

# *The pre-history and latter history of the infinitive in Greek and some relevant issues in grammatical analysis\**

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## *1. Preliminaries*

The region of present-day Turkey that was historically known as the Pontos was famed in ancient times for being the source of cultivated cherries for the Romans from the first century BC. Moreover, it was the birthplace of some famous intellectuals of the day, e.g. Strabo (b. 63/64) and it was mentioned three times in the New Testament (Acts 2:9, Acts 18:1, and 1Peter 1:1). In the context of Modern Greek dialectology, the Pontos is now famous for its *infinitives*, as described in the 19<sup>th</sup> century by various scholars, especially Deffner (1878), but even more than a century later by Mackridge (1987) and most recently in extensive work by Sitaridou (2009, 2014ab). For instance, in the Pontic dialect of Of, in the variety Sitaridou calls “Romeyka”, one finds:

- (1) tʃi poresa almeksini (Sitaridou, 2009, p. 7)  
not I-could milk  
‘I couldn’t milk (the cows)’  
(2) Xtes ti nixta elepenete parpatesinete?  
Yesterday the night you-saw walk(+2PL!)  
‘Last night could you see (in order) to walk?’

Such examples are of considerable interest to linguists and to Hellenists. For historical linguists, these forms are interesting because in some

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contexts they appear to have undergone certain innovations that offer material for the stock-in-trade of the linguists who study language change, in particular, the reshaping of the aorist infinitive to having the ending «-in» (a change witnessed in Hellenistic Greek) and especially the changes involving the adding of ostensible personal endings – note the gloss line in (2) – to an infinitive. For Hellenists, and also historical linguists, though perhaps less so, they hold a special place because they appear to be archaisms within Greek, inasmuch as they continue in some way the infinitives of Ancient Greek: «almeksini» in (1) is directly infinitival while «parpatesinete» shows the change alluded to above involving innovative ostensible personal endings with the infinitive. What makes such forms special, and apparently archaic, is the fact that infinitives were otherwise lost and replaced by finite forms in virtually all dialects of Greek (though see (3) – (5) for evidence from another dialect) and in virtually all productive uses by approximately the 16<sup>th</sup> century<sup>1</sup>.

Additionally, these forms are revealing in a way that dialectologists and linguistic geographers would delight in, because infinitives remain in quasi-productive use outside of the perfect tense formation only in Pontic Greek, as in (1) and (2), and in the Greek of Southern Italy (Pellegrini, 1880; Rohlf, 1958; Joseph, 1983-2009), where it is quite similar in overall distribution to what is seen in Medieval Greek (e.g., as complement to verbs of ability, of causation, and of perception):

(3) den don esonnain evri (Calabria)  
 NEG<sub>him</sub> could/3PL find/INF  
 ‘they could not find him’

(4a) de sonno ciumiθi (Bova)  
 NEG can/1SG sleep/INF  
 ‘I can’t sleep’

(4b) me canni peθani  
 me/ACC make/2SG die/INF  
 ‘You will make me die’

(4c) ton icua erti  
 him/ACC heard/1SG come/INF  
 ‘I heard him coming’

<sup>1</sup> Exception must be made here, as discussed below in §2 and §3, for the perfect tense formation of the type «exo zisi» ‘I-have lived’; see Joseph (1983-2009, 1978-1990) for discussion and relevant literature.

(5) è ssozo plosi  
 NEG can/1SG sleep/INF  
 'I can't sleep'

(Otranto)

Thus, given the geographical distribution of the infinitive in these modern dialects and the fact that it is an archaism, the occurrence of these forms here is a classic case of the principle («norma delle aree laterali») of dialectological interpretation set down by Matteo Bartoli (1925): «Solitamente nelle aree laterali si conserva una fase più antica rispetto a quella presente nelle aree intermedie» («Usually in lateral areas is preserved an earlier phase relative to that found in intermediate areas»). In this case, we see retention of an archaism at the peripheries of a dialect zone and innovation at the center.

It should be clear that much of the interest presented by constructions like those in (1) and (2) depends on just what forms like «parpatesinet» actually are and how they are to be analyzed. In particular, they raise the following questions:

(6a) Are they indeed infinitives, or are they something else?

(6b) For that matter, just what is an infinitive anyway?

(6c) That is, how do we know when we have an infinitive?

In the discussion that follows, I pursue these lines of inquiry, ultimately examining the status of the ancient Greek infinitive, with an exploration of its prehistory, by way of shedding some light on the latter history of this verbal form in Greek. Though much of the attention herein is on Medieval and Modern Greek, and even on matters of synchronic linguistic analysis, ultimately the considerations offered here have a direct and important bearing not only on the latter stages of Greek but also on Ancient Greek itself, as the starting point for the latter developments.

## 2. *An Attempt at Defining "Infinitive"*

Basing myself on discussion in Joseph (1983-2009, Ch. 2), I offer the following attempt at defining the notion of "infinitive" as used in linguistic analysis. Everyone agrees that infinitives have something to do with nonfinite verbal forms, so there is a prior question here: What is meant by "nonfinite", and thus by its counterpart "finite"?

Traditionally, "finite" refers to verbs that are "bounded" in some way, especially by inflection for person, number, tense (and possibly

other) categories, but the relevant categories seemingly can vary on a language-by-language basis. “Finite” can also be taken to mean, following Timberlake (1976, p. 30), «the extent to which a clause behaves as a simple sentence [so that] nonfinite clauses are by definition reduced forms of sentences». And, there are other potentially relevant factors. In particular, “nonfinite” generally means less verb-like, since typical uses of nonfinite forms include nominal, adjectival, and adverbial functions; under such a construction of the notion of “nonfiniteness”, “finite” would mean more prototypically verb-like.

It is instructive to note that in his recent, and theoretically quite up-to-date, treatment of nonfinite structures, Miller (2002, p. 1) adopts the traditional notion of “nonfinite” but recognizes that there are for the most part no cross-linguistic generalizations to be made about particular properties by which this notion is realized. He does recognize that having «no subject person agreement» can be diagnostic, but he himself also talks in terms of «languages with infinitival agreement» and «inflected» (or «conjugated») infinitives, so that nonfiniteness and subject person agreement for him are not mutually exclusive notions.

This gets one part of the way to the goal of characterizing infinitives, but even if we can appropriately identify and isolate parameters/features/behaviors that allow for the determination of which forms are “finite” and which are “nonfinite”, there is still a question that remains: Where do “infinitives” fit in? Presumably, they are a subtype/subclass of nonfinite forms, but in order to specify “infinitives” as a class, distinct from other nonfinite forms, function must be taken into account, as well as the value to the grammar of recognizing such a class. That is, one should impose the condition that positing a class of forms with the category label “infinitive” must benefit the grammar somehow in terms of its overall account, i.e. it must lead to or be revealing of some generalizations about grammatical forms or constructions or the like.

The isolated infinitival remnants in standard Modern Greek, restricted to occurring just in the perfect tense formation of the type «exo zisi» ‘I-have lived’ (see footnote 1) do not satisfy that criterion, inasmuch as they occur *only* there and nowhere else; there is no generalization to be made about them and so we can label them in other ways (e.g. perfect tense formative) that are not bound by prior traditions. These considerations led to the following, somewhat unsatisfying and in the end quite traditionally based, definition in Joseph (1983-2009, p. 34): «The infinitive... is a member of the nonfinite class of verbs that fills a particular function, e.g. complement to adjectives

and verbs, and allows for a certain degree of economy of description through its being posited». I call this somewhat unsatisfying because, in the sober light of some 30 years to mull this over, I would amend this definition to say «particular functions» rather than «a particular function», as there are several that are typical of what are conventionally called “infinitives”, and moreover would lead with «complement to verbs» as the primary such function and perhaps add «expression of purpose» as the second key function<sup>2</sup>.

In the discussion heretofore it has been assumed that infinitives are verbs, and that is a reasonable assumption, and a commonly held one, to be sure. Nonetheless, implicit in the point made above about nonfinite forms being less verb-like than finite forms is that a determination needs to be made as to the part-of-speech category of an infinitive. The distinction between verbs and other parts of speech is an important one, in general of course, but it converges precisely in the characterization of nonfiniteness and finiteness, and thus in the characterization of infinitives. It can be noted, moreover, that at least as far as English is concerned, though the same could be said about other languages, there are constructions in which nominal forms can fill the same slot as infinitives, as in (7a-b):

(7a) John is eager *for Bill to re-enter* society.

(7b) John is eager *for Bill's re-entry* into society.

Thus the part-of-speech identification of infinitives is a further issue that must be dealt with; accordingly, it is addressed in the next section.

### 3. *Nominal vs. Verbal Status of Infinitives: English and Sanskrit*

With regard to the characterization of infinitives as nominal or verbal in nature, there is a key issue that must be addressed. One has to determine whether a particular form that seems to be nonfinite at least in terms of its morphology, e.g. absence of person and number markings or the like, has other characteristics appropriate for the label of “infinitive”, as defined, say, above. Moreover, especially given that nonfinite forms are less verb-like and that a typical “infinitival”

<sup>2</sup> While a correlation between infinitives and purpose expressions is common across the Indo-European language family, Haspelmath (1989) argues for expressions of purpose being a prime source of infinitives cross-linguistically.

function includes verbal complementation, and further that complements can be treated as direct objects of a governing (matrix) verb, and that direct objects are (typically) nouns, a big part of the identification of infinitives involves deciding whether the form in question is truly part of the verbal system or not.

The question of nominal as opposed to verbal status for an infinitive can be illustrated by a consideration of the situation in English. Miller (2002, p. 4), echoing assumptions of others before him, states that «in earlier English the *to* infinitive could have a [+N] feature, which permitted it to appear as preposition-complement, [and] co-occur with a determiner D». Los (2005, p. 4), for her part, regarding developments with infinitive in English, such as the emergence of a passive infinitive, the occurrence of «to»-infinitives with perfective «have», and the possibility of splitting «to» off from rest of infinitive, observes that «it has been claimed that some or all of these changes follow from a change in categorical status of *to* (*to*-) infinitive from a noun to verb». She, however, doubts this claim, noting that «Fischer and Van der Leek (1981, pp. 318-21) found only scant evidence for the alleged nominal behaviour of the infinitive in OE and ME». Whatever the earlier status of the English *to*-infinitive was, its verbal status in Modern English *to*-infinitives seems to be agreed upon, and can be demonstrated by two facts about their syntactic behavior. First, they are modified by adverbs, such as “boldly” in (8), and not adjectives, such as “bold”:

(8)  $\sqrt{\text{to}}$  boldly go / \*to bold go / \*bold to go

Second, they take direct objects without any mediating element like a preposition, as in (9a) whereas nominals, as in (9b), require such a mediating element:

(9a)  $\sqrt{\text{to}}$  see him / \*to see of him

(9b) \*the sight him /  $\sqrt{\text{the}}$  sight of him

A similar case study, one more directly relevant to the analysis of the Greek infinitive, is that pertaining to the nominal versus verbal status of the Vedic Sanskrit infinitives. There are 17 different infinitival formations in Vedic, a number that could even be 19, or 18, depending on the weighting of various factors and certain analytic decisions. Each one of these formations consists of a case form, most often dative, but accusative, locative, and genitive/ablative infinitives also occur, of a

deverbal nominal formed from a verbal root with various noun-forming suffixes. Thus, Vedic has infinitives that etymologically can be classified according to the type of case ending they show and the type of stem formative:

DATIVE: Root + Noun-forming Suffix<sup>3</sup> + *e* (dative case ending)

...-Ø-e	e.g. dṛś-e 'to see; for seeing'
...-as-e	e.g. cakṣ-as-e 'to see; for seeing'
...-ay-e	e.g. yudh-ay-e 'to fight'
...-tay-e	e.g. pī-tay-e 'to drink'
...-tav-e	e.g. kar-tav-e 'to make'
...-tavā-e (= > -tavai)	e.g. man-tavai 'to think'
...-tyā-e (= > -tyai)	e.g. i-tyai 'to go' (the only such one)
...-dhyā-e (= > -dhyai)	e.g. piba-dhyai 'to drink'
...-man-e	e.g. dā-man-e 'to give'
...-van-e	e.g. dā-van-e 'to give'

ACCUSATIVE: Root + Noun-forming Suffix + -(a)m (acc ending)

...-Ø-am	e.g. śubh-am 'to shine'
...-tu-m	e.g. dā-tu-m 'to give'

ABLATIVE/GENITIVE<sup>4</sup>: Root + Noun-forming Suffix + -(a)s (abl/gen ending)

...-Ø-as	e.g. (ava-)pad-as 'to fall down'
...-to-s	e.g. han-to-s 'to be struck'
	dā-to-s 'to give'

LOCATIVE: ROOT + Noun-forming Suffix + -i (loc ending)

...-Ø-i	e.g. dṛś-i 'to see; on seeing'
...-tar-i	e.g. dhar-tar-i 'to support'
...-san-i	e.g. ne-ṣaṇ-i 'to lead'

Cognate formations to the Vedic infinitives are to be found in the infinitives of other Indo-European languages, where similar noun-forming suffixes and similar case-marking are involved:

Greek: do-men-ai 'to give' (< \*...-men-ai)  
do-un-ai 'to give' (< \*...-wen-ai)  
grap-s-ai 'to write' (< \*...-s-ai)  
graph-ein 'to write' (< \*...-e-sen-Ø)

<sup>3</sup> The noun-forming suffix in all of these formations can be a "zero", so that the verbal root alone is the basis for the derived noun.

<sup>4</sup> Some of these may be exclusively ablatival, and some exclusively genitival, based on usage, so that different types perhaps are to be distinguished here.

Latin:	dic-er-e ‘to lead’	(< *...-es-i)
	dic-tū (supine)	(< *...-tu-e/i)
	dic-tu-m (supine)	(< *...-tu-m)
Old Church Slavonic:	ubi-ti ‘to kill’	(< *...-tey-i)
	lobi-tŭ ‘to catch’	(< *...-tu-m)
Hittite:	memiya-wanzi ‘to say’	(< *...-wen(t)-s-i)
	ada-nn-a ‘to eat’	(< *...-tn-a)
	peske-wan ‘give’ (supine)	(< *...-wen-Ø)

Thus, just as in Vedic, one sees here \*-s-stems («grapsai»), \*-sen-stems («graphiein»), \*-men-stems («domenai»), \*-wen-stems («dounai», «peskewan», and possibly «memiyawanzi»), \*-tu- stems («dictū», «dictum», «lobitū»), \*-ti-stems («ubiti»), and \*-ter-stems («adanna»)<sup>5</sup>, and case-endings that include accusative («dictum», «lobitū»), locative («graphiein», «peskewan», and presumably the «-ai» of «grapsai» and others in Greek)<sup>6</sup>, possibly genitive/ablative («memiyawanzi», if the «-zi» reflects a combination with a case-ending \*-s-), and dative/locative («dicere»). These comparanda have relevance for an understanding of the Proto-Indo-European situation with infinitives, but first some more facts about Vedic need to be considered.

To return to the Vedic forms, there is more to be said about them with regard to their nominal or verbal status. While it is certainly true that they are case forms of deverbal nouns, at the same time, they show evidence of being incorporated into the verbal system. For instance, while they are mostly formed from roots, occasionally they are formed from verbal stems (e.g. present stem, perfect stem, causative stem), as in the following:

pība-dhyai ‘to drink’ (from present stem «pība» of √pā-)  
gr-ṇī-ṣaṇ-i ‘to sing’ (from present stem «grṇī» of √gr-)

<sup>5</sup> This Hittite form belongs here on the assumption that the stem-formative \*-tn- is the oblique form of a nominative \*-tar, so that this reflects an old «r/n»-heteroclit (cf. «papra-tar» ‘dirtiness.NOM’, with genitive «papra-nnas», from \*-tn-as; the Vedic use of «-tar-» would then show the generalization of the nominative allomorph into the oblique cases). On the case-ending, cf. footnote 6.

<sup>6</sup> The ending \*-a of Hittite «adanna» is probably an old directive case, a case distinguished in Hittite from the locative but with affinities with the dative; Greek «-ai» most likely represents a directive case ending with a dative or locative ending «-i» added on; the \*-Ø in Greek «graphiein» and Hittite «peskewan» reflects an old endless locative (cf. Vedic «ahan» ‘in/on the day’).



vā-vṛdha-dhyai ‘to strengthen’ (from perfect stem «vā-vṛdh» of √vṛdh-)  
nāśaya-dhyai ‘to cause to disappear’ (from causative stem «nāśaya» of  
√nāś-)

Moreover, objects of the Vedic infinitive are mostly in accusative, as would be expected for complements to a verb, as in «sūrya-m dṛś-e» ‘sun-ACC see-DAT’, i.e. ‘for seeing the sun; to see the sun’. Still, occasionally, genitive objects are found, as expected for complements to a noun, as in «sūrya-sya dṛś-i» ‘sun-GEN see-LOC’, i.e. ‘in-the-seeing of-the-sun; to see the sun’, and there is even some “quirky” case government via “attraction”, especially involving dative-marked direct object with a dative-case-form infinitive, as in «sūry-āya dṛś-aye» ‘sun-DAT see- DAT’, i.e. ‘for-the-seeing for-the-sun; for the seeing of the sun, to see the sun’.

Thus, morphologically Vedic infinitives are nouns; syntactically they are mostly verbal but some instances show nominal characteristics, and the instances of attraction seem to suggest that the nominal case is still transparently recognizable and “available” to speakers; derivationally they are somewhat tied to the verbal system in that some are formed from stems as opposed to roots, and some can be interpreted as passives even if not marked overtly as such. These facts have led to what can be considered the standard interpretation: these infinitives are originally, that is in pre-Vedic, simply case forms of deverbal nouns (thus “for the seeing”, “in the seeing”, etc.), and in the Vedic period are becoming integrated into the verbal system, taking on more fully verbal status. It can be noted that for Classical Sanskrit, several centuries later than Vedic, there is only one infinitive, in «-tum», transparently an accusative of a deverbal noun, but just a single stem-type is available and there is only verbal rection, i.e., only accusative-marked direct objects. The restriction to a single form makes it more likely that it can be treated as part of the verbal system as there is no regular relationship between a set of nominal formations and the infinitive, as there was in Vedic; that is, the plethora of infinitival forms in Vedic made it easy for speakers to associate the infinitives with noun formations — the reduction to singular infinitival morphology in later Sanskrit is in keeping with the transition evident in Vedic from fully nominal “infinitives” to fully verbal ones.

To make historical sense of all these developments, it must be noted that there are parallels across the different languages in regard to the functions that these forms have. For instance, many occur as complement to adjectives, like the Latin ablatival supine and infinitive and the

Greek infinitive, and in purpose constructions, like the Latin supine in «-tum» and (some) Vedic infinitives, and the Old Church Slavonic supine. This means, therefore, that not only do so many stem formatives and case endings coincide across the different languages but also the functions are similar. Overall, then, this body of evidence suggests that at least some of these formations were available as infinitives in Proto-Indo-European. Given the Vedic evidence, it can be hypothesized that most likely, these were originally deverbal nominals (i.e. verbal nouns, nouns derived from verbs) that were pressed into service, in the way that nouns can be, in complement contexts (cf. English «ready/eager for re-entry») and purpose expressions (cf. English «for seeing»). They were thus originally more nominal than verbal, so that the verbal rection seen in the use of accusative case for marking their objects was an innovation, but a very natural one, as these nominals came to be integrated into the verbal system. The fact that some came to be derived from verbal stems, as in Vedic «grnīṣaṇi» above<sup>7</sup>, is consistent with an emerging verbal character for these formations.

#### *4. The Infinitive in Ancient Greek and Beyond – Broad Brushstrokes*

With the material and discussion in §3 as background, the question of nominal versus verbal status for Ancient Greek infinitives can be addressed. As the facts in §3 indicate, Ancient Greek infinitives, as in Vedic, are old case-forms of deverbal nouns, but an important difference is that, unlike Vedic, the Greek forms are synchronically opaque as to the case-marking. The «-ai» ending, reflecting an old directive case form in \*-a (see footnote 6), even with the \*-i of the dative or locative ending added on, is not a synchronic case ending at all. Rather, the productive dative ending is «-i», and while «-ai» occurs elsewhere, it is only in some isolated adverbs, e.g. «khamai» ‘on the ground’. Similarly, the endingless locative seen in the present infinitive «graph-ein» ‘to write’ is isolated in Greek; in fact, a locative case of any sort, endingless or otherwise, is not part of the synchronic case system of Greek. Thus the historical connection between Greek infinitives and the nominal system is completely opaque so that from a synchronic standpoint for Ancient Greek, such a connection must be considered to be generally unavailable.

<sup>7</sup> And note also Hittite «peskewan» (from the inchoative stem in «-sk-»).

Moreover, infinitives are modified by adverbs, even when they have nominal function, achieved via the addition of the definite article, the “articular infinitive” use. Thus, «to legein» ‘the (act of) speaking’ is modified with the adverb «eu» ‘well’: «to eu legein» ‘the well to-speak’, i.e., ‘the (act of) speaking well’; modification with an adjective is impossible: \*«to kalon legein» ‘the good.NTR to-speak’). Further, infinitives are fully integrated into the verbal system and express the whole range of verbal categories. Voice is expressed through distinct active, middle, and passive forms, and even the special formative for aorist/future passives «-thē-» from finite forms occurs in the infinitive (cf. «lu-*thē*-nai» ‘to be loosened’, i.e. ‘loosen-PASS-AOR.INF’, like «e-lu-*thē*-n» ‘I was loosened’, i.e. ‘PAST-loosen-PASS-1SG’). And, infinitives enter into the aspectual distinctions in the verbal system of presential versus aoristic (e.g. «graphein» ‘to be writing’ versus «grapsai» ‘to write (once and for all)’), and show tense insofar as the future infinitive, e.g. «grapsein» ‘to (be about to) write’, is to be considered a tensed form.

Therefore, for Ancient Greek, infinitives are not at all nominal, except in terms of their diachronic source. Thus, for Greek more generally, we can start with infinitives, by Homeric times at least, as elements that are truly within the verbal system due to their participation in verbal categories; even though “marked” in a sense for inflectional categories, they are not fully marked, and can be considered nonfinite since they are lacking in person and number marking.

From this starting point, with the infinitive fully part of the verbal system in Ancient Greek, the latter history of the infinitive can be explored<sup>8</sup>. It is a story of decline over time and ultimate loss of the category altogether. The Classical Greek infinitive was robust, with many forms (in numerous tense and voice and aspect categories), and many functions associated with those forms. In the Greek of Hellenistic/Roman-era, including Greek of the New Testament, we see a decline in the use of infinitive with some verbs, often with «hina» (‘so that’) plus a Subjunctive occurring instead of infinitive; in addition, there are some formal reductions, so that the old aorist active infinitive, such as «grapsai» ‘to write’, is affected by the ending of present infinitive and becomes «grapsein» (and later «grapsei», by a regular sound change)<sup>9</sup>. Still, there are some verbs that obligatorily take infinitival complemen-

<sup>8</sup> For more details and references, see Joseph (1978-1990, Chapter 2), and Joseph (1983-2009, Chapter 3).

<sup>9</sup> Thus merging with the old future infinitive in terms of form.

tation. Moving ahead several centuries into Byzantine and Medieval Greek, one sees a higher rate in the decline of the infinitive, with more «(hi)na» (with regular loss of the first syllable) + Subjunctive complementation in its place; verbs that governed an infinitive obligatorily earlier now have it optionally, and those that took it optionally earlier cannot use it at all. Still, a few new uses arise, most notably with «thelō» ‘want’ in the expression of the future tense, and somewhat later with «ekhō» ‘have’ as a perfect formation (see footnote 1), and there is also a new circumstantial use as a sentential adverbial adjunct, e.g. ‘upon seeing ...’. There are even some new forms that arise, especially «eisthai» for ‘to be’, replacing the ancient form «ēinai». The infinitive is effectively dead by about the 15<sup>th</sup> or 16<sup>th</sup> centuries, what might be called Pre-Modern Greek, where the «thelō» future type persists in a certain sense, in that this Medieval future was the starting point for the modern «tha»-future type, with «tha» deriving from an impersonal «θelei na ...» ‘it will that ...’, replacing the earlier personal construction «thelō» + Infinitive. At this stage, there are vestiges of the earlier personal future construction with the infinitive<sup>10</sup> but it is clearly giving way to the «tha» type; also, the perfect consisting of «ekhō» + Infinitive continues productively, but the question needs to be asked whether the second part is an infinitive. A negative answer seems appropriate, largely because the form serves no other function in the language; here is where the criterion of generalization across the grammar, discussed in §2, comes into play — the form is isolated and so could just as easily be considered a “perfect participle” or more neutrally “perfect formative” as it could be considered an “infinitive”. Thus, at the Modern Greek stage, besides the perfect-tense formative and some isolated lexical remains, e.g. «filí» ‘a kiss’ from the infinitive «phileîn» ‘to love; to kiss’, the infinitive occurs, marginally, just in some peripheral dialects, as the examples in (1) through (5) indicate.

### 5. *The Romeyka Greek Infinitive, Revisited*

To return to those forms in peripheral dialects, especially those in Romeyka, the forms of particular interest are ones like those seen in (2) which fill infinitival functions but occur with morphology that suggests marking for person and number, i.e. the apparent 2PL ending

<sup>10</sup> To judge from the account in Thumb (1895, §226, 231), such vestigial personal futures occur in some outlying dialects into the late 19<sup>th</sup> century, though they “are not extensively in use”.

«-ete» on «parpatesinete» ‘to walk’. In a certain sense, the appearance of inflection alone is not really an issue, and not necessarily any more of a problem than voice and tense marking for Ancient Greek infinitives (cf. §4) is a problem for Greek or the tensedness of infinitives is in English, where infinitives of the type «to have VERB-ed» are the indirect discourse equivalent (cf. (10b)) of fully tensed direct discourse verbs (cf. (10a)):

(10a) The police now believe *that John committed* the crime last week

(10b) They now believe *John to have committed* the crime last week

By this reasoning, then, «parpatesinete» and other forms like it could be inflected/conjugated (= person-marked) infinitives, and it can be noted that their function is infinitival, involved, e.g., in the expression of purpose in (2).

Nonetheless, there is one unsettling aspect about treating the Romyka forms like «parpatesinete» as infinitives. That is, complement verbs in the rest of Greek (including Southern Italy where infinitives remain, and even elsewhere in Pontic) all occur with person/number-marking along with a prefixed element «na», as in (11):

(11) *đen borite na perpatisete*  
not can-2PL NA walk-2PL  
‘You can not walk’

This element «na», although associated with subordination, is probably not to be treated as a complementizer proper but rather as a (subordinated) mood marker; see most recently Sampanis (2011, 2013) on this. This raises the question of what «(na) perpatisete» is in sentences like (11). It is traditionally referred to as “subjunctive”, and while there is some controversy as to the label<sup>11</sup>, it is universally treated as marked for person and number, via «-ete»; in fact, the full range of person and number forms are found, even occurring in a seemingly redundant manner in combination with person and number marking on the matrix verb, as in (12), where a full paradigm of ‘X can walk’ is given (each literally “X can that X walk”):

(12) 1SG *boró na perpatíso*      1PL *borúme na perpatísume*

<sup>11</sup> See Joseph (2012) for some discussion.

2SG borís na perpatísis  
3SG borí na perpatísi

2PL boríte na perpatísete  
3PL borún na perpatísun

Also, these forms with «na» and person/number marking are (almost) universally treated as “finite”. However, for Miller (2002, pp. 93-110), there is a parallel between these Greek complements, which in later stages of Greek (and into the modern language) stand in for earlier infinitives (e.g. of Ancient Greek), as outlined in §4, and Portuguese “inflected infinitives”, e.g. (Raposo, 1987, p. 86, apud Miller, 2002, p. 76):

- (13) será difícil eles aprov-ar-em a proposta  
will.be difficult they approve-INF-3PL the proposal  
‘It will be difficult for them to approve the proposal’

Miller treats complements like «(na) perpatísete» as Greek inflected infinitives, saying they are infinitives for two reasons. First, he claims they occur with (“big”) PRO, the empty category associated with the understood subject of infinitives and gerunds in languages like English, not (“little”) *pro*, the empty category associated with the understood subject resulting from Subject-Pronoun-Drop, due to the lack of weak crossover effects. Second, they can occur nominalized with the definite article «to», a structure which, according to Miller, “is typical of nonfinite structures... and strange for subjunctives”. Both of these effects can be seen in (14), which is acceptable on the intended reading even with the crossing of paths of coreference («pjon» “crossing over” PRO in that it is fronted and not in its non-question position), and which contains a «na»-clause that is nominalized with the (neuter nominative) definite article «to»:

- (14) pjon<sub>i</sub> nevriaz-i to PRO<sub>i</sub> na plen-i to aftokinito tu t<sub>i</sub>  
whom upset-3SG the NA wash-3SG the car his  
‘Who does PRO washing his car upset?’  
(literally: “whom does the-PRO-washing the-car of-him upset”)

It is not clear that these are compelling considerations. Miller fails to realize, for instance, that all sorts of clauses can be nominalized with definite article «to», so such a structure is hardly much of an indication of nonfinite status, e.g.:

- (15) ðen m’ aresi to pos me kitaz-is  
not me pleases the how me look.at-2SG  
‘I don’t like (the) how you are looking at me!’

Moreover, since the «na perpatisete» type of complement is not so much a development from an earlier infinitive but a selection from among two earlier co-existing choices, namely “true” infinitives and what is universally regarded as a (finite, even if untensed) subjunctive in Ancient Greek (a set of forms morphologically marked differently from other mood forms) that occurred with the complementizer «hina» ‘(so) that’, perhaps a better candidate for Miller’s inflected infinitive would be the Medieval Greek future formation with two concatenated inflected verbs without any complementizer or subordinating element joining them:

- (16) thel-ō graps-ō  
 will-1SG write-1SG  
 ‘I will write’ (literally: “I-will I-write”)

Indeed, Hesseling (1892, p. 40) drew a parallel between these Greek complement verbs such as «grapsō» of (16) and Portuguese “inflected infinitives”, as well as the Pontic forms of (2), citing Deffner directly. But Hesseling seems to be the only scholar<sup>12</sup> to have treated «grapsō» of (16) as an infinitive, so one has to wonder if including it in with the Pontic and Portuguese forms is right. Still, if so, does it perhaps shed light back on Pontic and Portuguese? Are *they* perhaps *not* infinitives?

One has to wonder too if, instead of looking to Portuguese (and Romance varieties) for support for the treatment of Pontic (and «grapsō» of (16)) as inflected infinitives, we took «grapsō» of (16) as finite, and treated Pontic the same way. In that case, could we not then, rather than using Portuguese as a basis for treating the Greek forms as inflected infinitives, use those forms as a basis for saying rather that the Portuguese forms are finite? This might be especially attractive since the Portuguese “inflected infinitive”, under one interpretation, could be said to be something other than a clear infinitive; admittedly, it has the same stem shape as uninflected infinitives, but such was not always the case, as a consideration of the history of these constructions indicates. These points are taken up in the next section.

<sup>12</sup> Presumably Miller would be a second to treat «grapsō» in this way, though he did not discuss this particular construction, focusing only on standard Modern Greek.

## 6. Historical sources of these constructions: Some insight from history?

It is instructive to consider the history of the Portuguese inflected infinitives, and the possibly parallel Medieval Greek futures, as that may shed some light on the situation. Historically, the Portuguese forms may have nothing to do etymologically with infinitives, if, as argued by Williams (1962, pp. 180-4), they derive via a reanalysis of the Latin imperfect subjunctive. This subjunctive in Latin was originally built on a formative *\*-sē-* (to be found in Oscan «fusíd» (= Old Latin «foret», < \*fu-sē-d ‘that it be’)), so that, e.g., «legerem» ‘that I read’ derived from \*leg-e-sē-m. This formation, according to Williams, was reanalyzed as being instead built on the infinitive, e.g. «legere», from \*lege-s-i, a locative of an *s*-stem deverbal noun (cf. §3), and the personal endings associated with it in its subjunctive guise remained, giving a “personal/inflected infinitive”. In such situations, while the history is interesting and important, in the end, if speakers conceived of the form as involving an infinitive, then perhaps etymology does not matter.

The «thelō grapsō» future type of Medieval Greek, by contrast, derives directly from an infinitival construction for the future, e.g., «thelō grapsei» ‘I will write’ (literally “I-will (to-) write”) and reflects a reanalysis of the original infinitive as something else, via the third person singular forms, where the infinitive ending, now «-ei» due to analogy and sound change (see §4), and the 3SG ending happened to converge:

thel-ei graps-ei	==>	thel-ei graps-ei
will-3SG write-INF		will-3SG write-3SG

The new pattern (on the right) then allowed for multiple person/number marking in nonambiguous cases:

thel-ei graps-ei	:	thel-ō graps-ō
will-3SG write-3SG		1SG 1SG

However, despite Hesseling’s drawing a parallel between «grapsō» in this construction and Portuguese, must «grapsō» be considered an “inflected infinitive” just because it derives via a reanalysis of an earlier infinitive? Maybe, one might say, but also maybe not; etymology may be irrelevant.

Interestingly, the Romeyka form in (2) is based – historically – on an infinitive and built morphologically on an infinitive; such a deriva-



tion explains the «-n-» in «parpatesinete», since the older, uninflected infinitive here would be «parpatesin». But one can ask whether, if there is doubt that «grapsō» is an inflected infinitive, the presence of the «-n-» in «parpatesinete» is enough to say that this is still “infinitival” in some sense, or is it just as much of a synchronic analytic step as treating «grapsō» (etc.) in the future formation as an infinitival? Syntactically «grapsō» could simply be an asyndetic construction, i.e. a paratactic arrangement, of two inflected verbs, one bearing the meaning of future and one bearing the meaning of the main verb, that together add up to a future tense – nothing more, nothing less. By extension, «parpatesinete» could simply be, from a synchronic standpoint, an inflected verb form built on a special stem associated with subordination and occurring in subordinate constructions, in much the same way that in the standard Modern Greek perfect tense, forms like «zisi» in «exo zisi» ‘I have lived’ can be argued to be a special formative restricted to that particular composite construction.

## 7. Conclusion

The discussion here admittedly is somewhat inconclusive, in part because answers depend in part on definitions and there is room for disagreement as to how certain key constructs and key notions are defined. Still, the view that emerges over the history of the infinitive in Greek, both the prehistory of the category and its latter history, is one of movement along a scale of “verbiness” on the part of functionally identical sorts of forms that measure up quite differently in terms of their morphosyntactic character: forms that had a fully nominal character prehistorically and thus were as un-verblike, and as fully non-finite, as possible gave way to forms at a later stage in the language, Ancient Greek, that were still nonfinite but were verbal and yet not main-verb-like (being nonfinite), and those in turn gave way to forms in Modern Greek that are fully verbal in all respects and fully finite, unless one redefines the criteria for being finite.

Moreover, besides worrying about definitions and criteria, there is more information that is needed. In particular, might the Pontic «parpatesinete» type qualify as nonfinite if weak crossover effects could be tested for in the language? And, how would it measure up against complements in other dialects that are ostensibly and demonstrably finite with respect to negation and to the placement of weak pronouns, characteristics which Joseph (1978/1990; 1983/2009) has argued are diagnostic for finiteness in Modern Greek?

Despite the presence of loose ends in need of stitching up, we can end on a positive note. Encouraging discussion and detailed grammatical analysis of finiteness, and by the same token, nonfiniteness, across the history of Greek is fruitful, since its roots are all around us: that is, in the end (the *fin-is*), the delimiting act we call “definition” does matter for description and for explanation in making decisions about finiteness and infinitivals. At the risk of sounding flippant about an interesting and important analytic puzzle, it is likely that we can discuss these issues *ad infinit(iv)um*.

### References

- Bartoli M. G. (1925), *Introduzione alla Neolinguistica. Principi, scopi, metodi*, Olschki, Genève.
- Deffner M. (1878), *Die Infinitiv in den pontischen Dialekten und die zusammengesetzten Zeiten im Neugriechischen*, in “Monatsberichte der Königlich Preussischen Akademie der Wissenschaften zu Berlin. Aus dem Jahre 1877”, pp. 191-230.
- Fischer O., Van der Leek F. C. (1981), *Optional vs. Radical Re-Analysis: Mechanisms of Syntactic Change* (review article of Lightfoot 1979), in “Lingua”, 55, pp. 301-50.
- Haspelmath M. (1989), *From Purposive to Infinitive – A Universal Path of Grammaticization*, in “Folia Linguistica Historica”, 10, 1-2, pp. 287-310.
- Hesseling D. C. (1892), *Essai historique sur l’infinitif grec*, in J. Psicharis (éd.), *Etudes de philologie néogrecque*, Bouillon, Paris, pp. 1-43.
- Joseph B. D. (1978-1990), *Morphology and Universals in Syntactic Change: Evidence from Medieval and Modern Greek* (Outstanding Dissertations in Linguistics Series), Garland Publishers, New York (Expanded and updated version of 1978 Harvard University Ph.D. Dissertation).
- Id. (1983-2009), *The Synchrony and Diachrony of the Balkan Infinitive: A Study in Areal, General, and Historical Linguistics*, Cambridge University Press, Cambridge (Reissued in paperback, 2009).
- Id. (2012), *Taming – and Naming – the Greek “Subjunctive”*, in Z. Gavriilidou et al. (eds.), *Proceedings of the 10<sup>th</sup> International Conference of Greek Linguistics*, Democritus University of Thrace, Komotini.
- Los B. (2005), *The Rise of the to-Infinitive*, Oxford University Press, Oxford.
- Mackridge P. (1987), *Greek-speaking Moslems of North-East Turkey: Prolegomena to Study of the Ophitic Sub-Dialect of Pontic*, in “Byzantine and Modern Greek Studies”, 11, pp. 115-37.
- Miller D. G. (2002), *Nonfinite Structures in Theory and Change*, Oxford University Press, Oxford.
- Pellegrini A. (1880), *Il dialetto greco-calabro di Bova*, Loescher, Torino.
- Raposo E. (1987), *Case Theory and Infl-To-Comp: The Inflected Infinitive in European Portuguese*, in “Linguistic Inquiry”, 18, 1, pp. 85-109.

- Rohlf G. (1958), *La perdita dell'infinitivo nelle lingue balcaniche e nell'Italia meridionale*, in A. Rosetti (ed.), *Omagiu lui Iorgu Iordan cu Prilejul Implinirii a 70 de Ani*, Editura Academiei Republicii Populare Romine, Bucharest, pp. 733-44.
- Sampanis K. (2011), *A Diachronic and Typological Approach to the Modern Greek Subjunctive Complementation*, University of Salzburg Ph.D. Dissertation.
- Id. (2013), Summary of *A Diachronic and Typological Approach to the Modern Greek Subjunctive Complementation* (2011 University of Salzburg dissertation), in "Journal of Greek Linguistics", 13, pp. 165-9.
- Sitaridou I. (2007), *Infinitives with Subjects in Greek and Southern Italian Dialects: A Sprachbund Effect*, in D. Bentley and A. Ledgeway (eds.), *Sui dialetti italo-romanzi. Saggi in onore di Nigel B. Vincent*, in "The Italianist", Special Supplement, pp. 221-42.
- Id. (2009), *On the Emergence of Personal Infinitives in the History of Spanish*, in "Diachronica", 26, 1, pp. 36-64.
- Id. (2014a), *The Romeyka Infinitive: Continuity, Contact and Change in the Hellenic Varieties of Pontus*, in "Diachronica", 31, 1, pp. 23-73.
- Id. (2014b), *Modality, Antiveridicality, and Complementation: The Romeyka Infinitive as a Negative Polarity Item*, in "Lingua", 148, pp. 118-46.
- Thumb A. (1895), *Handbuch der neugriechischen Volkssprache*, Karl Trübner, Strassburg (II ed. 1910; English translation by S. Angus, *Handbook of the Modern Greek Vernacular: Grammar, Texts, Glossary*, T. & T. Clark, Edinburgh 1912).
- Timberlake A. (1976), *Nonfiniteness in Finnish*, in R. Harms and F. Karttunen (eds.), *Papers from the Transatlantic Finnish Conference* (Texas Linguistic Forum 5), University of Texas Department of Linguistics Austin, pp. 129-50.
- Williams E. (1962), *From Latin to Portuguese. Historical Phonology and Morphology of the Portuguese Language*, University of Pennsylvania Press, Philadelphia.

