ASPECT AND BOUNDEDNESS IN ENGLISH AND ROMANIAN

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Abstract: This paper deals with the interaction of verbal aspect and the type of verb situation (*Aktionsart*) by analyzing the influence of semantic characteristics such as stativity, duration and telicity on aspect in English and Romanian. The paper argues that aspect is related to boundedness in the sense that perfective aspect "binds" the situation which has a goal, while imperfective aspect does not. Thus the semantic notion of boundedness provides a more detailed and deeper analysis of situations with the distinctive feature [+ *goal*] by pointing out whether the goal was actually reached or not.

Keywords: aspect, aktionsart, boundedness, goal

1. Introduction

The notions of durability and duration, that is temporality, can be related in several ways to aspect and boundedness. Generally speaking, the very approach to these two concepts certainly changed thorough time and had their share in transience. More concretely, the notion duration (and possibly durability) has often (but not exclusively) been related to imperfectivity, and temporariness to perfectivity; in traditional, mostly Slavic literature, the category of aspect, in addition to completion, is quite often related to duration (even though there are also opinions that duration is not the essential key notion related to aspect, cf. Comrie 1976). On the other hand, boundedness of a situation could also include the notion of duration or absence of duration.

Therefore, this paper would try to investigate similarities and differences in these areas in English and Romanian and to draw possible conclusions.

2. Aspect and boundedness

One of the crucial issues connected with the category of aspect is its semantic content which is often closely related to the verb semantics itself. Namely, it is rather difficult to delimit the domain of aspect and the domain of traditional *Aktionsart* (lexical aspect), specially because there is an interaction between them, so it seems that aspect often interacts with certain lexical semantic features. As Comrie pointed it out, some semantic features of verbs interact with some aspectual oppositions, prohibiting some combinations or restricting their meaning (Comrie 1976: 41). Some authors, e.g. Ridjanović (1976) also indicate that aspect deals with the (in)divisibility of a situation along the time-line.

These and similar opinions could be a starting point for the assumption that aspect actually interacts with some already existing semantic features making the interpretation complete. One of such approaches is that perfective aspect typically presents the situation in its entirety, as a whole and imperfective as a structure (Comrie 1976, Dahl 1987) or, in other words, that aspect deals with the inclusion or exclusion of the endpoints of a given situation (Smith 1986). Step by step, this could bring us to the notion of boundedness, which means that one can start from an assumption that perfective aspect implies a bounded, while the imperfect aspect unbounded situation.

Actually, relevant basic lexical features which interact with aspect seem to include stativity, telicity and duration – the features making the foundation of one of the lexical classifications of verbs (Vendler 1967, Brinton 1988). Generally speaking, this interaction with boundedness assumes that the situations which imply endpoints (telic situations) in perfective aspect indicate the attainment of the final point, whereas in the imperfective aspect do not.

Further elaboration of this interaction, based on the relevant literature (Declerck 1979), can concentrate on the relation between telicity and boundedness. First of all, even though some authors use the terms telicity and boundedness (together with the terms conclusive, terminative, resultative, cf. Declerck 1979: 761) as synonymous, it seems that these two related notions could be separated. Namely, telicity could be related to the semantic structure of verb lexemes and verb phrases as the existence/absence of a goal, but boundedness should be the additional aspectual feature specifying if the existing goal was reached or not.

However, the notion of telicity itself is a complex notion including several components; according to some authors (Declerck 1979: 766), tending towards a goal requires intention and conscious agent. So, the situations lacking such an agent are thought to be bounded, but not telic, for example:

(1)   a. The rain destroyed the crops within one hour. (Declerck 1979: 765)
       b. Lightning struck five trees in one night. (Declerck 1979: 765)

Actually, it is questionable if telicity has to imply a conscious agent.

2.1 Tests for telicity

To start with, there are several well-known tests (Vendler 1967, Declerck 1979) which point to the presence of a goal; in this paper, one can mention the following tests:
(i) If one stops Ving, one did V; the verbs and verb phrases which can be inserted are atelic, homogeneous situations without cumulation and natural end;
(ii) two kinds of durational adverbials: *in X time* (definite time-span, within which definite time) and *for X time* (how long, time span which can be extended; the former occurs with telic situations, the latter with the atelic ones.
Consider the following examples:

(2)   a. They read all morning.
       b. They read all these letters.

Application of the tests shows that (2a) is atelic and (2b) telic, with the NP representing the goal. Moreover, atelic sentences are homogeneous, so one can assume that *reading* in (2a) was going on in every subinterval of the denoted period, while *reading all these letters* was not.
    On the other hand, boundedness indicates if the situation reached the existing final point or not:

(3)   a. She was reading a letter.
       b. She read a letter.

Example (3a), in the progressive aspect, is telic, but unbounded – it provides no information about the attainment of the existing goal; (3b), in the non-progressive aspect, is telic and the goal is reached or actualized.

2.2 Bounded, unbounded and indefinite situations

It is interesting to notice that in English, in addition to bounded and unbounded, there are also indefinite or ambiguous situations (Declerck 1979). Consider the examples below:

(4)   a. Helen filled the bottle with water.
      b. Helen filled the bottle with water for ten seconds./Helen was filling the bottle with water for ten seconds.
      c. Helen filled the bottle with water in ten seconds.

The first sentence (4a) is thus indefinite or ambiguous when it comes to boundedness: the durational adverbials added disambiguate it, implying that (4b) is telic unbounded (even more clearly in *Helen was filling the bottle with water for ten seconds*) while (4c) is telic bounded. The conclusion could be that the situation itself (without adverbials) is neither inherently bounded nor unbounded.

2.3 Stative/dynamic quality and boundedness

As for the set of features related to telicity, states are inherently unbounded, because they do not imply the final endpoint (Declerck 1979: 773). On the other hand, when it comes to the dynamic situations, there are opinions that momentary situations are telic (Vendler 1967) or that this feature is not applicable to them because they do not have any duration (Declerck 1979). However, this issue is worth discussing, because it seems that momentary achievements are telic, only their goal is realized instantly. In that sense, it seems that it is not really true that momentary situations cannot occur with any durative adverbials (Declerck 1979: 773):

(5)   a. !John fell on the roof for hours. (Declerck 1979: 773) (cf. *was falling*)
      b. *John fell onto the roof in an hour.

In fact, the second example (5b) could be acceptable, but the durative adverbial denotes the time which passed before the moment of the realization of the situation.

As for durative dynamic situations, they are telic if they consist of a limited number of subsituations, i.e. cumulation till the final subsituation of a given situation or a specific number of repeated subsituations is reached:

(6)   a. He swam the river.
      b. The boy kicked the ball three times.

Thus, in (6a) the last subinterval includes the goal, reaching of the other shore, whereas in (6b) there is a definite number of repetitions which makes it telic and bounded.

Durative dynamic situations are atelic if they include a (theoretically) unlimited number of subsituations (in a nonrepetitive main situation) or an unlimited number of repetitions (habitual). This is illustrated by the following examples:

(7)   a. Nevil strolled in the meadow.
      b. Cindy gets up at 7 o'clock.

The first example (7a) does not impose a definite number of subevents, only the main event which could be extended indefinitely (at least theoretically). The other example (7b) contains the repetition of the main event, without the implication that there is a linguistically indicated limit to the repetition.

Finally, durative dynamic situations are indefinite or ambiguous if they are neutral with respect to the number of subintervals or subevents, that is they have a relative terminal point (thus they could be limited or unlimited), so the context (e.g. durative adverbials) indicates telicity. Therefore, if a verb phrase denotes a complete transition to the final point, it is telic. If it denotes just the substages leading to the terminal point, it is atelic.

(8)   a. The corn dried in the fields. (Declerck 1979: 784-785)
      b. The corn dried in the fields in two days.
      c. The corn dried in the fields for two days.

Namely, the typical reading of example (8a) is telic and bounded; however, addition of the appropriate durational adverbial indicates that it is actually ambiguous: it can have both the telic bounded reading (8b) or the telic unbounded reading (8c).

2.4 Summary

To sum up the basic points of this section mention should be made of the fact that the relevant literature usually does not treat telicity as synonymous with boundedness: telicity is a lexical feature of verbs or the syntactically indicated goal, while boundedness relates to aspect. Moreover, the interaction between these two components makes it possible to explain the semantic structure of the entire verb phrase/clause, so there are possible combinations telic bounded and telic unbounded, in addition to atelic unbounded. Finally, in English, there are indefinite or ambiguous lexemes and phrases when it comes to boundedness, in which case the bounded or unbounded reading depends on the context.

3. Aspect and boundedness in Romanian

3.1 Aspect in Romanian

The study of verbal aspect is relatively new in Romanian linguistics. In older Romanian grammars, aspect was not considered a verbal category. The aspectual characteristics of verbs were analyzed in the domain of tense whereas Recent studies analyze verbal aspect as an individual verbal category in Romanian. Nevertheless, some Romanian linguists still believe that aspect does not exist in Romanian, mainly because the aspectual values do not have specific grammatical markers (Luchian 2007:135). In Romanian, aspectual meanings can be expressed periphrastically, morphologically together with the temporal values, rarely by prefixes, more often by the use of adverbials.

Zafiu (2001: 66) defines aspect as "the way the action is realized" (Germ. *Aktiosart*). The authors mention the following main aspectual oppositions:
(i)   perfective / imperfective (*perfectiv / imperfectiv*);
(ii)   (momentan) durative / punctual (*durativ / punctual*)
(iii)   telic / atelic (*telic / atelic*).

Romanian aspect is also defined as a verbal category dealing with the structure of the interval of realization of the action denoted by the verb (GALR 2005: 449). The authors mention several semantic characteristics of verbs:

(i)   The semantic characteristic [finite] renders the perfective / nonperfective (*perfectiv* / *nonperfectiv*) aspectual opposition. Perfective aspect denotes a completed situation while nonperfective denotes an uncompleted one.

(ii) The semantic characteristic [durative] introduces the aspectual distinction between durative (*durativ*) and momentary (*momentan*) situations.

(iii) The semantic characteristic [definite] implies the aspectual opposition individual (*individual*) / generic (*generic*). A situation is considered individual if it happens only once, while a generic situation is typical or normal.

(iv) The semantic characteristic [countable] introduces the aspectual distinction between unique (*unic*) and iterative (*iterativ*) situations, i.e. makes a difference between situations that happen only once and repetitive situations.

(v)   The semantic characteristic [change] distinguishes linear (*linear*) from progressive (*progresiv*) situations. A linear situation implies constant change, while a progressive one implies gradual change.

(vi) The semantic characteristic [divisible] denotes the possibility to divide the situation into phases. It introduces inceptive (*incoativ*), continuative (*continuative*) and terminative (*terminativ*) aspectual values.

3.2 The bounded and unbounded opposition in Romanian

This paper argues that aspect exists as a grammatical category in Romanian. For instance, the difference between the verbs *am scris* (*I wrote*) and *scriam* (*I was writing*) is of an aspectual nature, despite the traditional terminology which defines them as tense. Namely, both verbs are in the past tense, thus the difference between them can only be explained in terms of aspect, not tense. Thus, one can argue that the aspectual opposition perfective / imperfective (*perfectiv* / *imperfectiv*) allows the speaker/writer to present a situation as a structure or as a whole in Romanian as well. Nevertheless, the Romanian aspectual opposition perfective / imperfective is grammatically expressed only in the past tense (*perfect compus* vs. *imperfect*).

For the purpose of this analysis, we will restrict only to some Romanian aspectual values: perfectivity, duration and telicity and investigate the influence of boundedness on aspect in Romanian.

Romanian differentiates bounded from unbounded situations, as shown by the example below:

(9)   a. El a băut apă.
         'He drank water.'
      b. El a băut trei pahare de apă.
         'He drank three glasses of water.'

Sentence (9a) is unbounded since the situation does not tend towards a goal. On the other hand, the sentence (9b) includes a final point, i.e. a goal which was actually reached. Thus sentence (9b) is a bounded telic situation while (9a) is unbounded atelic situation.

Furthermore, the bounded / unbounded distinction can account for the difference and use of the so-called *perfect compus* and the imperfect (*imperfect*) in Romanian. Consider the following examples:

(10) a. El a desenat un cerc.
        'He drew a circle.'
    b. El desena un cerc.
        'He was drawing a circle.'

Sentence (10a) is bounded and telic since the final point was reached, i.e. the circle was drawn. The imperfective meaning in (10b) entails an unbounded situation, i.e. the circle was not completed. The situation in (10b) is telic since it implies a goal but unbounded because that goal was not reached. As seen from examples (10a, b), the imperfective aspect renders bounded situations unbounded.

       The notion of boundedness can be further illustrated by several tests (Vendler 1967, Brinton 1988, Declerck 1979) for distinguishing between bounded and unbounded situations in Romanian. Thus, the test *if one stops Ving, one did V / dacă cineva întrerupe să V (se opreşte din V), el a V* makes a distinction between homogeneous situations and situations consisting of segments including the final point. Unbounded sentences refer to homogeneous situations, whereas bounded sentences do not:

(11) a. Dacă cineva se opreşte din scris, înseamnă că a scris.
        'If one stops writing, one did write.'
    b. Dacă cineva se opreşte din scrisul unei scrisori, înseamnă că nu a scris-o.
        'If one stops writing a letter, one did not write a letter.'

The situation presented in (11a) is homogeneous in nature which means that all its segments are of equal quality. Such situations do not imply any specific final point, thus they are atelic and unbounded. Consequently, the situation in (11a) could be stopped at any point and still get the quality of the whole situation, because all segments of that situation are equal. The bounded situation in (11b) cannot be stopped with the same effect, because it has segments which are not of equal quality, i.e. it has a final segment or a goal (the written letter). Therefore, the situation in (11b) is telic.

       The tests *in X time / în X timp* and *(for) how long / (în) cât timp* further analyze the existence and attainment of a goal:

(12) a. El alerga ore întregi.
        'He was running for hours.'
    b. El a alergat ore întregi.
        'He ran for hours.'
    c. El a alergat o milă într-o oră.
        'He ran a mile in an hour.'
    d. El alerga o milă într-o oră.
        *'He was running a mile in an hour.'

Sentences (12a, b) are unbounded and atelic since the situation does not include a goal, it lasts in time. Sentence (12c) is bounded and telic since the goal was reached within a certain time span (in an hour). However, the English sentence in (12d) is unacceptable because the imperfective aspect does not combine with the adverbial *in X time*, because this adverbial requires a goal to be reached. Thus, the adverbial *in X time* combines with bounded telic situations, while the adverbial *(for) how long* combines with unbounded atelic situations.

It should be pointed out that the Romanian imperfect (*imperfectul*) can also denote a habitual situation in the past. Thus, the Romanian sentence (12d) is grammatical because using the imperfect in this case allows the habitual reading: *Cine era tinăr alerga o milă într-o oră*. However, the Romanian sentence does not mean what the English sentence with the past progressive does. It can only be interpreted as habitual. Correspondingly, the Romanian sentence in (12a) can also denote a habitual situation in the past: *He would run for hours. / He used to run for hours*.

The question *how long did it take to V / cât timp a trebuit să V* occurs only with bounded telic situations since the question implies the attainment of a goal:

(13) a. Cât timp i-a trebuit să citească cartea?
        'How long did it take him to read the book?'
      b. I-au trebuit zece zile să citească cartea.
        'It took him ten days to read the book.'
      c. Cât timp i-a trebuit să citească?
        * 'How long did it take to read?'

The English example (13c) illustrates an unbounded atelic situation, so it is ungrammatical. However, in Romanian, the direct object can be implicit in a sentence like (13c). The sentence means *Cât timp i-a trebuit să citească X? (*where X was mentioned before. For example *A: A citit toată cartea. (He read the whole book.) B: Cât timp i-a trebuit să citească?(How long did it take him to read it?)*, i.e. the sentence can only be interpreted as "he read a specific letter/book/etc. thus, the sentence has a telic reading.

The analysis of Romanian examples shows that the bounded or unbounded nature of the sentence does not depend only on the verb or verb phrase, but also on the nominal constituents (direct object, indirect object and subject):

(14) a. El a băut suc ore întregi.
        'He drank juice for hours.'
      b. El a băut trei pahare de suc ore întregi.
        'He drank three glasses of juice for hours.'

The sentence (14a) is unbounded and atelic even though it is denoted by a perfective verb. The object realized as an uncountable noun *suc / juice* renders the situation unbounded. On the other hand, situation (14b) is bounded and telic because the object (*trei pahare de suc / three glasses of juice*) denotes an end point or a goal which was reached and after which the situation cannot be continued.

Similarly, in (15b) the subject (*un litru de apă / a liter of water*) introduces the notion of a goal which was reached and situation rendered bounded and telic, while the situation in (15a) is unbounded and atelic:

(15) a. Apa a curs ore întregi din robinet.
        'For hours, water ran out of the tap.'
      b. Un litru de apă a curs ore întregi din robinet.
        'For hours, a liter of water ran out of the tap.'

In his attempt to define bounded and unbounded situations, Declerck (1979: 765) argues that bounded sentences cannot simply be defined as situations tending towards a goal since there are unbounded situations that seem to imply a goal, as in the example below:

(16) El a mers spre casă ore întregi.
        'He walked towards the house for hours.'

In (16a) the goal is clearly specified, but not actually reached. Thus the sentence is telic, but unbounded.

On the other hand, some bounded situations do not tend towards a goal:

(17) a. Ploaia a distrus recolta într-o oră.
            'The rain destroyed the crops within an hour.'
        b. Fulgerul a lovit cinci arbori în decurs de o oră.
            'Lightening struck five trees in an hour.'

Declerck (1979: 766) here argues that situations tending towards a goal must have a conscious agent in order to reach the goal. This argument needs additional investigation since in (17a, b) the final point was actually reached (the crops was destroyed, and the trees were actually stricken).

Furthermore, Declerck points out that not only bounded situations involve a terminal point beyond which the situation cannot continue:

(18) El a mers spre plajă.
        'He walked towards the beach.'

Sentence (18a) denotes a telic situation which has a well defined end point after which the situation cannot continue, yet it is unbounded since the subject did not arrive at the beach.

On the other hand, Declerck mentions situations which can continue even though the goal has been reached:

(19) El a colorat gardul.
        'He painted the fence.'

One can continue painting (smearing the paint on) the fence after one has covered it with paint.

Consequently, Declerck (1979: 766) defines bounded sentences as sentences representing a situation as terminating, thus it cannot be used to refer to a situation which has not yet reached a terminal point. This definition can be applied to bounded situations in Romanian as well.

Declerck (1979: 768) also argues that the distinction between bounded and unbounded situations is not enough to account for all linguistic expressions. Thus, he proposes a neutral value to account for situations which are ambiguous between bounded and unbounded. Consider the following examples:

(20) a. Procesiunea a mers pe lângă biserică.
            'The procession walked by the church.'
        b. Insecta s-a furişat prin tub.
            'The insect crawled through the tube.'
        c. El a umplut cisterna cu apă.
            'He filled the tank with water.'

The examples above are ambiguous between bounded and unbounded in Romanian as well. But the use of adverbials can clarify this ambiguity:

(21) a. Cât timp a mers procesiunea pe lângă biserică?
        'For how long did the procession walk by the church?'
     b. Procesiunea a mers pe lângă biserică zece minute.
        'The procession walked by the church for ten minutes.'
     c. Insecta s-a furişat prin tub ore întregi.
        'The insect crawled through the tube for hours.'
     d. Toată după-amiaza el a umplut cisterna cu apă.
        'All afternoon, he filled the tank with water.'

Even though the goal exists, the examples (21a-d) are unbounded since the terminal point was not reached. Such situations are said to be unbounded and telic.

The examples (22a-d), on the other hand, are bounded because the terminal point was actualized:

(22) a. Cât timp i-a trebuit procesiunii să treacă pe lângă biserică?
        'How long did it take the procession to walk by the church?'
     b. Procesiunea a trecut pe lângă biserică în zece minute.
        'The procession walked by the church in ten minutes.'
     c. Insecta s-a furişat prin tub în două ore.
        'The insect crawled through the tube in two hours' time.'
     d. El a umplut cisterna cu apă în treisprezece minute.
        'He filled the tank with water in thirteen minutes.'

The situations in (22a-d) are therefore bounded and telic.

The examples (21a-d, 22a-d) thus prove that the bounded / unbounded interpretation in Romanian results entirely from the existence of durational adverbials.

3.3 Summary

It can be concluded that Romanian verbs and verb phrases function the same as English ones as far as the notion boundedness is concerned. This similarity can be explained by the fact that both languages express aspect periphrastically and not morphologically. It should be pointed out that the Romanian imperfect (*imperfect*) can denote a habitual situation in the past, allowing, in such cases, the occurrence of the imperfective with modifiers designating telic situations.

4. Conclusion

The aim of this paper was to investigate the influence of the semantic feature boundedness on aspect and *Aktionsart* in English and Romanian. The analysis has shown that the semantic features stativity, duration and telicity can be related to aspect and boundedness. In English, the feature stativity influences verbal aspect in the sense that states are inherently unbounded and atelic, because they do not imply a goal, while durative dynamic situations can be telic or atelic depending on the number of subsituations or repetitions they denote.

Furthermore, the durative dynamic situations can be indefinite or ambiguous. In Romanian, however, stative verbs can denote imperfective aspect (*Când am fost mică credeam în Moş Crăciun. / When I was little, I used to believe in Santa Claus.*). Tests for telicity show that Romanian states are unbounded and atelic as well.

The paper suggests that the notions of telicity and boundedness should be separated. Namely, telicity indicates the existence or absence of a goal, while boundedness represents an additional aspectual feature specifying if the existing goal was reached or not. This analysis has shown that all possible combinations, i.e. bounded telic and unbounded telic, unbounded atelic and even bounded atelic, are attested both in English and in Romanian.

The analysis has proven that the interaction of aspect and boundedness assumes that the situations which imply endpoints (telic situations) in perfective aspect indicate the attainment of the final point, whereas in the imperfective aspect they do not.

It should be pointed out that, in English and in Romanian, boundedness can be viewed as three-fold division of situations into: bounded, unbounded and indefinite or ambiguous (Declerck 1979). The analysis has shown that bounded or unbounded reading depends on the context.

Despite the fact that some linguists deny the existence of aspect in Romanian, this analysis has shown that aspectual oppositions do exist. Furthermore, Romanian differentiates bounded from unbounded situations as well. Namely, bounded sentences represent a situation as terminating, while unbounded do not. Consequently, bounded sentences cannot be used to refer to a situation which has not yet reached a terminal point.

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