e.g. Kakouriotis (1982); Roussou (1992); Nicholas (1998, 2001).

claimed that *που* with the indicative is obligatory after factive predicates, whereas *πως* and *ὅτι* with the indicative typically follow non-factive predicates.

While the overall development of the Greek complementation system is relatively clear, few in-depth studies on Post-classical Greek exist, despite its being a crucial period of transition between Classical and Byzantine/Modern Greek. One exception in this regard is the recent study by James (2008), who analyses complementation with verbs of perception/cognition and verbs of declaration in documentary papyri from the first eight centuries AD.<sup>16</sup> My goal will be to continue the analysis of the Post-classical documentary papyri (I – VI AD), starting from a formal, rather than a functional point of view (that is, taking the actual complementation patterns as a starting point). However, rather than focusing on *ὅτι* with the indicative or the accusative with infinitive, the two complementation patterns that are dominant in this period (in terms of frequency), I will analyse to what extent other, less frequently used ('minor'), complementation patterns can be found in these documentary sources, and what factors govern their distribution.

The article is organised as follows. In §2, I briefly introduce the corpus used for this study. In §3, I present and analyse the different complementation patterns, distinguishing between finite complementation (§3.1), infinitival complementation (§3.2), and participial complementation (§3.3). In §4, I briefly summarise my findings, and make some suggestions for further research.

## 2 Corpus

The analysis presented in this article is based on documentary texts that are preserved on papyrus, letters and petitions to be more specific. Working with documentary papyri has a number of advantages: they have been preserved in great number for almost a millennium, often can be dated and are contextually diverse. Moreover, as James (2008:33) notes, being autographs they are not corrupted by transmission through Medieval manuscripts, whereby the text was often classicized.

As James (2008, 34) observes, 'the Koine shows the association of particular syntactic features with different levels, strata, or styles'. Since 'the papyri reflect the use of Greek by a wider range of writers (men, women, and children, from various social backgrounds), for a broader sweep of different purposes (both official and personal), in

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<sup>16</sup> For the Byzantine period, see also Hult (1990, ch. 5) and Kavčič (2005).

greater numbers, and over a longer period, perhaps, than any other corpus of Greek' (James 2008, 37), they allow and in fact demand a *socio*-historical analysis.<sup>17</sup> A coherent framework for the analysis of the relationship between social context and linguistic features is still a *desideratum*;<sup>18</sup> one of the social factors that will be highlighted<sup>19</sup> in the present analysis is *formality*:<sup>20</sup> our corpus contains both informal documents such as private and business letters, and formal documents such as official letters and petitions. The difference in degree of formality<sup>21</sup> between these documents is likely to have an impact on the choice of linguistic features, such as complementation patterns.<sup>22</sup>

In order to maximise the informational value of our documentary texts, I concentrate on letters and petitions that can be found in so-called 'archives', that is, groups of texts that have been collected in antiquity by persons or institutions, for example because they were useful and needed to be kept, or because they had sentimental value.<sup>23</sup> Such archives have been well studied, and contain texts that are related, thus offering a direct means of comparison. An overview of the corpus can be found in appendix, where the different archives have been grouped according to their place of origin (that is, the place where they have been found). The corpus contains about 1400 texts: 70% of these are letters, and 30% petitions.<sup>24</sup>

### 3 Minor complementation patterns

In what follows, I analyse the use (semantics and pragmatics) and development of 'minor' complementation patterns in the documentary papyri.<sup>25</sup> The following survey

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<sup>17</sup> For more background on socio-historical linguistics as a discipline, see e.g. the handbook recently edited by Conde-Silvestre & Hernández-Campoy (2012). As one of the reviewers notes, there are some differences between *historical sociolinguistics* and *socio-historical linguistics*, but I will not go further into this terminological issue here.

<sup>18</sup> For further observations, see Bentein (2015).

<sup>19</sup> Another factor that is worth drawing attention to, but to which no further attention will be paid in this article, is bilingualism (Latin, for example, showing a number of interesting parallels).

<sup>20</sup> For a coherent theory of formality, see Heylighen & Dewaele (1999). Heylighen & Dewaele (1999, 25) define formality as 'avoidance of ambiguity in order to minimize the chance of misinterpretation'. They specify some typical linguistic reflexes of formality, and discuss its 'behavioral determinants'.

<sup>21</sup> As Heylighen & Dewaele (1999:9) note, there is no strict dividing line between 'formal' and 'informal'.

<sup>22</sup> See Lee (1985) for some preliminary observations with regard to Post-classical Greek.

<sup>23</sup> Vandorpe (2009, 238-40).

<sup>24</sup> Letters have an average length of 17,5 lines (90 words), while petitions have an average length of 22 lines (151 words).

<sup>25</sup> I do not make a distinction between 'performance' and 'competence', as Burguière (1960, 190) and Joseph (1983, 51) do. The more frequently a pattern is used, the more it will be cognitively 'entrenched' (in the sense of Langacker 1987, 57-60).

does not include<sup>26</sup> (i) constructions of the type ἄρξομαι λέγων “I will begin to speak”, where the subject of the matrix clause and the complement clause are co-referential; (ii) indirect questions with εἰ, πότερον, τίς, etc.<sup>27</sup>

### 3.1 With finite complement

#### 3.1.1 Parataxis

With finite complementation, the complement clause is typically introduced by a complementiser such as ὥς, ἵνα, ὅπως, etc. (see further below).<sup>28</sup> This is not always the case, however: on some occasions, the matrix and complement verb are asyndetically juxtaposed (‘asyndetic parataxis’), or merely connected by καί (‘syndetic parataxis’). Such examples can already be found in the Classical period,<sup>29</sup> but become much more frequent in the Post-classical period.<sup>30</sup> Jannaris (1898, 402), for example, notes that ‘καί had, as early as P [Post-classical antiquity], established itself as the ordinary representative in cases where the literary language had been wont to resort to subordinate discourse or participial construction’.<sup>31</sup>

A coherent treatment of parataxis in Ancient Greek is, regrettably, still lacking: the most detailed treatment of the subject can be found in Ljungvik (1932, ch. 5). Ljungvik (1932) shows that parataxis, both asyndetic and with καί, can be found after a number of verb classes in the Post-classical period:<sup>32</sup> καί parataxis can be found, among others, after verbs of effort (e.g. μὴ ἀμελέω “I do not neglect”, σπουδάζω “I am eager to”), verbs of perception (e.g. ἀκούω “I hear”, ὁράω “I see”),<sup>33</sup> and verbs of ordering (e.g. κελεύω “I order”, παρακαλέω “I demand”); asyndetic parataxis after verbs of mental state (e.g.

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<sup>26</sup> In general, these two types present little to no minor complementation patterns.

<sup>27</sup> In what follows, I mention, on various occasions, the total number of examples for each complementation pattern. These numbers are calculated as follows: when the complement clause contains several verbs and is introduced by an overt complementiser, I count one example (e.g. ‘I saw that he ate, drank and smoked’ would be one example), but when the complement clause contains several verbs and is not introduced by an overt complementiser, each of the verbs counts as an example (e.g. ‘I saw him eating, drinking and smoking’ would be three examples).

<sup>28</sup> As Noonan (1985, 47) notes, these complementisers ‘typically derive historically from pronouns, conjunctions, adpositions or case markers, and, rarely, verbs’.

<sup>29</sup> See e.g. Kühner & Gerth (1976[1904], 351-2).

<sup>30</sup> Burguière (1960, 190) argues that no continuity should be maintained between Post-classical and Archaic/Classical Greek parataxis.

<sup>31</sup> Cf. also Moulton & Turner (1976, 50).

<sup>32</sup> My classification of verb classes follows, to a large extent, Levin (1993).

<sup>33</sup> As Noonan (1985, 106-7) notes, causative verbs and verbs of perception lend themselves quite naturally to parataxis: ‘paratactic complements typically occur in DTR [direct time reference] environments, especially in causative and immediate perception contexts. The reason for this is that the nature of these situations, a cause and an effect, an action and its perception, lend themselves particularly well to coding as two separate though logically connected events’.

γινώσκω “I know”, οἶδα “I know”), psychological verbs (e.g. ἡγέομαι “I believe”, νομίζω “I think”), communicative verbs (e.g. γράφω “I write”, λέγω “I say”), verbs of ordering (δέομαι “I ask”, ἑρωτάω “I ask”), and verbs of effort (e.g. ἐπιμελέομαι “I take care (that)”, σπουδάζω “I am eager to”).

Ljungvik notes that asyndetic parataxis occurs particularly frequently: ‘ausserordentlich häufig begegnet in der Volkssprache die Erscheinung, dass auf gewisse Verben ein asyndetisch angereicherter Satz folgt, der die Stelle eines Objektsatzes, einer Partizipial- oder Infinitivkonstruktion vertritt’ (Ljungvik 1932, 90).<sup>34</sup>

When it comes to the documentary papyri, James (2008) sketches a somewhat different picture. James argues that parataxis only plays a minor role in the Roman and Byzantine papyri, at least when it comes to verbs of perception/cognition, and verbs of declaration. For these verb classes, he only finds instances after γινώσκειν/εἰδέναι σε θέλω “I want you to know” (verbs of perception/cognition; James 2008, 98), and ὁμολογέω “I acknowledge” (verbs of declaration; James 2008, 128).

Our corpus does not entirely confirm these findings: it is true that parataxis with καί occurs infrequently, but there are over fifty examples of asyndetic parataxis. These mostly occur with verbs of effort (e.g. μὴ ἀμελέω “I do not neglect”, βλέπω “I see to it”, ὀράω “I see to it”, σπουδάζω “I am eager to”),<sup>35</sup> but can also be found with verbs of mental state (e.g. γινώσκω “I know”, οἶδα “I know”),<sup>36</sup> communicative verbs (e.g. γράφω “I write”, φανερόν ποιέω “I make clear”),<sup>37</sup> psychological verbs (e.g. θαυμάζω “I wonder”, νομίζω “I think”, πείθομαι “I am convinced”),<sup>38</sup> and verbs of ordering (e.g. ἑρωτάω “I ask”, ἐθέλω “I want”, παρακαλέω “I demand”).<sup>39</sup> The large majority of these examples occur in informal contexts (that is, private and business letters);<sup>40</sup> some examples can also be found in official letters and petitions.<sup>41</sup>

Ljungvik (1932, 90) connects the frequent use of asyndetic parataxis to the preference of the lower registers for direct speech: ‘dass dieser Sprachgebrauch [asyndetic parataxis] in späteren, volkstümlichen Texten so häufig und reich entwickelt

<sup>34</sup> Such structures still occur in Modern Greek. See e.g. Roussel (1922, 262-3).

<sup>35</sup> See e.g. P.Fay.113 (100 AD), ll. 10-1; BGU.2.417 (II/III AD), l. 10; P.Giss.Apoll.1 (113-5 AD), ll. 12-3; P.Mil.Vogl.2.77 (II AD), ll. 8-9; P.Oxy.48.3401 (IV AD), l. 7.

<sup>36</sup> See e.g. BGU.3.822 (105 AD), ll. 3-4; P.Abinn.5 (342-51 AD), ll. 8-11; PSI.8.938 (VI AD), l. 5.

<sup>37</sup> See e.g. P.Mich.3.206 (II AD), ll. 16-7; P.Ryl.2.233 (118 AD), ll. 13-5.

<sup>38</sup> See e.g. P.Brem.2 (II AD), ll. 10-1; P.Mich.3.209 (II/III AD), ll. 6-9.

<sup>39</sup> See e.g. P.Mich.8.473 (II AD), l. 8; P.Mich.8.487 (II AD), l. 11.

<sup>40</sup> Compare James (2008, 236).

<sup>41</sup> See e.g. SB.14.12143 (41-54 AD), ll. 3-4; P.Mich.6.423 (197 AD), l. 24; P.Brem.2 (II AD), ll. 10-1; P.Abinn.5 (342-51 AD), ll. 8-11.

ist, hängt mit der Vorliebe der Umgangssprache für die direkte Redeform zusammen'.<sup>42</sup> This is most evident in the many examples which contain an imperative, subjunctive or indicative future, as would have been the case in direct speech:<sup>43</sup> εὖ οὖν ποιήσης γράψον μοι (BGU.2.601 (II AD), l. 9) "so you will do well to write to me", παρ[α]καλῶ δῆλόν μοι ποιήσεις (P.Mich.8.487 (II AD), l. 7) "I beg you to let me know", ἔθελο γράψης περὶ φίλου (P.Mich.8.473 (II AD), l. 8) "I want you to write about a friend", ἔργον μὲν ποίησον τάχα εὔρης μοι αὐτόν (P.Flor.2.262 (III AD), ll. 7-8) "make an effort to find him quickly for me".

In the large majority of the examples, the complement is non-factive in nature. However, asyndetic parataxis is also attested with factive complements, as in (1):<sup>44</sup>

- (1) ἵνα ἰδῇς ἐν[έτει]λα τόδε αὐτῆς ὥρας τῷ Τιβερίνῳ· δ[ίδου] μοι τον ὑποζηνην καὶ λαβὼν/Κ[έλερι] δηλώσω. διὸ φανερόν σ[ο]ι ποιῶ κεκόμισμε μέχρις ἂν ὑγινεων παραγέ[ν]ῃ (P.Mich.3.206 (II AD), ll. 13-8)

"For your information, I gave this instruction straight away to Tiberinus: "Give me the girdle, and I'll take it and let Celer know." So I have to inform you, I have taken charge of it till you arrive in good health." [tr. Winter]<sup>45</sup>

In this private letter, Longinus Celer writes to his brother Maximus Celer about the whereabouts of their brother Sempronius. Maximus had sent Sempronius a chiton (tunic), but had not received an acknowledgment of receipt. Longinus had therefore sent Tiberinus to look for him. In the meantime, Tiberinus has found Sempronius, and Longinus has asked him to send the girdle of the chiton so that he can show it to Maximus as a proof of identity. Note how in Greek the complement, κεκόμισμε "I have taken charge of it", is directly attached to the matrix verb φανερόν σ[ο]ι ποιῶ "I inform you", without an overt complementiser being present.

As to syndetic parataxis, one context where it can be found occasionally is in so-called 'mixed constructions',<sup>46</sup> where the regular non-finite complementation pattern is followed by a finite verb form introduced by καί. Consider the following example:<sup>47</sup>

<sup>42</sup> James (2008, 130-41) offers a number of other cognitive and graphic explanations for parataxis: (i) misreadings when copying a standard template, (ii) subconscious assimilation of endings of matrix and complement verb; (iii) a considerable interval between the matrix verb and its complement.

<sup>43</sup> The use of the jussive subjunctive is non-Classical (Mandilaras 1973, 250-3). Burguière (1960, 190) has a different explanation: according to him, we are dealing with a compromise between finite and non-finite expression: 'il semble bien qu'il faille y apercevoir des sortes de compromis entre la forme d'expression à l'infinitif immédiat et la forme d'expression qui fait appel à ἵνα, ὅπως et le subjonctif. De la première on a voulu reproduire l'immédiateté, tout en conservant le subjonctif qui proposait la seconde.'

<sup>44</sup> For similar examples, see e.g. P.Mich.3.209 (II/III AD), ll. 6-9; P.Cair.Masp.3.67322 (VI AD), l. 3.

<sup>45</sup> Translations are my own unless otherwise indicated.

(2) ἀναγκαίως ἀνοσιῶ πρᾶμμα ὀδυρόμενος ἐπιδίδωμί σοι τάδε τὰ βιβλία, αὐτὰ ταῦτα μαρτυρόμενος, ἀξιῶν τούτους μετακαλέσασθαι σε καὶ πρῶτον μὲν ἅπερ ἀπεσύλησαν ἀποκατασταθῆναί μοι ποιήσης, [ἐ]πειτα καὶ ἐκδικίας τῆς προσηκούσης κατὰ τοὺς νόμους τυχεῖν (P.Sakaon.39 (318 AD), ll. 15-20)

“Lamenting at this impious deed, I am constrained to submit this petition to you bearing witness to these very facts and asking you that you summon these men and compel them first to restore to me what they have carried off, and then to receive the appropriate vengeance prescribed by the laws.” [tr. Parassoglou]

In this petition, Aurelius Sacaon addresses the *praepositus pagi* about the robbery of sixteen goats. He knows the names of the perpetrators, and therefore asks the official (i) that the accused may be summoned, (ii) that the accused may be compelled to restore what they stole, and (iii) that the accused may be punished. Remarkably, the petition verb ἀξιῶ “I demand” is followed by two different complementation structures: twice, the accusative with infinitive is used (μετακαλέσασθαι σε; ἐκδικίας τῆς προσηκούσης τυχεῖν), and once the subjunctive (ἀποκατασταθῆναί μοι ποιήσης), which is connected by καὶ to the first accusative with infinitive.

### 3.1.2 ὥς with the indicative/subjunctive /optative

In the Classical period, ὥς with the indicative was used in complementary distribution to ὅτι: ‘both forms can occur in factual contexts, where ὅτι typically conveys new, focalized and non-topical information, while ὥς introduces already known, non-focalized and topical information ... in non-factual contexts, only ὥς is allowed’ (Cristofaro 1998, 73-4).

During the Post-classical period, this fine-grained semantic/pragmatic distinction was lost: ὅτι generalised as a marker of subordination, and ὥς with the indicative became significantly reduced in usage.<sup>48</sup> However, as Cristofaro (1998, 76) notes, this does not mean that ὥς with the indicative entirely disappears. In fact, in our corpus more than forty examples of the pattern can be found.<sup>49</sup> These occur after a number of verb classes: most frequently after verbs of communication (e.g. διδάσκω “I inform”, λέγω “I say”, ὁμολογέω “I acknowledge”)<sup>50</sup> and psychological verbs (e.g. ἐλπίζω “I hope”,

<sup>46</sup> See e.g. James (2008, 130) for this term.

<sup>47</sup> For similar examples, see e.g. P.Mich.5.226 (37 AD), ll. 35-9; P.Mich.Mchl.23 (51-65 AD), ll. 4-7; Chr.Wilck.408 (216 AD), l. 10.

<sup>48</sup> Cristofaro (1998, 75).

<sup>49</sup> Note that in a few examples, the matrix verb with ὥς can be found, but the complement verb/clause has been lost.

<sup>50</sup> See e.g. P.Ryl.2.125 (28-9 AD), ll. 26-8; BGU.1.322 (216 AD), ll. 15-7; P.Cair.Masp.1.67005 (522 AD?), ll. 9-10; P.Cair.Masp.1.67003 (567 AD), ll. 15-7.



θαυμάζω “I wonder”, πέπεισμαι “I am convinced”, πιστεύω “I trust”),<sup>51</sup> but also after verbs of mental state (e.g. γινώσκω “I know”, οἶδα “I know”)<sup>52</sup> and verbs of perception (e.g. ἀκούω “I hear”).<sup>53</sup>

Examples of the construction can be found during the entire period under analysis. Quite remarkably, however, almost half of the examples occur in the sixth-century archive of Dioscorus. Here, ὥς accompanies the verb διδάσκω “I inform” particularly often<sup>54</sup> in what seems to be a petitionary formula.<sup>55</sup> Consider the following example:

(3) διδάσκωμεν τὴν ὑπερφυῖ ὑμῶν καὶ ἔνδοξον δεσποτείαν ὥς μωρίαν καὶ ἀκαταστασίαν ἀμύθη[τ]ον ἐνόσησέν τις (P.Cair.Masp.1.67004 (522 AD?), l. 6)

“We inform your extraordinary and glorious lordship that someone has fallen ill with unspeakable madness and rebellion.” [tr. Dijkstra]

The councillors of Omboi petition the *dux* of the Thebaid, who is addressed as τὴν ὑπερφυῖ ὑμῶν καὶ ἔνδοξον δεσποτείαν “your extraordinary and glorious lordship”. The actual contents of their complaint is introduced by the verb διδάσκομεν “we inform”, which takes a ὥς complement clause. Note how ὥς is used here in a non-Classical context: διδάσκω is a factive verb, and the information provided in the complement clause is new and focalised.

In the Dioscorus-archive, the large majority of the examples occur in petitions, and in general we can say that the construction tends to occur in higher-register texts: 30 out of a total of 43 examples can be found in formal contexts (petitions and official letters). This confirms James’ (2008, 47) observation that ‘ὥς was used as an alternative to ὅτι in higher registers’.

ὥς also occurs with the optative, but much less frequently. In the Classical period, ὥς with the optative was still common: according to Cristofaro (1996, 71-2, 135, 137-8), the oblique optative originally indicated epistemic modality (non- and contrafactuality),<sup>56</sup> which explains why it can be found almost exclusively with ὥς and not with ὅτι in early writers such as Herodotus. In later writers such as Xenophon, the oblique optative generalised as a marker of indirect discourse. That it no longer had a semantic

<sup>51</sup> See e.g. P.Wisc.2.84 (II AD), ll. 12-3; P.Herm. 6 (317 AD), ll. 18-20; P.Herm.9 (IV AD), l. 22.

<sup>52</sup> See e.g. BGU.1.261 (105 AD?), ll. 23-5; P.Abinn.3 (346-51 AD), ll. 16-8.

<sup>53</sup> See e.g. P.Hamb.3.230 (ca. 565 AD?), ll. 12.

<sup>54</sup> It should be stressed, however, that in this archive ὥς also accompanies a variety of other verbs, such as ἀγγέλλω “I announce”, γινώσκω “I know”, γράφω “I write”, λέγω “I say”, etc.

<sup>55</sup> The same use also occurs in another sixth-century archive, that of the *Apiones* (see e.g. P.Oxy.27.2479 (VI AD), ll. 6-9).

<sup>56</sup> Méndez Dosuna (1999) considers the oblique optative in its initial stage a marker of evidentiality.

motivation probably contributed to its loss in the Post-classical period.<sup>57</sup> In our corpus, ὥς with the optative is limited to petitions from a single fourth-century archive, that is, the archive of Aurelius Ammon *scholasticus* (lawyer). For an example, consider (4):

- (4) φήμης τοίνυν πρὸ ὀλίγου διαδοθείσης, ὥς εἴη τελευτήσας ἐκεῖνος (P.Ammon.2.45 (348 AD), ll. 12-13)

“When now the rumour had spread recently that he had died.”

In this petition, Aurelius Ammon addresses a high official: Flavius Nestorius, prefect of Egypt. He narrates how his brother Harpocratio went on a journey abroad, leaving his slaves with him. At a certain point, however, the news came that Harpocratio had died: φήμης διαδοθείσης ὥς εἴη τελευτήσας. Note how ὥς is used here according to Classical norms, that is, for a non-factive complement. While the use of the oblique optative after (φήμης) διαδοθείσης can be considered a high-register feature, it is noteworthy that it is found with an innovative, ‘periphrastic’ verb form, εἴη τελευτήσας.<sup>58</sup>

Finally, it should be mentioned that there are also two instances of ὥς with the subjunctive, both of which can be dated to the fourth century AD. In P.Ammon.1.3 (348 AD), 5, l. 20), which stems from the archive of Aurelius Ammon *scholasticus*, ὥς is used after the verb of effort φροντίζομαι. We might be dealing here with a conscious imitation of Classical literature: the use of ὥς for ὅπως is attested in the Classical period, but only rarely.<sup>59</sup> In the other example (P.Herm.9 (IV AD), ll. 7-9), ὥς with the subjunctive is used in a much lower social context: a certain Chairemon addresses Apa Iohannes. He asks the anchorite to remember him in his prayers, using a subjunctive with ὥς after the verb παρακαλέω “I exhort”; the subjunctive here seems jussive in nature.

### 3.1.3 ὥς ὅτι with the indicative

As noted in §3.1.2, during the Post-classical period ὥς became significantly reduced in usage, whereas ὅτι generalised as a complementiser, used in both factual and non-factual contexts. During the Post-classical period, ὥς and ὅτι also start to be used together to introduce complement clauses,<sup>60</sup> which forms another indication of the breakdown of the Classical complementation system.<sup>61</sup>

<sup>57</sup> See Méndez Dosuna (1999, 350); Horrocks (2007, 623, 625).

<sup>58</sup> On these constructions, see e.g. Bentein (2012).

<sup>59</sup> See e.g. Smyth (1984[1920], 497).

<sup>60</sup> Cf. Jannaris (1897, 413); Ljungvik (1926, 67-8); Cristofaro (1998, 75).

<sup>61</sup> Ljungvik (1926, 67) also mentions the occurrence of ὅτι πῶς with the indicative, but this complementation pattern is not attested in our corpus.

ὥς ὅτι with the indicative occurs infrequently as a complementation pattern in our corpus: there are only five examples,<sup>62</sup> dating to the second, fourth and sixth centuries. In all of the examples ὥς ὅτι with the indicative is used after a factive verb: it occurs four times after a verb of communication (e.g. διδάσκω “I inform”, μάρτυς εἰμί “I am a witness”),<sup>63</sup> and once after a verb of perception:

(5) ὄνον μου θήλειαν μέλαινα(ν) παρεθέμην ἐν τῇ μητροπόλει Ἀκουσαρίῳ, ἥνπερ βουλόμενος παρὰ τῆς Ἀκουσαρίου παραλαβεῖν μετέλαβον παρ’ αὐτῆς ὥς ὅτι ἄφνω ἐξέφυγεν εἰς τὴν Τεβ[τῦνι]ν ἀπὸ τῆς αὐλῆς αὐτῆς (P.Kron.2 (128 AD), ll. 5-13)

“I have placed a female donkey of mine with Acousarion in the metropolis, and when I wanted to take it back from Acousarion I heard from her that it had suddenly fled from her courtyard to Tebtynis.”

In this petition to the *strategus*, the farmer Cronion narrates that he left a donkey with a certain Acousarion; when he wanted it back, Acousarion claimed that it had fled to Tebtynis.

Since all of the other examples also occur in petitions, it seems that this innovative complementation pattern was mostly used in higher social contexts, although further evidence would be needed to confirm this observation.

### 3.1.4 διότι with the indicative

Another innovative complementation pattern is introduced by διότι, which Jannaris (1897, 412) considers a ‘strengthened’ form of ὅτι.<sup>64</sup> This pattern is in fact not entirely novel: it is first attested in Herodotus (*Hist.* 2.50.1, cf. Lillo 1999, 316),<sup>65</sup> possibly as a development from διὰ τοῦτο, ὅτι.<sup>66</sup>

Similarly to ὥς ὅτι with the indicative, it is infrequently attested: in our corpus, there are only two examples. These two examples are similar to some extent, since both date to the fourth century AD, and in both cases the factive psychological verb λυπέομαι “I am grieved” forms the matrix verb. For an example, consider (6):<sup>67</sup>

<sup>62</sup> ὥς ὅτι also occurs in P.Lond.5.1788 (VI AD), l. 2, but in this particular case the matrix verb is missing.

<sup>63</sup> See Stud.Pal.20.86 (330 AD), l. 3; P.Cair.Isid.79 (IV AD), ll. 16-8; P.Oxy.27.2479 (VI AD), ll. 21-2 & 23-5.

<sup>64</sup> It is unclear whether Jannaris (1897, 412) intends the term ‘strengthening’ in a morpho-syntactic, or rather semantic way (or both).

<sup>65</sup> According to Lillo (1999, 326), the first unambiguous Attic example can be found in the *Athēnaiōn Politeia*(3.3).

<sup>66</sup> Cf. Kühner & Gerth (1976[1904], 356). For different hypotheses, see Schwyzler & Debrunner (1950, 661); Lillo (1999).

<sup>67</sup> For the other example, see P.Ammon.1.3 (348 AD), 5, l. 12.

- (6) γνωθῆι δὲ, [ὅτι ἐ]λυπήθην διό\τι/ ἀπεδήμησας ἀλόγως [εἰ μὴ] αὕτη ἐστὶν ἡ συνταγή, ἀλλ' ἐχάρην [ἀκού]σας διὰ τοῦ πραιποσίτου, ὅτι ἀνέρχῃ [ταχ]υτέρου πρὸς ἡμᾶς (P.Amh.2.145 (IV AD), ll. 15-9)

“Know that I am grieved because you went away without cause ... but I rejoice at hearing through the *praepositus* that you are soon coming back to us.” [tr. Grenfell & Hunt]

In this letter from Apa Iohannes to his ‘brother’ Paulus, the anchorite asks for money for a certain Macarius. On a personal level, he notes that he was grieved that Paulus went away without cause, but that he is glad that he will be returning soon. The contents of Apa Iohannes’ grievance is expressed through διότι with the indicative: ἐ]λυπήθην διό\τι/ ἀπεδήμησας.

Pfister (1916/8, 559) has argued that the use of διότι with the indicative during the Classical period was a feature of the *Vulgärsprache*,<sup>68</sup> which later reappeared in *koine* Greek (and in Latin as *eo quod*). On the basis of our two examples it is difficult to say whether the complementation pattern still belongs to the lower social levels: both examples stem from private letters, but their authors (Apa Iohannes and Aurelius Ammon *scholasticus*) were well-educated people of a relatively high social standing.

According to Jannaris (1897, 413), διότι was not used as a complementiser for a very long time, ‘being thwarted by the presence of causal διότι’.<sup>69</sup> Jannaris situates its retreat in ‘Greco-Roman’ times (150 BC – 300 AD), and notes that it was succeeded by ὥς ὅτι. While it seems correct that διότι retreated during the period under analysis in this article, further research (including the Ptolemaic period) is needed to verify Jannaris’ hypothesis.

### 3.1.5 πῶς with the indicative

In Modern Greek, πῶς with the indicative is still a common complementation pattern. Jannaris (1897, 413) situates the rise of this pattern in the ‘Greco-Roman’ period (that is, 150 BC- 300 AD), and notes that it has been in competition with ὅτι with the indicative ever since; Jannaris even believes that πῶς ‘would have dispossessed its associate and immemorial predecessor ὅτι, were it not for the reaction of the national spirit’. In our corpus, the pattern does not (yet) constitute a serious competitor for ὅτι with the indicative, with only nineteen examples.

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<sup>68</sup> Cf. similarly Lillo (1999, 328).

<sup>69</sup> In other words, διότι continued to be seen as a causal conjunction, rather than being used as a complementiser.

The origins of *πῶς* as a complementiser lie with its use as an interrogative:<sup>70</sup> as James (2008, 22-3) notes, such an ambiguity can still be seen in the Post-classical examples. In an example such as ὁρᾷς, βασιλεῦ, πῶς πάντας μαγεύει ὁ ξένος (*Mart. Matth.* 232.7),<sup>71</sup> for example, it is unclear if the clause introduced by *πῶς* is equivalent to a *ὅτι* clause: it could either mean “[do you see, king] how the stranger bewitches everyone”, or “[do you see, king] that the stranger bewitches everyone”.

Ljungvik (1926, 66) notes that the use of *πῶς* with the indicative first occurred with verbs of perception.<sup>72</sup> In our corpus, examples can be found with αἰσθάνομαι “I perceive”, θεωρέω “I behold”, and ὁρᾶω “I see”.<sup>73</sup> Another verb class to which Ljungvik (1926, 66) draws attention is that of the psychological verbs: *πῶς* can be found after θαυμάζω “I wonder” already in the Classical period,<sup>74</sup> and in our corpus this is still a quite frequent usage.<sup>75</sup> Another psychological verb with which *πῶς* is attested is χαρίζομαι “I am happy”.<sup>76</sup>

*πῶς* with the indicative typically encodes factive complements. In our corpus, there is some semantic expansion to other factive verbs, but this is still very limited: the pattern can also be found after verbs of mental state (e.g. οἶδα “I know”, οὐκ ἄγνοέω “I know”),<sup>77</sup> which are related to verbs of perception, and perhaps also after a verb of communication (ἐπιδείκνυμι “I show”):

- (7) γράψω γάρ σοι ἐ[ὕθ]έως μετὰ τὸν περισπανμὸν τοῦτον εἴ[να] μὴ περὶ τῶν σοι δια-  
φερόντων φροντί[σ]η[ς]. οὕτως γάρ σοι ἐπιδείξομαι πῶς οὐ δε[ύτε]ρα οὐδενὸς ἀμελήσω  
(P.Mich.8.486 (II AD), ll. 18-22)

“For I shall write to you immediately after this distraction, so that you may not be anxious concerning your affairs. For in this way I shall show you how not again will I neglect anything.” [tr. Youtie & Winter]

<sup>70</sup> Jannaris (1897, 413) suggests that *ὥς* may have exerted an analogical influence; if this was the case (which seems questionable), it probably did not happen at a very early stage.

<sup>71</sup> I borrow this example from Ljungvik (1926, 66).

<sup>72</sup> Cf. similarly Jannaris (1897, 413). Contrast James (2008:58), who notes that ‘there is very little evidence for the use of *πῶς* instead of *ὅτι* with verbs of perception’, and further that ‘since the papyri do not provide many certain examples of *πῶς* meaning “that” with verbs of perception, they do not support Jannaris’ comment that *πῶς* began with these verbs’.

<sup>73</sup> See e.g. BGU.2.531 (75-6), 2, l. 19 (ambiguous); SB.10.10278 (98-138 AD), ll. 11-2.

<sup>74</sup> Cf. Kühner & Gerth (1976[1904], 370). Note, however, that Kühner & Gerth speak of a ‘Fragesatz’.

<sup>75</sup> For some examples, see e.g. P.Mich.8.500 (II AD), l. 3; P.Mich.15.751 (II AD), l. 4; P.Flor.2.250 (257 AD), ll. 3-5; P.Lips.1.107 (253 AD), ll. 2-3; P.Prag.1.109r (249-69 AD), ll. 3-5. White (1986, 208) considers this a formulaic usage.

<sup>76</sup> See P.Mich.8.473 (II AD), l. 4.

<sup>77</sup> See P.Brem.61 (II AD), ll. 18-9; SB.10.10278 (98-138 AD), ll. 5-6.

Sempronius Clemens writes to Apollinarius, explaining why he had been unable to attend to some matters which had been entrusted to him by Apollinarius. He closes the letter by stating that he will write to him immediately after going to Antinooupolis, in this way showing that he will not neglect anything a second time. Note that there is still an ambiguity in this example: Youtie & Winter render  $\pi\tilde{\omega}\varsigma$  with ‘how’, meaning that Sempronius will write in his letter how he will approach the matters at hand. Such an instrumental interpretation is not necessary, however: by simply writing the letter, Sempronius may be showing that he does not intend to neglect matters.

When it comes to the social contexts in which  $\pi\tilde{\omega}\varsigma$  with the indicative is used, it is quite remarkable that the pattern cannot be found in formal contexts (that is, petitions and official letters), not even after the verb  $\theta\alpha\upsilon\mu\acute{\alpha}\zeta\omega$ . Thus, it seems that  $\pi\tilde{\omega}\varsigma$  with the indicative was restricted to the lower registers.

### 3.1.6 $\tilde{\iota}\nu\alpha$ with the subjunctive/imperative/indicative

$\tilde{\iota}\nu\alpha$  with the subjunctive is one of the more frequently attested complementation patterns in our corpus, with 35 examples dating from the first to the sixth century AD. The use of this pattern in the Post-classical period is (relatively) innovative. In Classical Greek,  $\tilde{\iota}\nu\alpha$  could indicate both location and purpose. In authors such as Pindar, Aeschylus, Sophocles and Euripides, locative  $\tilde{\iota}\nu\alpha$  is by far the most frequent.<sup>78</sup> Purposive  $\tilde{\iota}\nu\alpha$  is avoided in these writers ( $\delta\pi\omega\varsigma$  being the preferred expression, see further §3.1.7), but can be found much more frequently in Aristophanes, which indicates that it was viewed as colloquial.<sup>79</sup>

Purposive  $\tilde{\iota}\nu\alpha$  eventually led to the use of  $\tilde{\iota}\nu\alpha$  as a complementiser (perhaps under the influence of  $\delta\pi\omega\varsigma$ , see further §3.1.7), through a reanalysis whereby the purpose clause came to be understood as the complement of the matrix verb: Hom., *Od.* 3.327  $\lambda\acute{\iota}\sigma\sigma\epsilon\sigma\theta\alpha\iota$   $\delta\acute{\epsilon}$   $\mu\iota\upsilon\varsigma$   $\alpha\upsilon\tau\acute{o}\varsigma$   $\tilde{\iota}\nu\alpha$   $\nu\eta\mu\epsilon\rho\tau\acute{\epsilon}\varsigma$   $\acute{\epsilon}\nu\acute{\iota}\sigma\pi\eta$ , for example, can be interpreted either as “pray to him so that he says the truth” or “pray to him that he says the truth”.<sup>80</sup> By Post-classical times, De Boel (1999, 271-6) notes,  $\tilde{\iota}\nu\alpha$  with the subjunctive was used as a complementation pattern after various types of non-factive verbs. In our corpus, it can be found after verbs of ordering (e.g.  $\acute{\alpha}\xi\acute{\iota}\omicron\omega$  “I ask”,  $\acute{\epsilon}\nu\tau\acute{\epsilon}\lambda\lambda\omega$  “I command”,  $\kappa\epsilon\lambda\epsilon\upsilon\omega$  “I order”,

<sup>78</sup> See Nicholas (1998, 197).

<sup>79</sup> Cf. also Burguière (1960, 153, 160).

<sup>80</sup> I borrow this example from Burguière (1960, 162). See also De Boel (1999, 268).

παρακαλέω “I demand”),<sup>81</sup> verbs of communication (e.g. γράφω “I write”, κράζω “I shout”, λέγω “I say”, μμνήσκομαι “I remind”, ὀμνυμι “I swear”, πέμπω “I send”),<sup>82</sup> psychological verbs (e.g. αγωνιάω “I am in distress”, εὔχομαι “I pray”, καταξιώω “I consider it proper”),<sup>83</sup> and verbs of effort (e.g. ποιέω “I bring about”, σπουδάζω “I am eager to”).<sup>84</sup>

As Burguière (1960, 152) writes, ἵνα with the subjunctive is typically used ‘après des verbes “ouverts” sur l’avenir’, that is, for (non-factive) complements with determined time reference,<sup>85</sup> as Burguière (1960, 152-3) notes, this made the complementation pattern a direct competitor of the accusative with infinitive.<sup>86</sup> Examples with a verb of communication such as γράφω “I write”, κράζω “I shout”, and μμνήσκομαι “I remind” may seem like an exception to this tendency, but with ἵνα they are construed as verbs of ordering.<sup>87</sup> Consider the following example:

(8) εὐθέως οὖν μνησθήσῃ αὐτῷ ἵνα ἐνκατέλθῃ (P.Mil.Vogl.6.279 (I AD), ll. 9-11)

“So immediately remind him that he has to return.”

In this letter, Patron makes some requests from Laches the φροντιστής (estate manager). Among others, he asks that Laches would remind [Isi?]dorus that he has to return. While μμνήσκομαι in itself is not a verb of ordering, the use of ἵνα with the subjunctive imposes such a construal.

Eventually ἵνα became used as a marker of purpose in all types of texts (its locative function disappearing altogether, cf. Nicholas 1998, 197),<sup>88</sup> and this must also have stimulated its use as a complementiser. In terms of social context, however, the extension of ἵνα with the subjunctive still has to take place: the pattern can be found only three times in a formal context in our corpus, all of which date to a later time (the fourth

<sup>81</sup> See e.g. P.Ryl.2.229 (38 AD), ll. 17-9; P.Gron.16 (III AD), ll. 14-20.

<sup>82</sup> See e.g. P.Fay.113 (100 AD), ll. 6-7; P.Fay.119 (103 AD), ll. 33-4; P.Mich.8.488 (II AD), ll. 6-8; P.Mil.Vogl.2.50 (II AD), ll. 10-1; P.Flor.2.127 (266 AD), ll. 14-5; P.Flor.2.177 (257 AD), ll. 2-5; P.Amh.2.145 (IV AD), ll. 13-4; P.Neph.4 (IV AD), ll. 25-8; P.Cair.Masp.2.67200 (VI AD), l. 3.

<sup>83</sup> See e.g. P.Giss.apoll.13 (113-20 AD), l. 5; P.Abinn.19 (342-51 AD), l. 29; P.Abinn.36 (342-51 AD), l. 18.

<sup>84</sup> See e.g. P.Abinn.36 (342-51 AD), l. 12; P.Cair.Masp.3.67290 (542 AD), ll. 7-8.

<sup>85</sup> Noonan (1985, 92) defines time reference dependency as follows: ‘a complement has dependent or determined time reference ... if its time reference is a necessary consequence of the meaning of the CTP [complement taking predicate]’.

<sup>86</sup> For the semantic contrast between the two, see Burguière (1960, 152): ‘l’un et l’autre servent à exprimer les prolongements dynamiques d’un énoncé, mais l’infinitif le fait en quelque sorte sur le plan logique, tandis que le subjonctif ... y mêle en principe une activité subjective’.

<sup>87</sup> See Horn (1926, 109-11). Compare De Boel (1999, 266-7).

<sup>88</sup> According to Burguière (1960, 151), the examples become particularly frequent starting from the second century BC.

and sixth century).<sup>89</sup> As Burguière (1960, 156) writes, ἵνα with the subjunctive ‘n’a pu pénétrer le langage écrit que lorsque les circonstances culturelles ont permis, dans certains cas ou moins, l’accession des usages parlés au sein de l’écrit’. Eventually, however, the construction became a serious competitor of the infinitival construction: in its reduced form νά<sup>90</sup> it is still commonly used for complementation. Moreover, the construction θέλω ἵνα crystallised as the Modern Greek future particle θά (a combination of the reduced forms θέ and νά).<sup>91</sup>

In our corpus, there are also some isolated examples of ἵνα with the indicative and imperative. The indicative can be found in P.Abinn.6 (342-51 AD), l. 8 and P.Harr.1.154 (V/VI AD), l. 7. In the second case, it is unclear whether we are truly dealing with an indicative form: ἔρχετε might be a misspelling for ἔρχηται. The same cannot be said for ἀνταποδώσει in P.Abinn.6: here, the future might have been used under the influence of ὅπως, which in Classical times could be used either with the future indicative or the subjunctive (the future indicative being a high-register option in Post-classical times, see further §3.1.7). However, given that the text contains various other low-register features (e.g. τὴν for ἣν in l. 9, κῖται for κεῖται in l. 11, πάντες for πάντας in l. 23, etc.), the use of the future indicative seems to be primarily motivated by the futurate orientation of the complement clause. The example with the imperative is printed under (9):

(9) ἀξιῶ τὸν Θεὸν ἵνα ἢ ἀπόλυσόν μου ἢ παραδοτε μοι το χρυσ(οῦ) νομ(ισμάτια) η (P.Herm.7 (IV AD), ll. 11-2)

“I ask God that you either release me or hand over to me the 8 gold solidi.” (tr. Rees)

Psois son of Cyllus is in prison and has given Apa Iohannes eight golden *solidi*, to be handed over to the ex-tribune Psois, for his release. However, he has still not been released and therefore asks Apa Iohannes either to get him free, or to give him back the eight *solidi*. The contents of Psois’ request is expressed by ἀξιῶ ἵνα, which is followed by the imperative (rather than the usual subjunctive), the mood that would be common in direct speech. This phenomenon occurs much more often with ὅτι,<sup>92</sup> which must have exerted an analogical influence. Ljungvik (1932, 49) suggests an alternative explanation:

<sup>89</sup> See P.Abinn.34 (342-51 AD), ll. 15-6; P.Cair.Masp.2.67200 (VI AD), l. 3; P.Cair.Masp.3.67290 (542 AD), ll. 7-8.

<sup>90</sup> According to Jannaris (1897, 418), this reduced form can be found as early as the ‘transitional period’ (that is, 300-600 AD), but no instances are attested in our corpus.

<sup>91</sup> For further details, see e.g. Joseph & Pappas (2002); Horrocks (2010, 228-9).

<sup>92</sup> The so-called ‘recitative’ ὅτι, on which see e.g. Levinsohn (1999).



he notes that the subjunctive could also be used with an imperatival (jussive) sense by this time, which might have stimulated their interchangeability.

### 3.1.7 ὅπως with the subjunctive/optative/indicative

As mentioned in §3.1.6, in the Classical period ὅπως was more frequent as a purpose marker than ἵνα. Already at this time, ὅπως was established as a complementiser after various verb classes,<sup>93</sup> including verbs of effort (e.g. ποιέω “I bring about”, πράσσω “I bring about”, παρασκευάζω “I cause”), and verbs of ordering (e.g. δέομαι “I ask”, κελεύω “I order”, προστάσσω “I command”). In these contexts, ὅπως could be followed by the subjunctive and, less often, the future indicative. It is likely that the use of ὅπως as a complementiser came about through the same process of reanalysis suggested for ἵνα with the subjunctive.<sup>94</sup>

As was noted in §3.1.6, the Post-classical period witnessed the rise of ἵνα as a purpose marker (and eventually complementiser), and with it the decline of ὅπως in all of its uses. ὅπως with the subjunctive did not entirely disappear, however: in higher social contexts, it was reintroduced, serving ‘as a literary variety frequently resorted to by individual writers, particularly atticists’ (Jannaris 1897, 417). Jannaris (1897, 416-7) situates this revival during the latter part of the ‘Greco-Roman period’ (that is, 150 BC – 300 AD). Kavčić (2005, 127) reports that it still occurs as ‘a sign of higher levels of style’ in Byzantine writings such as the *Vita Theodori Syceotae*.

In our corpus, there are surprisingly many examples of ὅπως with the subjunctive: it is still more frequently attested than ἵνα with the subjunctive, with 45 examples (though note that there are no examples after the fourth century AD). Semantically, ὅπως occurs in similar contexts as ἵνα: after verbs of communication (γράφω “I write”, δηλόω “I show”, ὑπομνήσκω “I mention”),<sup>95</sup> verbs of effort (μέλει μοι “it concerns me (that)”, πράσσω “I bring about”, σπουδάζω “I am eager to”, φροντίζω “I see to it”),<sup>96</sup> verbs of ordering (δέομαι “I ask”, παραγγέλλω “I order”),<sup>97</sup> and psychological verbs (εὐχόμαι “I pray”).<sup>98</sup> As we have seen with ἵνα, the complements to these verbs are non-factive and

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<sup>93</sup> See Burguière (1960, 156-7) for an overview.

<sup>94</sup> See De Boel (1999, 268) for an example.

<sup>95</sup> See e.g. P.Ryl.2.139 (34 AD), ll. 18-20; P.Mich.8.485 (II AD), l. 5; P.Neph.1 (IV AD), ll. 7-9.

<sup>96</sup> See e.g. P.Sarap.80 (II AD), ll. 8-9; P.Sarap.93 (II AD), ll. 3-5; P.Mil.Vogl.4.256 (II/III AD), ll. 8-9; CPR.8.31 (IV AD), ll. 12-3.

<sup>97</sup> See e.g. P.Mich.10.582 (49-50 AD), 2, ll. 13-4; P.Tebt.2.303 (177 AD), ll. 14-5; P.Giss.Apoll.26 (II AD), ll. 6-7.

<sup>98</sup> See e.g. P.Abinn.22 (342-51 AD), ll. 3-5.

oriented towards the future; with verbs of communication the use of ὅπως imposes a volitive construal.

What is quite noticeable, however, is that compared to ἵνα there is less lexical variety in the matrix verbs, despite the fact that there are more examples. Closer inspection shows that most of the examples occur in petitions: towards the end of the petition, παρακαλῶ ὅπως “I demand that” and δέομαι ὅπως “I ask that” are used to introduce the request of the petitioners; this accounts for nearly half of the examples. The other examples too tend to occur in higher social contexts such as petitions and official letters.<sup>99</sup>

There are a limited number of examples with the optative and the indicative. The optative appears only once, in a private letter from Horion to Nephros, head of the Hathor monastery (P.Neph.10 (IV AD), ll. 3-6): since the verb introducing this optative is a present indicative (εὔχομαι), we cannot be dealing with an oblique optative. Rather, the wishing-context seems to have triggered the use of the optative, which remained in use the longest for expressing a wish (typically in main clauses).<sup>100</sup> The indicative appears in two examples; in SB.20.15032 (39-41 AD), it seems doubtful that we are dealing with a future indicative (ποιήσεται): in principle, we could be dealing with an instance of the Classical usage of ὅπως with the future indicative, but there are parallel examples from the same archive where we find the form ποιήσῃται (P.Ryl.2.139 (34 AD), ll. 18-20 and P.Ryl.2.148 (40 AD) ll. 24-7; note, however, that these petitions stem from a different person).<sup>101</sup> The second example with the indicative is more interesting:

(10) θαυμάζω ὅπως οὕτω γράφεις μοι μὴ δηλώσας διὰ σῶν γραμμάτων μήται τὴν τιμὴν εἶνα πρὸ τῆς ἀνάγκης καὶ οἱ ἄγροικοι τὸ ἔτυμον ἑαυτῶν ποιήσ[υ]σιν (P.Oxy.48.3420 (IV AD), ll. 4-8)

“I am astonished how you write to me this way not even stating the price in your letter so that the country people can prepare themselves before absolutely necessary.” [tr. Chambers *et al.*]

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<sup>99</sup> Compare Burguière (1960, 159): ‘l’emploi est bien représenté, après les types de verbes passés en revue ci-dessus, dans les papyrus d’une certaine tenue littéraire’.

<sup>100</sup> Cf. Horrocks (2007, 625): ‘the optative disappeared quite quickly from non-belletristic writing except in the core function of expressing a wish’.

<sup>101</sup> Burguière (1960, 154) notes that the future quickly disappeared after ὅπως: ‘le subjonctif élimine peu à peu le futur, avec lequel au surplus des accidents phonétiques le confondent assez vite, l’équilibre du système ... se bâtit autour du subjonctif annoncé par ὅπως.’

Ammonius writes to a certain Sarapammon, expressing his astonishment about the latter's behaviour. The verb of astonishment, θαυμάζω, is followed by ὅπως with the indicative. The use of ὅπως after θαυμάζω and that of the indicative after ὅπως are both uncommon. I believe it can be attributed to the influence of πῶς, which, as we saw in §3.1.5 came to be more frequently attested in the Post-classical period: πῶς is typically followed by the indicative, and occurs after psychological verbs such as θαυμάζω.

### 3.1.8 μή with the subjunctive/optative

In Ancient Greek, μή not only serves as a negation, together with οὐκ, but also as a complementiser, after verbs of fearing. Smyth (1984[1920], 500) attributes the latter use to a reanalysis which occurred at an early stage:<sup>102</sup> 'the construction of μή after verbs of fearing has been developed from an earlier coordinate construction in which μή was not a conjunction (that, lest) but a prohibitive particle'. Thus, an example such as δέιδω μή τι πάθῃσιν (Hom., *Il.* 11.470) could be derived from "I fear – may he not suffer something".<sup>103</sup> In order to negate clauses such as this, οὐ is inserted after μή.

The complementation pattern of μή with the subjunctive occurs rather infrequently in our corpus, and it is only attested until the fourth century AD. It appears, as in Classical times, after non-factive psychological verbs such as ἀγωνιάω "I am in distress", εὐλαβῶς ἔχω "I fear", and φοβέομαι "I fear". An example is given under (11):

- (11) πῶς δ' ἔχεις; ἐγὼ δὲ ἀγωνιῶ [καθ' ἡμέραν, μή πάλιν νωθ[ρ]ὸς ᾖς  
(P.Brem.61 (II AD), ll. 14-5)

"But how are you? I am distressed that you are ill again." [tr. Bagnall & Cribiore]

In this private letter, a woman addresses the στρατηγός (governor) Apollonius about a theft. The woman must have been a close acquaintance of Apollonius, because she expresses concern about his health. The verb ἀγωνιῶ "I am distressed" is followed by μή with the subjunctive.

A few more instances of μή with the subjunctive following a psychological verb can be found in P.Sakaon.38 (312 AD, ll. 14 & 25-6), a petition to the prefect of Egypt. In another petition, P.Tebt.2.335 (165 AD?), μή with the optative is used after the participle

<sup>102</sup> Earlier than the oldest texts, one of the reviewers notes.

<sup>103</sup> I borrow this example from Smyth (1984[1920], 500).

φοβούμενος “fearing”: this is another instance of the ‘oblique’ optative which we already encountered with ὥς with the indicative,<sup>104</sup> and which had become very rare.

μή with the subjunctive also appears after non-factive verbs verbs of effort such as βλέπω “I see to it”, ὁράω “I see to it”, and φυλάττομαι “I take care”,<sup>105</sup> but here the analysis is more complex. Consider the following example:

(12) ἀπέστιλα πρὸς σαὶ Γερόντιον στρατιώτην καὶ Δημήτριον σύμμαχον στρατηγοῦ ὅπως ποιήσης τοὺς ὑπευθύνους πληρῶσαι αὐτοὺς κηροῦ λί(τρης) ἰ τοῦ κηρῶνος καιηκονος Ἀλεξανδρίας. ἀλλ’ ὅρα μὴ κατὰσχης αὐτοὺς ὥραν μίαν (P.Oxy.48.3412 (360 AD), ll. 3-8)

“I have sent you Gerontius, a soldier, and Demetrius, a guard of the *strategus*, so that you can make the responsible parties pay them 10 pounds of wax per bee-hive and (?) ... of Alexandria. But see that you don't hold them up a single hour.” [tr. Chambers]

In this business letter, Horion informs Dorotheus, the assistant tax-collector, that he has sent a soldier and a guard, so as to make certain persons pay ten pounds of wax per bee-hive. At the same time, he exhorts Dorotheus that he should *not* waste their time. According to Classical norms,<sup>106</sup> ὅρα μὴ κατὰσχης αὐτοὺς ὥραν μίαν should mean “see that you hold them up a single hour”, but the context makes it clear that the complement clause should be interpreted as being negated. This leaves us with two options: (a) we are really dealing with asyndetic parataxis, and μή serves as a negation, rather than a complementiser; (b) following verbs of effort of this type, μή has been reanalysed as a negated complementiser. Option (a) seems preferable, but it is quite noticeable that verbs such as βλέπω, ὁράω, and φυλάττομαι are never used asyndetically without μή.

### 3.1.9 μήπως with the indicative

One final complementation pattern is that of μήπως with the indicative, which occurs very infrequently, with only one example in our corpus. What makes this example particularly interesting is that it follows the above-discussed ὁράω “I see to it” and is negated:

(13) ὅρα δὲ μήπως οὐκ ἔστιν χρεία Λεοντᾶν μαθῖν [π]ερὶ τούτου (P.Flor.2.194 (259 AD), ll. 14-7)

“But consider whether perhaps there is no need that Leontas knows about this.”

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<sup>104</sup> See §3.1.2.

<sup>105</sup> For some examples, see e.g. P.Flor.2.150 (267 AD), ll. 8 & 13-4; P.Flor.2.194 (259 AD), l. 31; P.Ammon.2.37 (348 AD), l. 14; P.Oxy.48.3396 (IV AD), l. 12.

<sup>106</sup> Smyth (1984[1920], 507), however, mentions some Classical examples of the use of simple μή in a negative complement clause after ‘verbs of caution’.

Eirenaeus complains to his colleague Heroninus that the latter has not informed him yet about a certain Leontas, who he wants to speak. Leontas must have done something wrong, because Eirenaeus has already asked the authorities (δεκάπρωτοι) to come. Rather perplexingly, in this example we do find the double negation μή ού which was also expected with the examples discussed under §3.1.8. Why it is used here is unclear: perhaps because μήπως was not considered sufficient as a negation. Also note that μήπως is followed by the indicative, rather than the subjunctive. In the Classical period, the indicative could be used for ‘fear that something actually is or was’ (Smyth 1984[1920], 502).<sup>107</sup> In our case, this means that the complement clause refers to Eirenaeus’ having written a letter and alerted the authorities, that is, facts that are already at hand.

### 3.2 With infinitival complement

Infinitival complement structures are typically not introduced by a complementiser, since the non-finite mood already indicates subordination. However, as we will see in the following sections, in the Post-classical period we often find patterns where the infinitive is nevertheless combined with a complementiser. This can be thought of as a compromise between finite complementation, where hypotaxis is overtly marked, and non-finite infinitival complementation, caused by the infrequent usage of the infinitive, as Burguière (1960, 192) notes:

‘Il faut répéter que, si des “fautes” ... se lisent dans certains documents, c’est non pas parce que leur rédacteur employait couramment et avec bonne conscience un type abâtardi de proposition infinitive, mais bien parce que, poussé par l’honorable intention d’employer un type pur qui n’était plus vivant, il achoppait dans la réalisation.’

In the literature, this sort of construction is known as a ‘syntactic blend’, a notion that is defined by Fay (1982, 165) as follows: ‘a blend occurs when a speaker has in mind simultaneously two ways of expressing the same message. Instead of one or the other expression being used, they are combined in some way to give a new, synthesized utterance that does not match exactly either of the intended expressions’. Such blends are also known in other areas of Post-classical grammar: prepositional phrases such as

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<sup>107</sup> Compare Blass & Debrunner (1979, 300) with regard to the New Testament.

πρὸς τό “for the”, μετὰ τό “after the”, πρὸ τοῦ “before the”, for example, which are typically followed by an infinitive, can also be found with the subjunctive.<sup>108</sup>

### 3.2.1 ὥς with the infinitive<sup>109</sup>

In our corpus, five examples can be found of ὥς with the infinitive;<sup>110</sup> all of these are of a later date (from the third to the sixth century). The complementation pattern can be found after various types of verbs, such as verbs of perception (προοράω “I foresee”),<sup>111</sup> verbs of communication (έντυγχάνω “I petition”), psychological verbs (πείθομαι “I trust”),<sup>112</sup> verbs of mental state (γινώσκω “I know”),<sup>113</sup> and verbs of ordering (διατάσσω “I order”).<sup>114</sup> The complements to these verbs can be both factive and non-factive, as we have also seen with ὥς with the indicative. By way of illustration, consider (14):

(14) ἐπιδὴ οἱ ἁ κώμης Κερανίδος ἐν[έ]τυχάν μοι ὥς ἀνθρώπον αὐτῶν ὄντων εἶναι ὑπὸ τῷ σῶ πάγῳ, ἔσπευσα οὖν δηλῶσέ σοι, ἄδελφαι, ὅπως ἐπαναγκάσῃς τοὺς κωμήτας παραδοῦναι τοῖς <τοῦς> [ὁ]μοκωμήτας αὐτῶν (P.Cair.Isid.126 (308/9 AD), ll. 8-12)

“Since the villagers of Karanis have complained to me that some of their men are in your district, I have therefore hastened to inform you, brother, so that you may compel your villagers to surrender to them their fellow-villagers.” [tr. Boak & Youtie]

P.Cair.Isid.126 is an official letter from Heracleides, *praepositus pagi*, to another *praepositus pagi*. Heracleides reminds his colleague of an imperial constitution which stipulates that all strangers found to be residing in the villages should be handed over to the fisc. Heracleides has received a complaint from the villagers of Karanis that some of their people are not in their proper district. In Greek, ἐν[έ]τυχάν μοι is followed by ὥς with the infinitive: ὥς ἀνθρώπον αὐτῶν ὄντων εἶναι.

ὥς with the infinitive appears here in a formal context, that is, one official writing a formal letter to another official, as do most of the other examples. It is worth noting, however, that Heracleides’ letter contains various other linguistic peculiarities, such as ἐν[έ]τυχάν for ἐνέτυχον (l. 9), ἀνθρώπον for ἀνθρώπων (l. 9), τῷ σῶ for τοῦ σοῦ (l. 14),

<sup>108</sup> Cf. Burguière (1960, 182).

<sup>109</sup> ὅτι with the infinitive is also mentioned as a complementation pattern by scholars such as Burguière (1960, 179), but no examples can be found in our corpus.

<sup>110</sup> For the use of ὥς with the infinitive in Classical Greek, see e.g. Kühner & Gerth (1976[1904], 357-8) (note, however, that all of these examples occur in so-called ‘mixed constructions’).

<sup>111</sup> See P.Cair.Isid.62 (296 AD), l. 22.

<sup>112</sup> See P.Herm.8 (IV AD), ll. 14-7.

<sup>113</sup> See P.Oxy.1.130 (548/9 AD?), ll. 9-10.

<sup>114</sup> See P.Lond.5.1674 (ca. 570 AD), ll. 44-5.

ἀπόστιλον for ἀπόστειλον (l. 14), etc.; this indicates that Heracleides certainly did not compose his letter in the highest linguistic register.

### 3.2.2 ἵνα with the infinitive

In our corpus, there is only a single instance of ἵνα with the infinitive,<sup>115</sup> following the psychological verb εὐχομαι “I pray”:

(15) εὐχώμετά σε ἵνα καλῶς ἔχῃν (P.Merton.2.63 (58 AD), ll. 18-9)

“We pray that all is well with you.”

In this letter to her father, Pompeius Niger, Herennia formulates a health-wish near the end of the document. εὐχώμετά is followed by the accusative pronoun σε, which seems to announce an accusative with infinitive. Surprisingly, however, σε is followed by ἵνα with the infinitive.

The use of the infinitive after ἵνα (and ὅπως, see below) may, as Ljungvik (1932, 46) has suggested, have received an additional stimulus from the general confusion that existed between ἵνα/ὅπως “in order that” and ὥστε “so that”, whereby the former was used as a consecutive conjunction and the latter as a purposive conjunction. As we will see below, already in Classical Greek ὥστε could be followed by the infinitive, both in adverbial and completive clauses.

### 3.2.3 ὅπως with the infinitive

There are more instances of ὅπως with the infinitive in our corpus than there are of ἵνα with the infinitive: seven cases, ranging from the first to the fourth century AD. This follows the trend already observed under §3.1.7, whereby ὅπως continues to be used relatively frequently in the papyri. The examples can be found after verbs of communication (γράφω “I write”), verbs of ordering (ἔχω συστατικάς “I have orders”, κελεύω “I order”),<sup>116</sup> and psychological verbs (εὐχομαι “I pray”).<sup>117</sup> One of these is the following:

(16) διὸ ἀξιῶν γράψαι τῷ τῆς κώμης ἀρχεφόδῳ ὅπως τὴν ἀναζήτησιν ποιήσῃται καὶ τοὺς τὸ τοιοῦτο διαπράξαντες ἀχθῆναι ἐπὶ σὲ πρὸς τὴν ἐσομένην ἐπέξοδον (P.Ryl.2.139 (34 AD), ll. 17-24)

<sup>115</sup> For further examples of this complementation pattern in Post-classical Greek, see Ljungvik (1932, 46-7); Burguière (1960, 180).

<sup>116</sup> See P.Tebt.2.315 (II AD), ll. 29-31.

<sup>117</sup> See P.Abinn.11 (342-51 AD), ll. 3-5; SB.22.15359 (IV AD), ll. 4-5.

“Wherefore I ask you to write to the *archepodus* of the village that he may make an inquiry and that the authors of the outrage may be brought before you for the ensuing punishment.” [tr. Johnson *et al.*]

In this petition, Horion son of Souchion informs the chief of police that six artabs of wheat have been stolen, and that he suspects that the crime has been done by the inhabitants of the so-called Winepress. He therefore asks the chief of police to write to the ἀρχέφοδος (chief of police) of the village, so that the perpetrators can be punished. Note how ἀξιῶι γράψαι ὅπως is followed first, correctly, by ποιήσεται and later by the infinitive (with accusative) ἀχθῆναι. We are dealing here with the type of ‘mixed construction’ which we already encountered in §3.1.1. Scholars frequently report the use of atypical complementation patterns in this type of environment, already in the Classical period.<sup>118</sup> Also observe how the use of ὅπως turns γράφω “I write” into a verb of ordering: ὅπως with the infinitive only appears in non-factive contexts and therefore imposes a certain construal with verbs that are typically used in factive contexts.

Similarly to ὅπως with the subjunctive, the large majority of the examples occur in a formal context. The construction appears particularly frequently in petitions from one, fourth-century archive, the archive of the wealthy landowner Aurelius Isidorus.<sup>119</sup>

### 3.2.4 ὥστε with the infinitive

ὥστε with the infinitive is attested already in the Classical period as a complementation pattern.<sup>120</sup> This use was rather uncommon, however: much more frequent was its use for adverbial consecutive clauses. As Burguière (1960) notes, originally the infinitive could have a final/consecutive value even when it was not accompanied by ὥστε, as in Hom., *Il.* 21.601 ἐπέσσυτο ποσσὶ διώκειν “he [Achilles] rushed upon him swiftly to pursue him”. However, on occasion it was strengthened by ὥστε, as in Hom., *Il.* 1.42 εἰ δὲ σοὶ αὐτῷ θυμὸς ἐπέσσυται, ὥστε νέεσθαι “but if your own mind is eagerly set upon returning”, and in time this combination became a fixed syntactic pattern.<sup>121</sup> Later on, ὥστε was extended to the indicative, forming a pragmatic opposition with the infinitive.<sup>122</sup> ὥστε with the infinitive also came to be used in contexts where we would

<sup>118</sup> See e.g. Jannaris (1897, 570); Moulton (1908:213); Kühner & Gerth (1976[1904], 357-8, 377).

<sup>119</sup> See P.Cair.Isid.76dupl (318 AD), l. 18; P.Col.7.169 (318 AD), ll. 14-5; P.Col.7.170 (318 AD), l. 20.

<sup>120</sup> See esp. García Ramon (1999).

<sup>121</sup> Cf. Kühner & Gerth (1976[1904], 500); Burguière (1960, 84). For a different hypothesis regarding the origins of completive ὥστε with the infinitive, see García Ramón (1999, 181-3).

<sup>122</sup> See e.g. Smyth (1984[1920], 507). In Post-classical Greek, ὥστε was mostly accompanied by the infinitive (in the New Testament, for example, there are almost no instances with the indicative, see Burguière 1960, 84; Blass & Debrunner 1979, 317).



expect the bare infinitive (as in completive contexts), e.g. with verbs of effort such as διαπράττω “I bring about”, ποιέω “I bring about”, and σπουδάζω “I am eager to”.<sup>123</sup>

In our corpus, there are only four examples of completive ὥστε with the infinitive; three date to the fourth century, one to the sixth century. In these examples, the complementation pattern is used after verbs of ordering (παραγγέλλω “I order”, προστάσσω “I order”)<sup>124</sup> and verbs of communication (δηλόω “I make clear”, προσκαλέω “I call on”).<sup>125</sup> In illustration, consider (17):

(17) καὶ δει’ ἐτέρων γραμμάτων ἐδήλωσα τῇ εὐγενίᾳ σου ὥστε ὅσα νίτρα καταλαμβάνεις εἴτε διὰ Μαρεωτῶν εἴτε διὰ Αἰγυπτείων κατερχόμενα ἐν τῇ Ἀρσενοειτῶν ἢ καὶ ἐν ἐτέροις τόποις ταῦτα ἐπέχειν (P.Abinn.9 (342-51 AD), ll. 3-6)

“I have already in another letter notified your nobility that you are to impound whatever natron you find being imported into Arsinoe or into other places whether by Mareotes or by Egyptians.” [tr. Bell *et al.*]

In this letter, Demetrius, an officer of the natron monopoly, kindly requests the military commander Abinnaeus to seize all natron found arriving in either Arsinoe or elsewhere. The request is introduced by ἐδήλωσα ὥστε, followed by an infinitive. As this example shows, ὥστε with the infinitive is typically used in non-factive contexts:<sup>126</sup> when it is found after a verb of communication such as δηλόω, it imposes a volitive construal.

Three out of four examples of ὥστε with the infinitive occur in a formal context; P.Lond.6.1914 is a private letter from a priest to Apa Paieous, head of the Hathor-monastery. This renders ὥστε with the infinitive very similar in use to ὅπως with the subjunctive and infinitive.<sup>127</sup>

### 3.2.5 τοῦ with the infinitive

Similarly to what we have seen for ὥστε with the infinitive, τοῦ could occasionally accompany the infinitive, the genitive expressing ‘diverses relations dont certaines, sur le plan de la signification du moins, étaient très proches de l’explication par l’infinitif’ (Burguière 1960, 130). In time, τοῦ came to be used with a purposive sense,<sup>128</sup> which made it similar in meaning to ἵνα with the subjunctive. In Post-classical times, the

<sup>123</sup> See García Ramón (1999, 176-8) for a comprehensive list of verb classes, with examples.

<sup>124</sup> See P.Cair.Isid.69 (310 AD), ll. 4-5; P.Lond.6.1914 (335 AD?), l. 23.

<sup>125</sup> See BGU.3.836 (530-8 AD), ll. 9-10.

<sup>126</sup> Compare García Ramón (1999) on the Classical period.

<sup>127</sup> Cf. §3.1.7 and §3.2.3.

<sup>128</sup> Burguière (1960, 134).

articular genitive in general became more frequent,<sup>129</sup> and the competition of τοῦ with the infinitive and ἵνα with the subjunctive led to the use of the former even in completive contexts, as a sort of hyperpurism.<sup>130</sup> In the Septuagint and the New Testament, for example, τοῦ with the infinitive is very frequently used:<sup>131</sup> here, one finds expressions of the type εἶπα τοῦ φυλάξασθαι τὸν νόμον σου (Ps. 118.57) “I said that I would keep your law”.<sup>132</sup>

In our corpus, examples of τοῦ with the infinitive are rare.<sup>133</sup> Only three examples can be found, all of which after verbs of effort (μὴ ἀμελέω “I do not neglect”, διακομίζω πίστιν “I give assurance”, πειράομαι “I try”).<sup>134</sup> An example is given in (18):

(18) οὐδὲν δὲ ἤττον ἀλλὰ καὶ [ν]ῦν σκεπάσαντες Παήσι(ον) ἥς ἡ χώρα ἐκάλεσεν εἰς ἀπ[α]ίτησιν ἀχύρου πάλιν ἐμὲ πιρῶνται τοῦ βαλῖν ἀντὶ τοῦ Παησίου ἴσως ἀργυρολογήσαντες ἐκῖνον σὺν τῇ ἐμῇ ἀνατροπῇ (P.Cair.Isid.68 (309-10 AD?), ll. 18-22)

“Nonetheless even now, having protected Paësius from the service as collector of chaff to which the village-district called him, they are again trying to put me into it in place of Paësius, probably having mulcted him at the same time that they seek my ruin.” [tr. Boak & Youtie]

In this petition, Aurelius Isidorus informs the *praepositus pagi* that he has been suffering violence and injustice at the hands of some men. These men protect a certain Paësius from a liturgy, trying to put Aurelius Isidorus in his place. In Greek, πιρῶνται is followed by τοῦ with the infinitive. Note the prolepsis of ἐμέ, which may have been fronted for reasons of (contrastive) focus.

As for the pragmatic value of τοῦ with the infinitive, opinions are varied:<sup>135</sup> Blass and Debrunner (1979, 330) note that ‘τοῦ mit Inf. gehört einer höheren Schicht der Koine an’, a view which is shared by Burguière (1960, 139). Kavčić (2005, 154), however, finds that ‘concerning the stylistic value of the τοῦ infinitive, it could hardly be ascribed to higher levels of style; in the 5<sup>th</sup> century as well it is found only in the less literary

<sup>129</sup> Cf. Kavčić (2005, 151), who notes that ‘the articular infinitive is one of the most remarkable features of the syntax of the Post-classical infinitive’.

<sup>130</sup> Burguière (1960, 139).

<sup>131</sup> For further examples, see Aalto (1953, 88).

<sup>132</sup> For further discussion of τοῦ with the infinitive in the New Testament, see Blass & Debrunner (1979:330-2).

<sup>133</sup> Cf. Blass & Debrunner (1979, 331), who note that τοῦ with the infinitive occurs infrequently in the documentary papyri. For further examples from the papyri, see Mayser (1926, 321-2); Burguière (1960, 143).

<sup>134</sup> See SB.12.11148 (I AD), ll. 21-2; P.Sarap.89 (II AD), ll. 9-12.

<sup>135</sup> Due to its great frequency in the Septuagint and the New Testament, some scholars have suggested that τοῦ with the infinitive is a Semitism (see e.g. Burguière 1960, 139), but I will not go further into this matter here.

authors'.<sup>136</sup> Since the evidence is limited it is hard to make any conclusive statements: in (18) we find the complementation pattern in a formal context, but the two other examples occur in private letters.

### **3.3 With participial complement**

In this third and last part of §3, I analyse the use of participial complementation. During the Post-classical period, the participle was gradually in decline, due to the complexity of participial morphology.<sup>137</sup> This had an impact on all of the uses of the participle,<sup>138</sup> including, next to the completive use, the attributive and circumstantial use. When it comes to complementation, the participle was readily substituted by infinitival and especially finite complementation patterns, as Jannaris (1897, 498) notes, 'it was inevitable<sup>139</sup> that the participial construction should, in the course of P-N [Post-classical/Neo-hellenic] times, be confounded with, and merged into, that of the other two cognate classes'.<sup>140</sup> As we will see in the following sections, however, participial complementation has not entirely disappeared during the period under analysis in this article.

#### **3.3.1 The accusative with participle**

The use of the participle for complementation is limited in the languages of the world, even in those that make extensive use of participles;<sup>141</sup> the only context where it can be found with some frequency is in complements to immediate perception predicates, the object of the immediate perception predicate being the head and the participle a qualifying clause, as in English 'I saw him walking'. Ancient (Classical) Greek forms an exception to this general tendency:<sup>142</sup> participial constructions can be found as complements not only to verbs of perception, but also to verbs of mental state, psychological verbs, and even verbs of declaration.

Contrary to what the general observations in §3.3 might lead one to suspect, participial complementation is quite frequently attested in our corpus,<sup>143</sup> with nearly sixty examples, ranging from the first until the sixth century AD. In these examples, the

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<sup>136</sup> Cf. also Hult (1990, 210).

<sup>137</sup> For further details, see e.g. Horrocks (2010, 181-3). One of the reviewers notes that the loss of the infinitive, as the other non-finite form within the verbal system, may also have played a role.

<sup>138</sup> See e.g. Kavčić (2005, 193).

<sup>139</sup> Of course, as one of the reviewers notes, in historical linguistics no change really is 'inevitable': lots of things can happen, including staying the same.

<sup>140</sup> Compare Ljungvik (1926, 55).

<sup>141</sup> See Noonan (1985, 62).

<sup>142</sup> Cf. Cristofaro (1996, 24-5).

<sup>143</sup> Compare the observations made by Mandilaras (1973, 363-5).

present and perfect participle are particularly often used, the aorist somewhat less frequently; the future participle is almost unattested,<sup>144</sup> with only two examples<sup>145</sup> in our corpus, both from the second century AD.

The accusative with participle is attested most frequently after verbs of perception such as εὐρίσκω “I find”, ἐπιγινώσκω “I find out”, θεάομαι “I see”, θεωρέω “I see”, καταγινώσκω “I observe”, μανθάνω “I learn”, and ὁράω “I see”.<sup>146</sup> A distinction that is sometimes made in this regard is that between ‘direct’ and ‘indirect’ perception:<sup>147</sup> in Classical (Attic) Greek, participial complementation was typically used for direct perception, while infinitival complementation was used for indirect perception.<sup>148</sup> In our corpus, this distinction does not seem to be upheld consistently:<sup>149</sup> participial complementation is used in both contexts. For an example of direct perception, consider (19):<sup>150</sup>

(19) ὥς νῦν οὖν Δημήτ[ριο]ς γενόμενος παρ’ ἐμὲ ἐξ αὐτοψ[ία]ς ἔθε[ά]σατό με καλαίοντά πλείστοις δάκρυσιν (P.Mil.Vogl.1.24 (117 AD), ll. 18-21)

“So when Demetrius came to me with his own eyes he saw me weeping intensely.”

In this private letter, a certain person (whose name is unknown) addresses Paulus, saying that he would very much like to come to him, but that he cannot, as he is going through a hard time. On one occasion, Demetrius saw him weeping: ἔθε[ά]σατό με καλαίοντα.

This example illustrates an issue mentioned by James (2008, 236), namely that ‘participles are sometimes used with verbs of declaration and of perception in such a way that their function cannot be labelled as complementary with absolute certainty’. In our example (19), ἔθε[ά]σατό με καλαίοντα can be interpreted both as “he saw me weeping” (with καλαίοντα as a circumstantial participle) and “he saw that I was weeping” (with καλαίοντα as a complementary participle). The ambiguity inherent in

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<sup>144</sup> Compare James (2008, 59-61).

<sup>145</sup> See P.Mich.11.617 (145/6 AD), l. 12; P.Oxy.3.485 (178 AD), l. 33.

<sup>146</sup> See e.g. P.Mich.5.226 (37 AD), ll. 27-30; P.Wisc.1.33 (147 AD), l. 16; P.Mich.8.486 (II AD), l. 4; P.Mich.8.496 (II AD), ll. 22-3; P.Ammon.2.42 (348 AD), l. 8; P.Sakaon.48 (343 AD), l. 14.

<sup>147</sup> Kavčič (2005, ch. 2) makes yet another distinction, that is, between “visual”, ‘audible’, ‘physical’ and ‘mental’ perception.

<sup>148</sup> See e.g. Cristofaro (1996, 42); Nicholas (1998, 227); Kavčič (2005, 87); James (2008, 10-3). Several scholars mention, however, that there is not a strict dividing line between the two types.

<sup>149</sup> Compare James (2008, 50).

<sup>150</sup> For similar examples, see P.Cair.Isid.124 (298 AD), ll. 12-3; P.Sakaon.48 (343 AD), l. 14; P.Ammon.2.42 (348 AD), l. 8.

constructions of this type probably lies at the origins of participial complementation,<sup>151</sup> and, as James (2001/5, 166) claims, may explain the relatively long use of the accusative with participle in Post-classical and Byzantine Greek: ‘it seems that the survival of complementary participles was dependent on the participle being understood as an adjective rather than a complement structure and the most common or standard construction after a verb of perception being a direct object.’

It should be stressed that in the Post-classical period participial complementation can still be found after other verb classes,<sup>152</sup> that is, verbs of mental state (e.g. γινώσκω “I know”, οἶδα “I know”),<sup>153</sup> psychological verbs (νομίζω “I think”, πείθομαι “I am convinced”, προσδοκάω “I expect”)<sup>154</sup> and verbs of communication (e.g. ἀποδείκνυμι “I point out”, διδάσκω “I inform”, ἐπιδείκνυμι “I show”, λέγω “I say”, φημί “I say”).<sup>155</sup> After verbs of communication it appears infrequently, but not as infrequently as James (2008, 151, 164) claims.

In most cases, the participle is used for factive complements, as was also the case in the Classical period.<sup>156</sup> Less frequently, it appears in non-factive contexts. For an example, consider (20):

(20) ἐζήτησα τοὺς κωμάρχας ἐπὶ τῆς πόλεως καὶ οὐχ εὔρον αὐτοὺς εἰ μὴ μόνους τοὺς δύο τοὺς κατακλίστους καὶ γὰρ ἐνόμιζον αὐτ[ο]ὺς ἐκβάντας (P.Oxy.48.3409 (IV AD), ll. 6-10)

“I looked for the comarchs in the city and found only the two that were locked up and I supposed they had left” [tr. Chambers]

Chaeremon, perhaps a *praepositus pagi*, writes to Dorotheus in search of a group of comarchs. He looked for them in the city (that is, Oxyrhynchus), but did not find them; therefore, he supposed that they had left. This supposition is expressed through an accusative with participle: αὐτ[ο]ὺς ἐκβάντας.

When it comes to the social contexts in which participial complementation is used, Kavčič (2005) and especially James (2008) have made some interesting observations. In her discussion of the accusative with participle after verbs of perception, for example,

<sup>151</sup> See Cristofaro (2012, 342).

<sup>152</sup> Compare Ljungvik (1926, 50-4).

<sup>153</sup> See e.g. P.Mich.11.617 (145/6 AD), l. 12; P.Mich.8.477 (II AD), ll. 7-9 & 20.

<sup>154</sup> See e.g. P.Flor.2.127 (256 AD), ll. 2-3; P.Oxy.48.3409 (IV AD), ll. 9-10; P.Oxy.16.1868 (VI/VII AD), ll. 2-3.

<sup>155</sup> See e.g. P.Giss.Apoll.22 (116/20 AD), l. 6; SB.20.14401 (147 AD), ll. 16-8; P.Petaus.11 (184 AD), l. 14; P.Brem.37 (II AD), l. 16; P.Cair.Masp.1.67003 (567 AD), ll. 15-6.

<sup>156</sup> See e.g. Nicholas (1998, 224).

Kavčič (2005:193-4) concludes that ‘the use of the participle as a complement to verbs of perceiving can be interpreted, if not as a feature of the higher levels of written language, predominantly as a matter of written language’. James (2008, 237) similarly observes that ‘the complementary participle was retained across the continuum of registers. It is attested (although not in the nominative) with verbs of perception and cognition in various text types, including personal letters’. In our corpus too the complementation pattern can be found both in higher- and lower-register documents, though it should be noted that most of the examples (38/56) occur in formal documents. In private letters, the accusative participle occasionally occurs in introductory formulas starting with γίνωσκε “know” or γινώσκειν σε θέλω “I want you to know”.<sup>157</sup> As James (2008, 104) observes, this constituted the standard formula in the Ptolemaic period, but was replaced in the Roman period by γινώσκειν σε θέλω ὅτι “I want you to know that” (followed by a finite verb).

### 3.3.2 ὥς with the participle

Contrary to what we have seen with infinitival complementation, the language user did not feel the need to strengthen the participle by overt complementisers. There is, however, one exception to this general observation. As Cristofaro (1996, 83-5) has noted, starting from the Hellenistic period, we witness the appearance of an entirely new complementation pattern, that is, ὥς with the participle.

In our corpus, this complementation pattern occurs relatively frequently, with seventeen examples, ranging from the first until the sixth century. It is mostly used after verbs of communication (e.g. γράφω “I write”, εἰς γνῶσιν φέρω “I make known”, μέμφομαι “I blame”, μηνύω “I disclose”),<sup>158</sup> but also after verbs of mental state (e.g. γινώσκω “I know”),<sup>159</sup> psychological verbs (e.g. ἀγανακτέω “I am angry”),<sup>160</sup> and verbs of perception (e.g. εὐρίσκω “I find”, περιηχέομαι “I hear”).<sup>161</sup> In these contexts, the complement is typically factive. By way of illustration, consider (21):

(21) Εὐπορος τοῖνυν υἱὸς Ἑρμείας ἀπὸ κώμης Φιλαγρείδος τοῦ αὐτοῦ νομοῦ ἐσύλησέν με ἔνδον τῆς οἰκείας, ἐπιβὰς ληστρικῶν τρόπων, καὶ πᾶσαν τὴν ἐσθίαν συνελάβετο καὶ εἰς τὸ ἴδιον ἀνεστιλατω μέχρεις δ[ευ]ρω, δυναμ[έν]ον μου καὶ τ[ὰ]ς ἀποδίδει[ς]

<sup>157</sup> See e.g. P.Mich.8.477 (II AD), ll. 7-8; P.Oslo.3.162 (IV AD), l. 3.

<sup>158</sup> See e.g. P.Wisc.1.31 (147 AD), ll. 12-3; P.Abinn.3 (346-51 AD), ll. 17-20; P.Cair.Masp.2.67194 (VI AD), ll. 2-3; PSI.8.939 (VI AD), ll. 2-3.

<sup>159</sup> See e.g. P.Cair.Isid.79 (IV AD), ll. 8-9.

<sup>160</sup> See e.g. P.Cair.Masp.3.67290 (542 AD), ll. 3-4.

<sup>161</sup> See e.g. P.Sakaon.38 (312 AD), l. 24; P.Abinn.30 (IV AD), ll. 7-11.

[ποι]εῖν ὥς τούτου τήνδε τὴν κ[α]κουργίαν π[ε]ποιημένου (P.Abinn.55 (351 AD), ll. 6-12)

“Euporus, then, son of Hermias, of the village of Philagris in the same nome, robbed me in my house, entering it in the manner of a robber, and seized all my clothing, and appropriated it to his own use until now, although I can demonstrate that it was he who perpetrated this outrage.” [tr. Bell *et al.*]

The deacon Aurelius Heron writes a petition to the military commander Flavius Abinnaeus, informing him that a certain Euporus has robbed him. Aurelius Heron can even prove that Euporus has committed the crime. In Greek, τὰς ἀποδείξεις ποιεῖν “to prove” is followed by ὥς with a genitive subject (τούτου) and a perfect participle (πεποιημένου). As we can see in this example, ὥς with the participle is not restricted to an accusative subject (as was the case in §3.3.1): the subject of this complementation pattern can be in the accusative, genitive, or nominative.<sup>162</sup> The nominative is chosen in case of co-referentiality of the subjects of matrix and complement clause, as in (22):

(22) ἐπεὶ ἔγραψεν ὁ κύριός μου Ἀλύπις ὥς αὔριον μετὰ τοῦ διοικητοῦ ἐν[θά]δε ἐρχόμενος φροντίς σοι γενάσθω ἀπὸ νυκτὸς τοὺς παρὰ σοι ἀλιέας ἀποστεῖλαι ἔχοντας ἰχθὺν πλεῖστον καὶ κάλλιστον (P.Flor.2.201 (259 AD), ll. 2-10)

“Since my Lord Alypius has written that tomorrow he will come here with the *dioikêtês*, make sure that you send this night your fishermen with plenty of good fish”.

Ischyrion, right-hand man of Alypius, central administrator of the estate of the *Apiones*, informs Heroninus that Alypius will visit him. Therefore, Heroninus has to make sure there is plenty of good fish. Alypius has personally written to Ischyrion about this: note how the subjects of ἔγραψεν and ἐρχόμενος are identical, bringing with it the use of the nominative case.

In terms of social context, the use of ὥς with the participle resembles that of the accusative with participle: the large majority of the examples (14/17) occur in formal contexts, particularly official letters. Our example (21) forms an exception to this general tendency, although it is to be noted that the addressor of this business letter has a high social status.

The diachronic origins of ὥς with the participle are unclear. Cristofaro (1996, 84) suggests interference from the conjunct participle, which could be accompanied by ὥς, meaning “as if, as”. In time, structures of the type λέγουσιν ἡμᾶς ὥς ὁλωλότας (Aesch.,

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<sup>162</sup> Cristofaro (1996, 83) only mentions the use of the nominative and the genitive, not that of the accusative.

Ag. 672) “they speak of us as if dead” could have been reanalysed as “they say that we are dead”.<sup>163</sup> The advantage of this analysis is that it explains the variety of cases used. An alternative analysis would be to say that ὥς with the participle really is an accusative with participle strengthened by a complementiser, as suggested in the introductory paragraph to this section. This suggestion explains the social distribution of ὥς with the participle, and is in line with what we have seen for the infinitive (where ὥς is used with the accusative with infinitive, after almost the same verb classes as ὥς with the participle). However, it does not explain the appearance and frequent usage of the genitive case for the subject of the complement clause.

## 4 Conclusion

I have analysed the use and development of ‘minor’ complementation patterns in documentary texts from the Post-classical period (I – VI AD). Despite the alleged rise of ὅτι as a ‘forma completiva generica, del tutto indipendente dallo *status* semantico della completiva’ (Cristofaro 1996, 151), such minor complementation patterns (still) occur quite frequently. Most of these patterns are typically formed with a finite verb (mostly with a complementiser); however, the infinitive and less frequently the participle are also found in combination with complementisers such as ὥς, ἵνα, ὅπως, etc. Some of the patterns can already be found in the Classical period (e.g. ὥς with the indicative), others are entirely new (e.g. ὥς ὅτι with the indicative); some develop much further in Post-classical and Byzantine times (e.g. ἵνα with the subjunctive), others are found only a few times in the history of the Greek language (e.g. ὅπως with the infinitive).

In the analysis of these complementation patterns, I have paid particular attention to their semantic and pragmatic distribution. Semantically, I have focused on the notion of ‘factivity’, which, scholars have shown, plays a major role in the distribution of both Ancient and Modern Greek complementation patterns. It has been shown that most patterns are either complement to factive verbs (e.g. πῶς and ὥς ὅτι with the indicative, ὥς with the participle) or non-factive ones (e.g. ἵνα, ὅπως, μή with the subjunctive).<sup>164</sup> Some patterns are attested in both contexts (e.g. the accusative with participle, ὥς with

<sup>163</sup> Nicholas (1998, 230), referring to Smyth (1984[1920], 473-4), seems to believe that this process already took place in the Classical period.

<sup>164</sup> When the subjunctive is used, the complement is always non-factive. Compare also Noonan (1985:91-2): ‘the essence of the subjunctive in complementation is the coding of complements that are in some way *dependent*’.



the indicative and infinitive, asyndetic parataxis), but even here there is a tendency to use the complementation pattern predominantly in one of the two contexts (the accusative with participle, for example, primarily encodes factive complements, whereas asyndetic parataxis non-factive ones). This can be contrasted with the findings of Cristofaro (1996, 152), who claims that ‘la progressive eliminazione di ogni possibilità di esprimere delle differenziazioni modali attraverso la forma sintattica assunta dalla completiva’ is one of the major diachronic developments in the Post-classical complementation system.

In terms of social context, we have seen that the notion of ‘formality’ plays an important role: many patterns show a marked tendency<sup>165</sup> to occur either in formal contexts (e.g. ὡς with the indicative, ὅπως with the subjunctive, the accusative with the participle) or informal ones (e.g. asyndetic parataxis, πῶς with the indicative, ἵνα with the subjunctive).<sup>166</sup> In general, there is a tendency for patterns that already existed in the Classical period to be used in formal contexts, but some innovative formations (e.g. ὡς ὅτι with the indicative, ὡς with the infinitive and the participle, ὅπως with the infinitive) also appear in higher social contexts.

It is quite noticeable that the majority of the complementation patterns analysed in this article are non-factive in nature. This could be attributed to the gradual disappearance of the accusative with infinitive, which was used in Classical Greek in non-factive contexts. This would lead us to suppose, however, that ὅτι was not used as a ‘generic’ form, as Cristofaro (1996, 151) writes, at least not in the period under analysis; rather, we would expect it to predominantly occur in factive contexts, as it was also used in the Classical period. Further research is needed to integrate my findings on ‘minor’ complementation patterns with the history of the ‘major’ complementation patterns, ὅτι with the indicative and the accusative with infinitive.<sup>167</sup>

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<sup>165</sup> As one of the reviewers notes, however, some patterns are only attested in a few texts, which makes it hard to make generalising statements.

<sup>166</sup> Atticism is likely to have played at least some role, but in order to evaluate this hypothesis one would need to take into account Ptolemaic papyri and literary texts.

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## Overview of the corpus<sup>168</sup>

<i>Location</i>	<i>Archive</i>	<i>Date</i>	<i>Letters</i>	<i>Petitions</i>
Aphrodito	Dioscorus	V – VIII AD (400-799)	69	39
Arsinoites	Aphrodisius	I AD (38-40)	4	0
	Nilus	II AD (100-199)	5	0
	Pompeius Niger	I AD (31-64)	6	1
	Soldiers of the <i>numeri</i> of Arsinoe	V – VII AD (454-640)	1	0
Bacchias	Apollonius of Bacchias	I AD (50-99)	15	0
	Horus and Tapeccysis	I – II AD (71-131)	1	0
	Petesuchus and his sons	II AD (119-144)	0	1
	Temple of Socnobrais	II – III AD (116-216)	13	5
Canopus	Monastery of the <i>metanoia</i>	VI AD (500-599)	4	0
Dionysias	Flavius Abinnaeus <i>praefectus alae</i>	IV AD (325-75)	39	18
Euhemeria	Epagathus estate manager	I - II AD (94-110)	18	1
	Petitions from Euhemeria	I AD (28 - 42)	0	33
Hermopolis	Apollonius strategus	I - II AD (58-150)	140	34
	Aurelius Adelphius	IV AD (300-99)	2	0
	Aurelius Asclepiades, Adelphius, Aurelia Charite and Demetria alias Ammonia	III-IV AD (200-325)	4	1
	Aurelius Cyrus <i>nyctostrategus</i>	IV AD (380-99)	0	2
	Boule of Hermopolis	III AD (200-99)	7	13
	Damarion strategus	II AD (184-6)	0	0
	Flavius Taurinus son of Plousammon	V-VII AD (400-699)	1	0
	Soldiers of the <i>numerus</i> of the Mauri	IV-VI AD (340-599)	0	1
	Theophanes	IV AD (300-99)	10	6
Hermopolites	Apa Iohannes	IV AD (375-99)	15	0
	Archive from the Hermopolites	I AD (61-3)	0	1
	Aurelius Nikon alias Anicetus	III AD (200-99)	2	0
	Hermias and Maximus	IV AD (300-50)	1	0
	Nearchides	IV AD (300-99)	5	1
	Tryphon Phibas	III AD (200-50)	4	0
Karanis	Aurelius Isidorus	III-IV AD (267-324)	6	27
	Aeon son of Sarapion and Valerius son of Antiourius	III-IV AD (299-399)	3	3
	Claudius Tiberianus	II AD (100-25)	11	0
	Gaius Iulius Agrippinus	II AD (103-48)	4	8
	Gemellus Horion	I - III AD (93-214)	1	13
	Iulius Sabinus and Iulius Apollinaris	I - II AD (96-147)	14	1
	Iulius Serenus	II - III AD (179-219)	1	1
	Saturnila and her sons	II-III AD (175-99)	9	0
	Socrates tax collector and family	II AD (107-85)	8	1

<sup>168</sup> This appendix is based on the information provided by the Trismegistos-website (<http://www.trismegistos.org/arch/index.php>). It does not include archives which do not contain any letters or petitions. Texts which consist of several unrelated subdocuments have not been investigated.

Magdola Mire	Eutychides son of Sarapion	I - II AD (90-195)	32	0
Oxyrynchus	Apiones	V-VII AD (400-699)	39	9
	Applications to join the gerousia	III AD (225-6)	1	0
	Aurelia Diogenis alias Tourbiaina	III AD (200-99)	1	0
	Aurelius Heras <i>praepositus pagi</i>	IV AD (316-24)	4	0
	Aurelius Serenus alias Sarapion son of Agathinus	III AD (240-80)	0	1
	Boule of Oxyrynchus	III - IV AD (200-375)	5	1
	Claudia Isidora alias Apias	III AD	1	2
	Comon son of Mnesitheus	I AD (25-99)	4	1
	Corn dole of Oxyrynchus	III AD (200-99)	1	2
	Dius strategus	I - II AD (99-100)	2	1
	Flavia Anastasia	VI AD (500-599)	0	1
	Logistae of Oxyrynchus	IV AD (303-60)	1	4
	Papnouthis and Dorotheus	IV AD (330-90)	29	3
	Sarapion alias Apollonianus and sons	II-III AD (120-299)	18	5
	Theones	II AD (100-99)	0	1
	Tryphon weaver	I AD (15 - 83)	2	5
Panopolis	Aurelius Ammon <i>scholasticus</i>	III-IV AD (281-399)	1	23
	Descendants of Alopex	III-IV AD (298-399)	0	7
Panopolites	Correspondence of Asclas	I-II AD (1-199)	4	0
Phathor	Apa Paieous	IV AD (330-40)	6	0
	Nepherus	III-IV AD (200-399)	18	0
Philadelphieia	Aurelius Ol	IV AD (372-86)	1	0
	Casius	II AD (155-75)	1	0
	Lawsuit of Isidoros vs. Tryphon	I AD (5-6 AD)	5	2
	Nemesion	I AD (30-61)	9	3
	Ploutogeneia	III AD (297)	8	0
	Tesenouphis wine merchant	III AD (211)	1	0
	Valerias' family	I - II AD (99-105)	6	0
Ptolemais				
Hormou	Petaus <i>comogrammateus</i>	II AD (135-87)	42	1
Socnopaïou				
Nesos	Pacysis priest	III AD (212-30)	0	4
	Satabus son of Herieus	II AD (167)	5	11
Tebtynis	Cronion and Isidora	II AD (100-199)	5	2
	Cronion son of Apion head of the <i>grapheion</i> of Tebtynis	I BC - I AD (20 BC - 56 AD)	1	10
	Cronion son of Cheos	II AD (106-53)	3	3
	Diogenis	II AD (138-47)	3	0
	Pacebcis' descendants	II AD (127-62)	0	1
	Patron's decendants	II AD (108-76)	21	5
	Philosarapis	I - III AD (89 - 224)	3	3
	Sarapias and Sarapammon	II - III AD (165-270)	1	2
	Turbo	II - IV AD (100-299)	4	0
Theadelpheia	Administrative archive of Theadelpheia	I-III AD (98-225)	1	2

Aphrodisius son of Philippus and descendants	I - II AD (98-161)	0	2
Harthotes priest and public farmer	I BC - I AD (5 BC - 61 AD)	1	6
Heroninus	II - III AD (199-275)	292	3
Ptolemaeus son of Diodoros	II AD (138-62)	1	11
Sacaon	III - IV AD (254-343)	5	16
Sheep-lessees of Theadelpheia	III - IV AD (260-306)	2	0
Soterichus and Didymus	I - II AD (65 - 135)	1	0