Morphological and telicity aspect with accomplishment VPs in Greek

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1. Introduction

In the literature on aspectuality a clear division is made between lexical aspect (Aktionsart) which focuses on the lexical type of verbs determined by their inherent temporal properties (cf. Rhothstein 2002, Ramchand 2001), predicational or telicity aspect (Dowty 1979, Verkuyl 1972, 1993, in press) which refers to the aspectual type of the predicate and can be either telic or atelic and grammatical or viewpoint aspect which refers to the Slavic ‘type’ of aspect (Comrie 1976, Smith 1991/1997). This article argues for the need to separate the two aspectual domains, i.e. predicational/telicity aspect and grammatical/viewpoint aspect in Greek, a language in which the opposition between imperfective and perfective aspect is morphologically encoded in verb forms (for a same proposal for Russian see also Borik 2002), showing that (a)telicity and (im)perfectivity are aspectual phenomena of different levels (see also Verkuyl 1993).

1 The main ideas of this paper were presented at the 23rd Annual Meeting of the Department of Linguistics in Thessaloniki in May 2002. I would like to thank Melita Stavrou for helpful discussions and extensive comments. Further comments were gratefully received from Anastasia Giannakidou. I also thank the audience of the 5th Chronos Colloquium for their useful feedback, two anonymous reviewers as well as Co Vet for comments and criticisms. All errors are of course mine.

2 Verkuyl (1993) uses the term terminative as a synonym to telic and durative as a synonym to atelic; Tenny (1987, 1994), Levin & Rappaport Hovav (1995) and Brinton (1988) use the term delimited and non-delimited to distinguish between telic and atelic, while Krifka (1989, 1992, 1998, in press) uses quantized and non-quantized respectively, as will become clear later. To avoid confusion I will make use of the terms telic and atelic to denote VP aspect throughout this article.

3 I will not discuss lexical aspect in this study.
It is well known that the aspectual interpretation of verb phrases depends not only on the verb itself but also on the properties of its direct argument (Dowty 1979, Verkuyl 1972, 1993, in press, among others) plus modifiers. The present study is a follow up of previous work of mine (Sioupi 2002a, b, c) and argues that the complement of verbs of creation (write, build) and of verbs of consumption (eat, drink) that can appear bare in Greek, in contrast to the complement that appears as a DP with an indefinite determiner, can affect the aspectual interpretation of the VP in various ways (see Vendler 1967, Dowty 1979, Tenny 1994). Such contrasts are exemplified in (1a, b, c) and (1a', b', c')

(1) a. I Maria troi portokali.
    the Maria eats orange.ACC
    ‘Maria eats/is eating an orange’.
    vs.
    a’. I Maria troi ena portokali.
    the Maria eats an orange.ACC
    ‘Maria eats/is eating an orange’.

b. I Maria grafi gramma ston Yanni.
    the Maria writes letter.ACC to-the Yanni
    ‘Maria writes/is writing a letter to Yanni’.
    vs.
    b’ I Maria grafi ena gramma ston Yanni.
    the Maria writes a letter.ACC to-the Yanni
    ‘I Maria writes/is writing a letter to Yanni’.

c. I Maria xtizi spiti fetos.
    the Maria builds house.ACC this year
    ‘Maria builds/is building a house this year’.
    vs.
    c’ I Maria xtizi ena spiti stin eksoxi.
    the Maria builds a house.ACC in-the country
    ‘Maria builds/is building a house in the country’.

I will show that: (a) the term ‘telicity’ should not be treated as synonymous with the term ‘delimitedness’ (for example Tenny (1987, 1994), Levin & Rappaport Hovav (1995) and Brinton (1988)) and should be distinguished in Greek at least in the case of VPs that contain verbs of creation and verbs of

\* Abbreviations used in interlinear glosses: ACC=accusative case, GEN=genitive case, IMP=imperfective aspect, PERF=perfective aspect, sg=singular, SUBJ=subjunctive.
consumption (see Horrocks & Stavrou to appear), and that (b) telicity depends not only on the verb and on the objects but probably also on the determiner. In the spirit of Sioupi (2002a, b, c) I will claim here that VPs that contain verbs of creation and verbs of consumption followed by an articulated singular count noun as direct object are telic (1a’, b’, c’), whereas those followed by a bare singular count noun are atelic (1a, b,c); finally, telicity does not force perfective aspect in Greek in contrast to Chila-Markopoulou & Mozer (2001) who claim that perfective aspect in activities forces telicity on the verb. I will show that the morphologically marked aspect (perfective/imperfective) does not interfere with (a)telicity but only with (non)-delimitedness.

The paper is organized as follows. In Section 2 I will give a brief literature overview on telicity as well as on grammatical/viewpoint aspect in Germanic languages and in Slavic respectively, and I will define my approach. Section 3 discusses (a)telicity and (non)-delimitedness in Greek. The terminological distinction between (a)telicity and (non)-delimitedness is necessary for VPs with verbs of creation and verbs of consumption. It is proposed that perfectivity does not imply telicity in Greek, and that telicity depends not only on the verb but also on its object as well as on the type of the DP involved. It will be shown that VPs that contain verbs of creation and verbs of consumption are telic when they appear with a DP with an indefinite determiner either in perfective or imperfective aspect, but atelic when they appear with a DP with a null determiner 5. As far as (non)-delimitedness is concerned, it is the morphological aspect in Greek that determines it and not the presence or absence of the determiner. Finally, in section 4 I give some concluding remarks.

2. Defining telicity and viewpoint aspect: background assumptions

In this section I will briefly outline the two major proposals in the literature: the first one gives the definition of an (a)telic VP based on the property of homogeneity as formulated in Vendler (1967), while the second one defines telicity in terms of assuming the existence of end points (Depraetere 1995, Filip 1993, Smith 1991/1997, Krifka 1989, Comrie 1976, Decklerck 1979 among others)6. Then, I will introduce the notion of grammatical/viewpoint aspect.

5 See Sioupi (2001a) as well as Sioupi (2002b) for discussion on null determiners with these verb-complement constructions.

6 In the discussion of telicity the important question that arises is the nature of the objects for which telicity is defined. There are two positions: one can choose either between eventualities or linguistic entities, i.e. predicates. Brinton (1988), Tenny (1987) and Levin and Rappaport Hovav (1995) argue for the former,
aspect as has been applied for Slavic, and then I will present the terminological distinction I will base my analysis on.

2.1 The ‘homogeneity’ approach

Vendler (1967) distinguished four distinct categories of verbs, states (love, hate, etc), activities (walk, play, etc) achievements (arrive, win) and accomplishments (build, break) by their restrictions on time adverbials, tenses and logical entailments. The criteria for this classification are mainly two: continuity and homogeneity. Vendler uses the temporal property of continuity in time - which is important for progressive formation in English - to distinguish between states and achievements and activities and accomplishments. According to him accomplishments and activities sound natural in the progressive while they differ in homogeneity. Activities like running go on in time in a homogeneous way; any part of the process is of the same nature as the whole. This contrasts with accomplishments such as running a mile or writing a letter, which also go on in time but proceed toward a terminus. An obvious question that arises is whether aspectual classes refer to VPs or verbs. Dowty (1979), among others argues, that VPs modifiable by in x time are accomplishments, and VPs modifiable by for x time are activities. In this line of thought, the examples (2) and (3) show that the answer to the above question should be VPs (cf. Krifka 1992, 1998, Tenny 1987, 1994, Rothstein 2001 among others):

(2) a. John walked for an hour.
    b. #John walked in an hour.
    c. #John walked a mile for an hour.
    d. John walked a mile in an hour.

(3) a. #John built a house for a month.
    b. John built a house in a month.
    c. #John built houses in a month.
    d. John built houses for a month.

(2a) shows that walk is an activity verb, but (2d) shows that walk can also head a VP which denotes an accomplishment. In (3b) we see that build a house is naturally interpreted as an accomplishment, while the same verb can head an activity VP when the direct object is a bare plural (3d). The examples in (4) contrast with (3):

(4) a. John pushed a cart for an hour.
    b. #John pushed a cart in an hour.
    c. #John pushed carts in an hour.
    d. John pushed carts for an hour.

(4) shows that while activities like *push* head an activity VP no matter the type of their direct object, *build* (3) allows the properties of the direct object to determine whether it heads an accomplishment or an activity VP when the direct object is a bare plural. It seems then that we can distinguish between those verbs which allow the grammatical properties of the complement to determine their telicity (accomplishments) and those which don’t (activities).

2.2 The ‘end-point’ approach

Garey (1957) examines aspect in French and proposes that if there is a direct object and if this object designates something that has a structure with a temporal ending to it, like *a game of chess* or *a game of tennis* the expression *verb-plus-object* is telic. In the opposite case, if the complement of a verb like *jouer* is *du violon* (the violin) or if there is no object (jouer) the expression is atelic.

Verkuyl (1972) and Dowty (1979) both argue that accomplishment VPs behave as telic or non-telic depending on the properties of the direct object. Van Hout (1997, 1998, in press), following Dowty (1979) proposes that telicity of a VP is not a purely lexical affair, but a compositional process of the verb and its object. *To write a book* implies a culmination point, in constrast to *to write* where no culmination is envisaged. According to her, only incremental theme objects may give telicity. Constructions like *write a book, bake a cheesecake* are telic while *carry a book, look at a play, love cheesecake* are atelic.

Krifka (1989, 1992, 1998, in press) argues that predicates can be characterized as cumulative or quantized: [-Specified Quantity] predicates like *tea, apple* are cumulative, while [+Specified Quantity] predicates like *three cups of tea, three apples* are quantized. According to Krifka if a verb has the appropriate relation with its theme, then the quantized/non-quantized status of the theme determines whether the VP is telic (quantized in his terminology) or non-quantized (atelic).

Tenny (1987, 1994) takes the definition of telicity as a property of the situations denoted by VPs and develops the intuitive notion of measuring out an event. In cases like *peel a carrot*, the object NP *a carrot*, measures out the event expressed by the verb. Levin & Rappaport Hovav (1995), as well as Brinton (1988), adopt Tenny’s terminology to distinguish between telic and atelic.
According to Rothstein (2001) the telic (or culmination) point is the point at which the event is completed, the point at which there is enough of the event for the predicate to correctly apply to it.

Using the traditional diagnostic for telicity, i.e. the in/for test, the count noun direct object in (5a) is naturally interpreted as contributing a telic reading to the VP, while it is rather awkward under a non-telic reading. In contrast, the mass noun or bare plural in (5b) allows for a non-telic reading of the whole VP but not for a telic one.

(5) a. John ate an orange for a couple of minutes.
    in a couple of minutes.

b. John ate ice cream/oranges for a couple of minutes.
    * in a couple of minutes.

2.3 Viewpoint aspect

Aspectual differences in Russian become apparent due to the morphological processes such as prefixation and suffixation. There is no single perfective or imperfective morpheme in Russian. Aspect in Russian is a grammatical category. This means that any given verb form is either perfective or imperfective, so that the category of aspect is obligatorily expressed. However, in contrast to what is the case in Greek, there is not a uniform perfective or imperfective morphological marker. Imperfective verb stems are often morphologically simple, underived. They provide a basis for the derivation of perfective forms, for instance by usually means of prefixation.

For Slavic languages some linguists assume that telic equals perfective (Kabakciev 2000), while others claim that telic does not equal perfective (Borik 2002). Under the hypothesis that telic does not equal perfective there are two options: (a) perfective is dependent on telic, (b) perfective is independent, or dictates conditions independently. For Germanic languages “there is no need for a distinction between perfective and telic, since telic equals perfective” (Verkuyl 1972, this volume).

2.4 A new approach

One difference between Greek and Germanic languages is that Greek marks perfective and imperfective aspect morphologically on verb forms, i.e. each verb in Greek is provided with two mutually exclusive sets of forms marked either for perfective or for imperfective aspect. Every time a verb is used, a form marked for one aspect to the exclusion of the other has to be selected (efagePERF, etrogeIMP = ate-3sg).

Following Horrocks & Stavrou (to appear) who propose an explicit terminological distinction between (a)telicity and (non)-delimitedness, I will
show that this distinction is justified if one considers the aspectual properties of VPs that contain verbs of consumption and verbs of creation which are followed by an indefinite or a bare singular count noun.

Horrocks & Stavrou (to appear) follow Comrie (1976: 44-8) in using telic as a descriptor of accomplishments (i.e. activities with a intrinsic bound identified as their culmination, goal or conclusion). Telicity may be encoded through the combination of a verb in conjunction with a direct object that forms a VP that denotes an activity that may at least optionally be thought of as having a natural endpoint. All other situation types are said to be atelic.

According to Horrocks & Stavrou (to appear: 13) “in languages with a grammaticalised contrast between perfective and imperfective aspect encoded morphologically in their verb forms, the action denoted by a verb may be viewed in one of two ways (...): as a single, complete whole with external ‘bounds’ (beginnings and ends), but without specification of any internal temporal ‘contour’ (in Comrie’s (1976) terminology) characterized in terms of properties like continuousness or progressiveness: such delimited readings are carried by the choice of perfective aspect. Alternatively, it may be conceived exclusively in terms of some internal contour of this sort, i.e. without specification of external bounds: such non-delimited readings are carried by the choice of imperfective aspect”. In what concerns morphological marked aspect I will claim that perfective is indeed independent on telic.

In what follows, I will present an analysis of (a)telicity, as well as of (non)-delimitedness, in Greek.

3. The analysis
3.1 The data

As examples (6a, b), which correspond to (5a) illustrate, the in/for X time test does not give the expected result for cases of verbs of consumption and verbs of creation that appear with a DP containing an indefinite determiner—a fact recently argued by Chila-Markopoulou & Mozer (2001), among others: (6a) which is marked for imperfective aspect is grammatical with for X phrase, in contrast to English (5a) and it is telic, since trogo ena portokali (‘eat an orange’) denotes an activity that has a natural endpoint, as I will show in section 3.2.

(6) a. O Yannis etroge ena portokali epi 10 lepta*/se 10

7 Horrocks & Stavrou (to appear) do not take a position in the definition of telicity, whether taken as a semantic property of VPs or as a property of the situations they denote. I use the adjectives telic atelic in combination with terms like VP, since they are properties of linguistic entities (VPs).
the Yannis ate.IMP an orange.ACC for 10 minutes/*in 10 minutes

‘Yannis was eating an orange for 10 minutes/*in 10 minutes’.

b. O Yannis efage ena portokali se 10 lepta/ *epi 10 minutes

the Yannis ate.PERF an orange.ACC in 10 minutes/*for 10 minutes

lepta.

‘Yannis ate an orange in 10 minutes/*for 10 minutes’.

Next, I will discuss (a)telicity and (non)-delimitedness with respect to verbs of consumption and verbs of creation that appear with a bare singular count noun (7a,b, 8a,b respectively) comparing these constructions with constructions containing a DP with an indefinite determiner, as in (6a,b).

3.2 (A)telicity

I claim that in Greek perfective is independent from telic, in contrast to Chila-Markopoulou & Mozer (2001) who assume that perfective aspect in activities forces telicity and entails specificity of object NPs, ruling out the appearance of bare complements, and in accordance with Giannakidou (2003) who claims that there is no telicity involved in the Greek perfective forms. To illustrate the point, Chila-Markopoulou & Mozer (2001) claim that cases that appear with a bare complement like zografize portreto (paintedIMP-3sg. portrait) and zografise portreto (paintedPERF-3sg. portrait) are ungrammatical since the telicity8 of the verb forces specificity of the object NP and rules out a bare complement. Chila-Markopoulou & Mozer (2001) do not discuss cases with of VPs that contain verbs of creation that appear with perfective aspect and a bare complement like egrapse gramma (wrotePERF-3sg. letter), extise spiti (buildPERF-3sg. house) but only with verbs of consumption like etroge milo (eatIMP-3sg. apple) efage milo (eatPERF-3sg. apple). In order to explain the grammaticality of these cases, they claim that milo (apple) functions as a non count (:mass) noun.

As (6a,b) illustrate9, verbs of creation and verbs of consumption, either perfective or imperfective, that appear with a DP with an indefinite determiner form a telic activity VP (i.e. an accomplishment), since they may be interpreted as having a natural endpoint. In contrast to what happens when a verb takes a DP with an indefinite determiner (6a,b) as its object, I will show that verbs of consumption (7a, b) as well as verbs of creation (8a, b), either imperfective or perfective, that appear with bare singular count nouns

8 By the term telicity the authors may mean delimitedness in my terminology.
9 Cases with mass nouns or bare plurals will not be discussed.
as direct object form atelic VPs, since they act as activities (Sioupi 2002a, c for verbs of creation with bare singular count nouns).

(7) a. O Yannis etroge portokali epi 10 lepta.
    the Yannis ate.IMP orange.ACC for 10 minutes
    ‘Yannis was eating an orange for 10 minutes’.

   b. ??O Yannis efage portokali se 10 lepta.
    the Yannis ate.PERF orange.ACC in 10 minutes
    ‘Yannis ate an orange in 10 minutes’.

(8) a. O Yannis egrafe gramma epi 20 lepta.
    the Yannis wrote.IMP letter.ACC for 20 minutes
    ‘Yannis was writing a letter for 20 minutes’.

   b. ??O Yannis egrapse gramma se 20 lepta.
    the Yannis wrote.PERF letter.ACC in 20 minutes
    ‘Yannis wrote a letter in 20 minutes’.

Verbs of consumption (7), as well as verbs of creation (8) with bare nouns as direct arguments are not acceptable with the adverbial phrase \textit{in x time}, while they are acceptable with the phrase \textit{for x time} (7a, 8a), like simple activity VPs in the examples in (9):

(9) a. #I Maria kolimpise/perpatise se 10 lepta.
    the Maria swam/walked.PERF in 10 minutes
    ‘Mary was swimming for 10 minutes’.

   b. I Maria kolimpuse/perpatouse epi 10 lepta.
    the Maria swam/walked.IMP for 10 minutes
    ‘Mary was swimming for 10 minutes’.

The second test we can use in order to show that these VPs are acting as activity VPs, when they appear with bare DP objects, is the \textit{finish test} (Dowty 1979:57, Borik 2002:16). As (10a,b,c) illustrate, only accomplishments, i.e. telic can normally occur as the complement of \textit{finish}:

(10) a. #O Yannis teliose to xritisimo spitiou
    the Yannis finished.PERF the building.ACC house.GEN
    /to grapsimo grammatos.
    /the writing.ACC letter.GEN
    ‘Yannis finished the building of the house/the writing of the letter’.

   b. O Yannis teliose to zografisma tou
    the Yannis finished.PERF the painting.ACC the GEN
    pinaka.
    picture.GEN
    ‘Yannis finished the painting of the picture’.

c. O Yannis teliose to xritisimo tou
The VPs formed out of verbs of creation and/or verbs of consumption and bare objects behave as activity VPs i.e. they are atelic (see 10a), whereas the same verb classes which appear with a DP containing an indefinite determiner behave as accomplishment VPs, i.e. they are telic VPs (see 10b,c).

Another test that can be used in support of the claim that these VPs are interpreted as activity VPs, when they appear with bare DP objects, is the use of the adverb *almost* (Dowty 1979:58), which has different effects on activities and accomplishments, as (11a, b) shows:

(11) a.  O Yannis paraligo na xti spiti/
the Yannis almost SUBJ build.PERF house.ACC
na grapsi gramma sti Maria.
SUBJ write.PERF letter.ACC to-the Maria

b.  O Yannis paraligo na xti ena spiti/
The Yannis almost SUBJ build.PERF a house.ACC/
na grapsi ena gramma sti Maria.
SUBJ write.PERF a letter.ACC to-the Maria

‘Yannis almost build a house/wrote a letter to Maria’.

(11a) entails that Yannis did not build a house/write a letter to Maria, whereas (11b) seems to have two readings: (a) Yannis had the intention of building a house/writing a letter but changed his mind and did nothing at all, or (b) Yannis did begin some work on the house/letter and he almost but no quite finished it. It is the second reading which is lacking in activities, such as those in (11a).

Summarizing so far we have seen that telicity does not reside with perfective forms and that the type of the determiner of the object DP is what imparts telicity.

3.3 (Non)-delimitedness

Following the terminological distinction of Horrocks & Stavrou (to appear), I will show that morphological aspect in Greek marks (non)-delimitedness; the presence or absence of determiner does not influence (non)-delimitedness: the eventualities referred to by sentences with verbs of creation and verbs of consumption are non-delimited when the verb is marked with imperfective aspect – and this holds independently of whether there is a bare complement.
or a DP with an indefinite determiner – whereas they are delimited when the verb is marked with perfective aspect.

Eventualities denoted by the sentences (12a,b) below are non-delimited according to Horrocks & Stavrou’s definition, since (a) they do not have external ‘bounds’ and (b) the verb is marked with imperfective aspect. Eventualities denoted by the sentences (13a,b) are delimited, since (a) they have external ‘bounds’ (beginnings and ends) and (b) the verb is marked with perfective aspect. For the cases (12c,d) I propose that, although the eventuality denoted has external ‘bounds’ - beginnings and ends - it requires the verb to be marked as imperfective and it is therefore non-delimited. In this case it is not necessary for the eating or the writing event to be completed.

Cases (13c,d), with the verb in perfective and a DP containing an indefinite determiner, are clear instances of delimited eventualities, since the eventuality has external bounds and the verb is marked perfective.

(12) a. O Yannis  egrafe  gramma  (otan ton  sinantisa).
    the Yannis  wrote.IMP letter  (when him.ACC met.1sg-PERF)
    ‘Yannis was writing a letter (when I met him)’.

b. O Yannis  etroge  portokali  (otan mpika).
    the Yannis  ate.IMP  orange    (when came.1sg-PERF)
    ‘Yannis was eating an orange (when I came in)’.

c. O Yannis  egrafe  ena gramma  (otan    ton
    the Yannis  wrote.IMP  a letter   (when him.ACC
    met1sg-PERF)
    ‘Yannis was writing a letter (when I met him)’.

d. O Yannis  etroge  ena portokali  (otan mpika).
    the Yannis  ate.IMP  an orange    (when came.1sg-PERF)
    ‘Yannis was eating an orange (when I came in)’.

(13) a. O Yannis  egrapse   gramma  (htes).
    the Yannis  wrote.PERF letter  (yesterday)
    ‘Yannis  wrote a letter (yesterday)’.

b. O Yannis  efage  portokali (htes).
    the Yannis  ate.PERF  orange   (yesterday)
    ‘Yannis ate an orange (yesterday)’.

c. O Yannis  egrapse  ena gramma  (htes).
    the Yannis  wrote.PERF a letter   (yesterday)
    ‘Yannis  wrote a letter (yesterday)’.

d. O Yannis  efage  ena portokali (htes).
    the Yannis  ate.PERF an orange   (yesterday)
    ‘Yannis ate an orange (yesterday)’.
Summarizing section 3, we can say, along with Verkuyl (1993), that (a)telicity depends not only on the verb and on the nature of the object (count vs. mass) but also on the determiner type of the DP object. However, the presence or absence of the determiner affects only (a)telicity and not (non)-delimitedness. When verbs of creation or production appear with a bare DP object, the VP is atelic on a par with an activity verb class, while with a DP with an indefinite article it is telic. (Non)-delimitedness on the other hand is exclusively a by-product of morphological aspect.

4. Conclusion

I have argued for a separation of predicational/telicity aspect and grammatical/viewpoint aspect in Greek showing that perfectivity is independent from telicity. I have also shown that (a)telicity and (non)-delimitedness are not synonymous terms in Greek: (a) (a)telicity depends (among others) on the determiner: a VP which consists of a DP argument with an indefinite determiner is interpreted as telic, while if the same VP has as its object a bare singular count noun it is atelic, (b) (non)-delimitedness is determined by perfective/imperfective aspect, i.e the eventuality in imperfective aspect is non-delimited, while in perfective is delimited independently of whether the DP complement has an indefinite determiner or is a bare singular count noun.

References


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