

Two Changes in Greek Infinitival Syntax*

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1 Introduction

Background:

- Modern Greek lacks infinitival complements, replacing both ECM and control complements with subjunctive clauses headed by the complementizer *na*.

– subject of embedded clause distinct from matrix subject:

- (1) *elpízo na min argísi o yiánnis*
hope.1S.PRS NA not be-late.3S.DEP the John
'I hope John won't be late.' (Holton et al., 2004, p. 220)¹

– subject of embedded clause identical with matrix subject:

- (2) *tha thélame aplós na tis milísune*
FUT want.1P.COND just NA her speak.1P.DEP
'We would just like to speak to her.' (Holton et al., 2004, p. 220)

- Joseph (1983, pp. 49-55) argues that the replacement of infinitival complements by finite clauses headed by (*hi*)*na* has its origins in the Greek New Testament (GNT) and is part of a process of “gradual retreat” of the infinitive in general.
- Question: is this “gradual retreat” one very slow syntactic change or multiple syntactic changes?

Goal:

Show that infinitive replacement in Greek happened (at least) twice:

1. replacement of ECM infinitives between the early post-Classical period and the beginning of the Late Medieval period
2. replacement of subject control infinitives concluding around the end of the Late Medieval period

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¹The abbreviations used in glosses in this paper are as follows: 1s = 1st person singular, 2s = 2nd person singular, 3s = 3rd person singular, 1P = 1st person plural, 2P = 2nd person plural, 3P = 3rd person plural; PRS = present, PST = past, FUT = future, SUBJ = subjunctive, COND = conditional, DEP = dependent, INF = infinitive; IMPF = imperfective, PF = perfective; PASS = passive; ACC = accusative, GEN = genitive, DAT = dative; NA = *hína* or *na*.

The Data

- Using the lemmatized search function of the *Thesaurus Linguae Graecae* (TLG), collected over 1,000 instances of the verb *thélō* ‘want’ taking some sort of clausal complement—whether an infinitive clause or a (*hi*)*na* + subjunctive clause.
- Examples come from 10 texts spanning approximately 1350 years from the GNT to the *Chronicon Cypri* from the 15th century C.E.

Text	Author	Century (C.E.)	Type
Greek New Testament	Multiple	2nd	Religious, vernacular
Epistles	Ignatius of Antioch	2nd	Religious, semi-vernacular
Chronographia	Ioannes Malalas	6th	Historical, semi-vernacular
Chronicon Paschale	Unknown	7th	Historical, semi-vernacular
Chronographia	Theophanes Confessor	9th	Historical, semi-vernacular
Digenes Acritas, Grottaferrata	Unknown	10th-13th?, earlier	Epic, semi-vernacular
Digenes Acritas, Escorial	Unknown	10th-13th?, later	Epic, vernacular
Chronicon Moreae, Ms. H & T	Unknown	13th-14th, earlier	Historical epic, vernacular
Chronicon Moreae, Ms. P	Unknown	13th-14th, later	Historical epic, vernacular
Chronicon Cypri	Leontios Makhairas	15th	Historical, Cypriot vernacular

Table 1: Koine to Late Medieval Texts Used to Analyze Infinitive Replacement in Greek

2 Infinitives in the Greek New Testament

- The use of infinitives in the GNT is very similar to the use of infinitives in Classical Greek (CG).
- In particular, we find both ECM and control infinitives in the GNT.

ECM and Control Infinitives in the GNT

- ECM:

(3) ou thélomen toûton basileûsai eph' hēmâs
 not want.1P.PRS this.ACC rule.PF.INF over us
 ‘We don’t want this man to rule over us.’ (Lk. 19:14, 21 total examples in the GNT)²

- control:

(4) thélomen apò sou sēmeïon ideîn
 want.1P.PRS from you.GEN sign.ACC see.PF.INF
 ‘We want to see a sign from you.’ (Mthw. 12:38, 102 total examples in the GNT)

Other Infinitives in the GNT

Some infinitival constructions seem to have become *more* common in the GNT:

- purpose infinitives (Blass and Debrunner, 1961)

(5) kai élthomen proskunêsai autô
 and come.1P.PST worship.PF.INF him.DAT
 ‘And we have come to worship him.’ (Mthw. 2:2, around 189 examples in the GNT)

²Here and throughout, all NT and Medieval Greek data are transliterated according to orthography, not phonology.

- articular infinitives (around 254 examples in the GNT)
 - (6) a. en tô hupostréfēn autūs hupēmēnen Iēsūs ho paīs en Ierousalēm
in the return.IMP.F.INF them.ACC remain.3S.PF Jesus the child in Jerusalem
‘When they were returning, the child Jesus stayed behind in Jerusalem.’ (Lk. 2:43)
 - b. kai euthūs eksanētēlen dià tò mè ékhēn báthos gēs
and immediately sprout.3S.PF through the not have.IMP.F.INF depth soil
‘And immediately it [a seed] sprouted because of not having depth of soil.’ (Mk. 4:5)

3 Finite Clause Replacements for ECM Infinitives

Evidence from ECM Infinitives following *thélō* ‘want’ in post-Classical and Medieval Greek

Time Period	Text	% Inf.
2nd Cent.	Greek New Testament <i>Epistles</i> , Ignatius	78% (27) 67% (3)
9th Cent.	<i>Chronographia</i> , Theophanes Confessor	50% (6)
12th-13th Cent.?	<i>Digenes Acritas</i> , Escorial recension	0% (5)

Table 2: Frequency of ECM Infinitives (Sample Size in Parentheses)

hina-clause Replacements for ECM Infinitives in the GNT

In the GNT, *hina* subjunctive clauses replace ECM infinitives following *thélō* ‘want’ about 22% of the time:

- ECM infinitive:
 - (7) ou thélō dē humās agnoeîn, adelfoi, hōti pollákis proethēmēn
not want.1S.PRS but you.ACC be-ignorant.IMP.F.INF brothers that often plan.1S.PF
eltheîn...
come.PF.INF
‘But I don’t want you to be unaware, brothers, that I often planned to come...’ (Rom. 1:13, 21 total examples in the GNT)
- *hina* subjunctive clause:
 - (8) kai ouk éthelen hína tis gnoî
and not want.3S.PST NA anyone know.3S.SUBJ
‘And he didn’t want anyone to know (it).’ (Mk. 9:30, 6 total examples in the GNT)

hina-clause Replacements for ECM Infinitives in the letters of Ignatius

In the letters of Ignatius, roughly contemporaneous with the GNT, we find a similar distribution of ECM infinitives (67%) and *hina* subjunctive clauses (33%).

- ECM infinitive:
 - (9) mē thelésētē me apothaneîn
not want.2P.SUBJ me die.PF.INF
‘Do not wish for me to die.’ (Ignat. Epistle 4, Ch. 6)
- *hina* subjunctive clause:
 - (10) egō dē thélo hína kakeîna bébaia ê...
I but want.1S.PRS NA and-those certain be
‘Now I desire that those things be certain...’ (Ignat. Epistle 4, Ch. 3)

***hina*-clause Replacements for ECM Infinitives in *Chronographia* of Theophanes Confessor**

In the *Chronographia* of Theophanes the Confessor dating to around 815 C.E., *hina* subjunctive clauses replace ECM infinitives following *thélō* ‘want’ about 50% of the time, although there are only 6 examples of *thélō* with a clausal complement in which the subject is distinct from the matrix subject.

- ECM infinitive:

(11) ei kai thaneîn autòn thelésē ho theós...
 if even die.PF.INF him.ACC want.3S.SUBJ the god
 ‘Even if god wants him to die...’ (p. 449, l. 24, 3 examples)

- *hina* subjunctive clause:

(12) èan thélēs hína élthō prós se...
 if want.2S.SUBJ NA come.1S.SUBJ to you
 ‘If you want me to come to you...’ (p. 387, l. 11, 3 examples)

na*-clause Replacements for ECM Infinitives in the *Digenes Acritas

In the Escorial recension of the vernacular epic *Digenes Acritas* (DA) from around the 12th or 13th century C.E., there are no examples of ECM infinitives following *thélō* ‘want’ and 5 examples of *na* subjunctive clause complements with subjects distinct from the matrix subject, suggesting that by this time, ECM infinitives had already been completely replaced by *na* clause complements.

(13) thélomen nà omósēs...
 want.1P.PRS NA swear.2S.SUBJ
 ‘We want you to swear...’ (l. 440)

***na*-clause Replacements for Control Infinitives in the DA**

In contrast to the evidence from *na*-clause replacements for ECM infinitives in the DA, *na*-clause replacements for control infinitives following *thélō* ‘want’ occur only about 60% of the time.

- control infinitive:

(14) kai àn thélēs pân eis tèn Surían...
 and if want.2S.SUBJ go.INF to the Syria
 ‘And if you want to go to Syria...’ (l. 440, 7 examples)

- *na* subjunctive clause:

(15) thélō nà páo nà toùs idô kai páli nà hupostrépsō...
 want.1S.PRS NA go.1S.SUBJ NA them see.1S.SUBJ and again NA return.1S.SUBJ
 ‘I want to go to see them and to return again...’ (l. 375, 9 examples)

Exceptional Data

In some of the remaining of the 10 texts surveyed, the pattern of finite clauses replacing ECM infinitives is slightly irregular, but each case can be easily explained.

- *Chronographia* of Ioannes Malalas and *Chronicon Paschale* (6th to 7th centuries C.E.): all ECM infinitives, but very few examples (2 and 3, respectively) of *thélō* ‘want’ taking a complement with a subject distinct from the matrix subject; the language of these texts shows much influence from CG.
- 1 example in the Grottaferrata recension of the DA where *thélō* ‘want’ takes an infinitival complement introduced by the genitive definite article *tu*; this recension is in general more archaising (or less vernacular) than the Escorial recension (Jeffreys, 1998).

- 1 example of an ECM infinitive in the *Chronicon Moreae*, but this is 1 example out of 23 total examples in which *thélō* ‘want’ takes a complement with a subject distinct from the matrix subject, and it only occurs in the Parisinus recension.

4 Finite Clause Replacements for Subject Control Infinitives

Evidence from Control Infinitives following *thélō* ‘want’ in MG

Time Period	Text	Only Volitive	All Uses
9th Cent.	<i>Chronographia</i> , Theophanes Confessor	100% (45)	same
10th-13th Cent.?	<i>Digenes Acritas</i> , Grottaferrata recension	96% (25)	97% (32)
	<i>Digenes Acritas</i> , Escorial recension	41% (17)	60% (35)
13th-15th Cent.	<i>Chronicon Cypri</i> , Leontios Makhairas	3% (159)	57% (462)
	<i>Chronicon Moreae</i> , Ms. H & T	7% (30)	54% (204)
	<i>Chronicon Moreae</i> , Ms. P	0% (35)	49% (173)

Table 3: Frequency of Control Infinitives in MG (Sample Sizes in Parentheses)

Caveats

- Narrow sample: only looked at *thélō* ‘want’ for verbs.
- During the Late Medieval Period, *thélō* is also starting to be used as a future auxiliary.
 - Using context and translations, tried to focus only on uses of *thélō* in its volitive meaning.
 - Some instances still ambiguous.

hina-clause Replacements for Control Infinitives in the GNT

On three occasions in the GNT (Beck, 2010), *hina* subjunctive clauses replace control infinitives selected for by the adjectives *áksios* ‘worthy’ and *hikanós* ‘sufficient.’

- (16) a. hoû ouk eimì áksios tò hupódēma tôn podôn lūsai
 whose not am worthy the sandal the feet loosen.PF.INF
 ‘The sandal of whose feet I am not worthy to loosen.’ (Acts 13:25)
- b. hoû ouk eimì egò áksios hina lūsō autoû tôn himánta toû hupodématos
 whose not am I worthy NA loosen.1S.SUBJ his the strap the sandal
 ‘Whose sandal-strap I am not worthy to loosen.’ (Jn. 1:27, 2 other examples)

Control Complements of Adjectives in the GNT

- Aside from those 3 occasions of *hina* subjunctive clauses replacing control infinitives following adjectives in the GNT, there are 22 occurrences of control infinitives after adjectives following *áksios* ‘worthy’ and *hikanós* ‘sufficient,’ as well as following *dunatós* ‘able,’ *hétioimos* ‘ready,’ *eleútheros* ‘free,’ and *oksús* ‘quick’ (Beck, 2010).
 - This makes the frequency of *hina* subjunctive clause replacements for infinitival complements to adjectives about 12%.
- (17) a. ...hoû ouk eimì hikanòs tà hupodémata bastásai
 whose not am sufficient the sandals carry.PF.INF
 ‘... whose sandals I am not worthy to carry.’ (Mthw. 3:11)
- b. okseís hoi pódēs autôn ekkhéai haíma
 quick the feet their spill.PF.INF blood.ACC
 ‘Their feet are quick to spill blood.’ (Rom. 3:15)

Finite Clause Replacements for Control Complements of Adjectives in MG

- No examples of *hina* subjunctive clause replacements for infinitival complements following *áksios* ‘worthy,’ *hikanós* ‘sufficient,’ *dunatós* ‘able,’ *hétioimos* ‘ready,’ *eleútheros* ‘free,’ and *oksús* ‘quick’ in the *Chronographia* of Theophanes the Confessor.
- Also no examples in the DA.

Infinitival Complements of Adjectives in MG

- In contrast, infinitival complements of adjectives in the *Chronographia* of Theophanes the Confessor and in the DA do exist.
- In particular, there are 12 total examples of infinitival complements of the following adjectives and nouns in the DA: *áksios* ‘worthy,’ *eksousía* ‘power,’ *hétioimos* ‘ready,’ *dunatós* ‘able,’ and *adúnatos* ‘impossible.’
- But in the *Chronicon Moreae*, we start to see infinitival complements following adjectives being replaced by *na* subjunctive clauses.

(18) egò eímai áksios nà génō basiléas
 I am worthy NA become.1S.SUBJ king
 ‘I am worthy to become king.’ (l. 943)

- The 3 examples of *hina* subjunctive clause replacements for control infinitives following adjectives in the GNT are not significant.
- The 2 alleged³ examples of *hina* subjunctive clause replacements (the former mentioned by Joseph, 1983, p. 53) for subject control infinitives following *thélō* ‘want’ in the epistles of Ignatius are best analyzed as adjunct *hina* subjunctive clauses, as indicated by the translations given⁴ :

(19) a. thelésēte, hina kai humeís thelēthēte
 want.2P.SUBJ NA even you want.2P.PASS.SUBJ
 ‘Be ye willing, then, that ye also may have your desires fulfilled.’ (Ignat. Epistle 4, Ch. 8)

b. allà kai thélo, hina mè mónon légomai xristianós, allà kai
 but even want.1S.PRS NA not only say.1S.PASS.SUBJ Christian but even
 heurethō
 find.1S.PASS.SUBJ
 ‘(...that I may not only speak,) but [truly] will, so that I may not merely be called a Christian, but really found to be one.’ (Ignat. Epistle 4, Ch. 3)

- Control infinitives following adjectives (and nouns, in the DA), as well as subject control infinitives following *thélō* ‘want,’ do not appear to be giving way to (*hi*)*na* clauses before the Late Medieval period.

³See Joseph, 2002 for further discussion of these examples.

⁴Joseph (1983, p. 53) also gives one example of this kind from the *Acta Pilati*; since this text is not yet in the *Thesaurus Linguae Graecae*, it was not possible to examine the full distribution of complements to *thélō* ‘want’ with subjects identical to the matrix subject in this text.

5 Conclusion

Putting it all together...

- ECM infinitives are yielding to finite clauses as early as the NT and the *Chronographia* of Theophanes the Confessor.
- Control infinitives are not beginning to be replaced by finite clauses until the Escorial recension of the *Digenes Acritas* in the Late Medieval period.
 - The exception is a few cases of finite clauses replacing control infinitives following adjectives in the NT.
 - Given the lack of any evidence of this pattern in early MG texts, we view the NT cases as truly exceptional and insignificant.

Towards a conclusion...

- Kroch (1989) presents data to support the Constant Rate Hypothesis: while the rate of use of a grammatical construction undergoing change varies across contexts at a given time, the rate of change is the same across all contexts.
- Since our best estimate of the time course of the loss of ECM infinitives is that this process took a fair while—beginning around the NT and reaching a half-way point around the 9th century—while the loss of control infinitives was very rapid, with the whole change taking place between around the 12th century and the 15th, these two contexts appear to have very different rates of change.
- If we wanted to interpret Joseph’s “gradual retreat” of infinitives as one very slow syntactic change, we would have quite an extreme counterexample to the Constant Rate Hypothesis.
- Given the Constant Rate Hypothesis, it makes more sense to view the replacement of ECM infinitives and control infinitives as separate, although not entirely independent, syntactic changes.

Causes of Infinitive Replacement

- The loss of ECM infinitives may be rooted in the fact that the ECM construction is cross-linguistically marked.
- A possible influence on the loss of control infinitives, particularly with respect to *thélō* ‘want,’ is a desire on the part of MG speakers to distinguish *thélō* in its volitive use from its use as a future auxiliary with the infinitive, which is the most common future construction in this period (Joseph, 1978, p. 121).

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