# Unergative and/or Unaccusative: On the Argument Structure, Semantics and Syntax of Semelfactives in Hungarian

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The focus of this paper is the relationship between the syntactic behaviour and semantic characterization of semelfactive verbs in Hungarian. It will be argued that semelfactives are located in the middle of the unergative-unaccusative continuum based on their syntactic behaviour, and that this mixed behaviour can be derived straightforwardly from the semantic characterisation of the verbs in question. A syntactic model is proposed where the arguments of semelfactive verbs have multiple potential (optional) merge locations. The paper corroborates the hypothesis of an unergative-unaccusative continuum that has been mainly examined for certain Indo-European languages and by means of a singe diagnostic (auxiliary selection), by examining a non-Indo-European language and making use of several diagnostics. As far as syntax and semantics of semelfactives in Hungarian is concerned, this model has better empirical coverage than earlier proposals and has more desirable qualities from a theoretical point of view.

Keywords: argument structure, Hungarian, semelfactives, syntax-semantics interface, unaccusativity

#### 1 Introduction

This paper is concerned with the relationship between the syntactic behaviour and semantic characterization of semelfactive verbs in Hungarian. It will be argued that semelfactives are located in the middle of the unergative-unaccusative continuum based on their syntactic behaviour, and that this mixed behaviour can be derived straightforwardly from the semantic characterisation of the verbs in question. A syntactic model is proposed where the arguments of semelfactive verbs have multiple potential (optional) merge locations.

This paper is organized as follows. After an overview of the unaccusativity hypothesis (Section 2) and the various theoretical accounts for it (Section 3 and 4), semelfactives in Hungarian (Section 5) are examined both in terms of their syntax (Section 6) and semantics (Section 7). We present our proposal for an account of the mixed unaccusative-unergative behaviour of Hungarian semelfactives in Section 7. As a conclusion, Section 8 summarizes the main findings of this paper, pointing out some open issues warranting further research.

## 2 The unaccusativity hypothesis

In linguistic theory, two main groups of predicates have traditionally been distinguished based on the number of arguments they take: single argument (or intransitive) verbs such as *run* or *arrive* and two-argument (or transitive) verbs such as *read*. In many accounts, a third group containing three-argument (or ditransitive) verbs such as *give* is also stipulated.

In essence, the Unaccusativity Hypothesis (Perlmutter 1978) proposes a refinement of this traditional categorization as it claims that the class of single-argument verbs is not homogeneous; rather, it can be neatly subdivided into two disjoint subgroups based on syntactic behaviour. So-called unergative verbs behave like the subject of two-argument verbs, whereas so-called unaccusatives display syntactic behaviour similar to that of the objects of two-argument verbs.

The unaccusativity literature (see the introductory study Alexiadou 2004 for a recent overview) has identified several tests for separating unergatives and unaccusatives. Some of the most widely used are the following (Alexiadou 2004, Bene 2005):

Auxiliary selection as a diagnostic is mostly used for Indo-European languages. It classifies verbs based on whether they take BE or HAVE as auxiliaries:

(1) a. Marie est arrivée retard. Marie BE arrived in late ⇒ unaccusative Marie arrived late.' b. Marie а de honte. rougi blushed of Marie HAVE shame ⇒ unergative

Adjectival passive participles can be constructed from unaccusative and transitive verbs but not from unergative verbs (examples from Alexiadou 2004):

(2) a. der geküßte Student
the kissed student
'the student that was kissed'

b. \*der gearbeitete Student the worked student 'the student that has worked'

c. der eingeschlafene Student the fallen-asleep student 'the student that has fallen asleep'

'Marie turned red with shame.'

As far as resultatives are concerned, only theme arguments (i.e., the objects of transitives or the arguments of unaccusatives) may appear in a resultative structure (Simpson 1983, Levin-Rapaport-Hovav 1995: Direct Object Restriction, Csirmaz 2006):

(3) a. John painted the door red

b. \*John shouted hoarse.'John shouted himself hoarse.'

c. The bottle broke open.

In Hungarian, only transitive or unaccusative verbs may be associated with a verbal particle (É. Kiss 2005): <sup>1</sup>

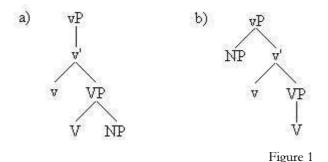
<sup>1</sup> An anonymous reviewer suggests that this claim may be too strong as verbal particles do appear with semelfactives and statives. I shall discuss the co-occurence of verbal particles with semelfactives later in this paper. The co-occurence of verbal particles with statives is an issue beyond the scope of this paper which I will not address here.

- (4) a. Feri meg-sütötte a kenyer-et. Feri PRT-baked the bread-ACC 'Feri baked the bread.'
  - b. Feri meg-érkezett. Feri PRT-arrived. 'Feri arrived.'
  - c. \*Feri el-énekelt. Feri PRT-sang. 'Feri sang.'

The pseudo-object *egyet* ('one, once') can only be associated with unergatives (Kiefer 1992, Pinon 2001):

- (5) a. Feri futott egy-et. Feri ran one-ACC. 'Feri had a run.'
  - b. \*Feri érkezett egy-et. Feri arrived one-ACC. 'Feri arrived.'

As is already evident, not every test of unaccusativity is applicable in every language: e.g. the auxiliary test is obviously irrelevant for languages with no auxiliaries (such as Hungarian) or languages with only one auxiliary (such as English). What is common to all the tests, however, is that they lend strong support to the basic observation that the argument of unaccusatives behaves like the object argument of two-argument verbs, whereas the argument of unergatives behaves like the subject argument of two-argument verbs. Based on this, standard syntactic accounts suppose that the argument of unaccusatives is merged in the object position (a), whereas the argument of unergatives is merged in the subject position (b):



#### 3 Unaccusativity as a syntax-semantics interface phenomenon

One of the main concerns of linguistic research spurred by the unaccusativity hypothesis has been to establish whether the syntactically defined unergative-unaccusative distinction can be correlated to the semantic characterisation of the predicates and arguments in question. While some attempts (such as Dowty 1990 and Levin-Rappaport Hovav 1995) follow a lexical semantic path (hypothesising that the unergativity/unaccusativity of a predicate is coded in the lexicon via its semantic

features); others have treated unaccusativity as a sentence-level property in a compositional framework (such as Borer 1994 and van Hout 2004), typically hypothesising a strong relationship between aspect and unaccusativity.

In lexical semantically oriented models, the syntactic configurations of unergativity/unaccusativity are derived from the lexical-semantic representations via socalled linking rules. The classical representative of this approach is Dowty (1990), where two semantic proto-roles are identified (that of proto-agent and proto-patient), and the position of each argument on the so-called agent-patient spectrum is defined by the amount of semantic properties it shares with either the proto-agent or the proto-patient cluster of properties. This in turn defines the unergativity/unaccusativity of the verb concerned. The proto-agent cluster includes the following semantic properties: volitionality, sentience/perception, the causing of an event or a change of state in another participant, movement (relative to the position of another participant), and existence independently of the event named by the verb. Proto-patient properties include: undergoing a change of state, incremental theme, causally affected by another participant, stationary relative to movement of another participant, no existence independently of the event named by the verb. Verbs with a single argument that has solely or predominantly proto-agent properties are unergative, verbs with a single argument that has solely or predominantly proto-patient properties are unaccusative, verbs with a single argument with mixed properties are unstable and show mixed behaviour in terms of unaccusativity.

It is important to note that Dowty's (1990) model is stochastic (non-deterministic) in the sense that it can readily accommodate (and even predicts) the existence of verbs that are neither purely unergative or purely unaccusative, but are to be found in the middle of what is termed an unergativity-unaccusativity spectrum.

Levin-Rapaport-Hovav (1995) propose a more deterministic model. The relationship between syntactic behaviour and semantic characterisation is modeled by way of so-called linking rules. Variations across languages with regard to the unaccusativity of certain verb classes are accommodated by stipulating an optional ordering of these linking rules:

(i) Immediate cause ⇒ external argument
 (ii) Directed change ⇒ internal argument
 (iii) Existence ⇒ internal argument
 (iv) Other (default) ⇒ internal argument

#### 4 Unergativity and unaccusativity: a blurred distinction

In its original and strongest form, the Unaccusativity Hypothesis stipulates that all single-argument verbs can be distinctly classified as either unergative or unaccusative. More recent research (Sorace 2000, Alexiadou 2004), however, suggests that this is not the case: while there are indeed many verbs that display a uniformly unergative or unaccusative syntactic behaviour, several others show a mixed behaviour both intra- and cross-linguistically (the examples below are taken from the introductory study in Alexiadou 2004):

Some verbs/verb classes (such as verbs of existence) are unergatives in some languages and unaccusatives in others:

- (6) Ι (Italian) vampiri mai esistiti. a. non sono the vampires not BEnever existed. ⇒ unaccusative 'Vampires never existed.'
  - b. There exist three versions of the manuscript.  $\Rightarrow$  unaccusative
  - c. Die Dinosaurier haben/\*sind wirklich existiert. (German)
    the dinosaurs HAVE/\*BE really existed. ⇒ unergative
    'Dinosaurs did exist.'
  - d. Il a/\*est été a l'université. (French)
    he HAVE /\*BE been at the university. ⇒ unergative
    'He was at the university.'

In a given language, certain verbs/verb classes may display mixed behaviour:

- (7) a. La villa ha appartenuto alla mia famiglia. the villa HAVE belonged to-the my family.  $\Rightarrow$  unergative 'The villa belonged to my family.'
  - b. La villa è appartenuta alla mia famiglia.

    the villa BE belonged-FEM to-the my family. ⇒ unaccusative 'The villa belonged to my family.'

This suggests that instead of a strictly and neatly dichotomic distinction, we should in fact stipulate an unergative-unaccusative continuum (spectrum), with strongly unergative and strongly unaccusative verbs at either end, and verbs with varying degrees of mixed behaviour at the corresponding relative position inside the spectrum. If this were indeed the case, the immediate question is how to relate this syntactic phenomenon to the semantic characterisation of the verbs concerned. Sorace (2000) proposes the following model:

#### Semantic characterisation of verb/predicate Syntactic behaviour (auxiliary selection) (i) directed change of location BE (least variation) (ii)change of state (iii) continuation of a pre-existing state (iv) existence of state (v) uncontrolled process (vi) controlled process, motional

HAVE (least variation)

Both intra- and cross-linguistically, verbs expressing a directed change of location are consistently unaccusative and verbs denoting nonmotional controlled processes are unergatives. Verbs denoting an existence of state or an uncontrolled process display mixed syntactic behaviour intra- and cross-linguistically. It is important to note that Sorace uses semantic features the relevance of which has already been identified in the unaccusativity literature; the novelty of her approach lies in the hiearchy proposed.

controlled process, nonmotional

The relevant semantic features are the following:

- (i) dynamicity/stativity
- (ii) affectedness
- (iii) change of location or change of state
- (iv) internal/external causation
- (v) control
- (vi) agentivity
- (vii) telicity

While this proposal has considerable descriptive adequacy, the exact role of the above features in determining unaccusativity is unclear, especially as far as the interaction of the above features is concerned. E.g., activity verbs are at opposite ends of the spectrum (depending on affectedness). A further potential weakness of this analysis is that it examines unaccusativity through a sole diagnostic (auxiliary selection) and across a sample limited to a single language family (Indo-European languages). It is important to note, however, that this proposal entails empirically falsifiable predictions: e.g.: if in a given language, verbs denoting the existence of a state are unaccusative, then all verb classes situated above in the hierarchy (such as change of state verbs) are unaccusative too.

#### 5 Semelfactives

Semelfactives are usually defined as verbs denoting punctual events that have no preparatory stage or result state. In her seminal work, Smith (1991) (extending upon Vendler 1957) proposes three features for the classification of verbs/predicates:

- (i) stative/dynamic,
- (ii) durative/instantaneous
- (iii) telic/atelic

Based on these features, five verb classes are defined, adding semelfactives to the classic Vendlerian four-way categorization:

- (i) *States*: stative, durative, atelic
- (ii) Activities: dynamic, durative, atelic
- (iii) Accomplishments: dynamic, durative, telic
- (iv) Semelfactives: dynamic, instantaneous, atelic
- (v) Achievements: dynamic, instanteneous, telic

In Hungarian, semelfactives can be identified by examining the compatibility of a verb with various time adverbials (Kiefer 2006): semelfactives are unique in that they are only compatible with the time adverbials bearing the -kor ('at') suffix:

(8) a. A fény hat óra-kor fel-villant. the light six hour-at PRT-flashed. 'The light flashed at six o'clock.'

- b. \*A fény hat óra alatt fel-villant. the light six hour under PRT-flashed. 'The light flashed in six hours.'
- c. \*A fény hat órá-ig fel-villant. the light six hour-till PRT-flashed. 'The light flashed until six o'clock.'
- d. \*A fény hat órá-n keresztül fel-villant.
  the light six hour-on through PRT-flashed.
  'The light flashed for six hours.'

Semelfactives in Hungarian are morphologically marked by the suffixes  $-An^2$ , -dul or -int. -An suffixation is still a productive way of verb formation (a non-word such brotty can be turned into a semelfactive with onomatopoeic flavour, brottyan). It is important to note that most single-argument semelfactives have a transitive pair with a -t suffix (robban-robbant), 'explode (intr)'-'explode (tr)'). This phenomenon is quite general for unaccusatives in Hungarian (esik-ejt) 'fall (intr-tr)', siil-siit 'bake (intr-tr)', romol-ront 'deteriorate (intr-tr)'). In the case of many semelfactives, there exists a parallel class of verbs with the -o(n)g suffix, which produces verbs with an iterative reading such as villan-villog ('flash' (semelfactive-iterative)). It is important to note, though, that this phenomenon is not entirely productive.

#### 6 Are semelfactives unaccusatives in Hungarian?

#### 6.1 Tests of unaccusativity in Hungarian

The following tests of unaccusativity have been identified as relevant for Hungarian: Association with the verbal particle (É. Kiss 2006): 

Unaccusativity

- (9) a. Feri meg-sütötte a kenyer-et. Feri PRT-baked the bread-ACC. 'Feri baked the bread (ready).'
  - b. Feri meg-érkezett. Feri PRT-arrived. 'Feri arrived.'
  - c. \*Feri ki-dolgozott.3

    Feri PRT-worked.

    'Feri had a good bit of work.'

Association with the pseudo-object *egyet* (one-ACC, 'one, once') (Kiefer 1992, Piñon 2001): ⇒ Unergativity

<sup>2</sup> -An signifies that the suffix is realised as either -an or -en in accordance with the vowel

harmony rules of Hungarian.

3 It is important to note that the addition of a pseudo-object renders the above sentence

perfectly grammatical: Feri kidolgozta magát (Feri PRT-worked himself-ACC). Cf. Levin-Rappaport-Hovav (1995), Csirmaz (2006).

- (10) a. Feri futott egyet.
  Feri ran one-ACC.
  'Feri had a run.'
  - b. \*Feri érkezett egyet.

    Feri arrived one-ACC.

    'Feri arrived/had an arrival.'

Association with semantically incorporated subject (Marácz 1989, É. Kiss 2002): ⇒ Unaccusativity

(11) a. Vendég érkezett.
guest arrived.
'A guest arrived./Guests arrived.'

\*Munkás dolgozott.
 labourer worked.
 'A labourer worked./Labourers worked.'

Resultative structure (Csirmaz 2006): ⇒ Unaccusativity

(12) a. *Juli darabok-ra törte a vázá-t.* (transitive) Juli pieces-unto broke the vase-ACC 'Juli broke the vase into pieces.'

b. A váza darabok-ra van törve. (stative passive) the vase pieces-unto is broken. 'The vase is broken into pieces.'

c. A váza darabok-ra tört. (unaccusative) the vase pieces-into broke. 'The vase broke into pieces.'

d. \*Juli beteg-re nevetett.

Juli ill-unto laughed.

'Juli laughed (herself) ill.'

# 6.2 The syntax of Hungarian semelfactives in light of unaccusativity diagnostics

Based on their syntactic behaviour, semelfactives in Hungarian are situated in the middle of the unergative-unaccusative spectrum. Based on some diagnostics, they pattern with unergatives (association with the pseudo-object *egyet* (13a)); other tests identify them as unaccusatives (association with verbal particles (13b); association with semantically incorporated unspecific subjects (13c)). A further argument for unaccusativity may be the fact that semelfactives (with some systematic exceptions that will be treated in Section 7.1) belong to the *-ik* verbal paradigm in some dialects of Hungarian (14a-b)). <sup>4</sup> As far as the resultative construction (a strong cross-linguistic unaccusativity diagnostic) is concerned, the grammaticality judgments of native speakers diverge (15a-b); which can be interpreted as a direct reflection of the intermediate position of semelfactives on the unergative-unaccusative spectrum.

<sup>&</sup>lt;sup>4</sup> Historically, the *-ik* verbal paradigm was confined to unaccusatives.

- (13) a. A fény villant egy-et.  $\Rightarrow$  unergative the light flashed one-ACC. 'The light flashed.'
  - b. A fény fel-villant.  $\Rightarrow$  unaccusative the light PRT-flashed. 'The light flashed.'
  - c. Fény villant. ⇒ unaccusative light flashed.
    'A light flashed./Lights flashed./There was a flash of light.'
- (14) a. Pattanik. Robbanik. Mozdulik. ⇒ unaccusative bounce-PRES.3SG explode-PRES.3SG move-PRES.3SG
  'It bounces.' 'It explodes.' 'It makes a move.'
  b. \*bólintik \*köhintik<sup>5</sup> ⇒ unergative
  - nod-PRES.3SG cough-PRES.3SG 'He nods.' 'He makes a cough.'
- (15) a.  ${}^{?}Az$   ${}^{\'}$ irsikló  ${}^{\'}$   ${}^{\'}$   ${}^{\'}$   ${}^{\'}$   ${}^{\'}$  the space shuttle tiny pieces-unto exploded. "The space shuttle exploded into pieces."
  - b. A deszka szilánkok-ra reccsent.  $\Rightarrow$ ?

    the plank splinters-unto cracked.

    'The plank cracked into splinters.'

The observations above raise two closely interrelated questions:

- (i) What is the relationship (if any) between the mixed syntactic behaviour of semelfactives and their semantic characterisation?
- (ii) How is this mixed behaviour to be modelled syntactically?

The above issues have been briefly touched upon by Csirmaz (2006). In her proposal, semelfactives are analyzed as unaccusatives. The pseudo-object *egyet* is taken to be merged in an adjunct position (i.e., not in the position of the internal argument). Since unaccusatives can typically be associated with the verbal particle (see (9) above), this would predict the possible cooccurence of the pseudo-object *egyet* and the verbal particle. This, however, is completely unattested:

(16) \*A fény meg-villant egy-et. the light PRT-flashed one-ACC. 'The light flashed.'

In Csirmaz (2006)'s account, this cooccurence is ruled out via Tenny's (1994) Single Delimiting Constraint.

<sup>&</sup>lt;sup>5</sup> The existence (or non-existence) of these verb forms has been confirmed by several informants hailing from the Northern Transdanubia region of Hungary. See also p. 18. of Popovics (2009) on semelfactives and the *-ik* paradigm.

In the sections below, we propose an alternative and, in our view, more appropriate account for the mixed unergative-unaccusative behaviour of semelfactives in Hungarian.

## 7 A syntactic model for semelfactives with recourse to their semantic characterisation

#### 7.1 The semantics of semelfactives in Hungarian

The semantic characteristics of semelfactives and their correlations with unergativity-unaccusativity as identified in the unaccusativity literature (e.g. Sorace 2000, Alexiadou 2004) are listed below:

(i)	low agentivity (more experiencer than agent):	$\Rightarrow$ unaccusative
(ii)	low volitionality:	$\Rightarrow$ unaccusative
(iii)	low control:	$\Rightarrow$ unaccusative
(iv)	internal causation:	⇒ unergative
(v)	high affectedness	$\Rightarrow$ unaccusative
(vi)	dynamicity	⇒ unergative
(vii)	atelicity:	⇒ unergative

Since some of these features are associated firmly with unaccusativity and others with unergativity in the literature, the conclusion can be drawn that we can provide a natural explanation for the mixed syntactic behaviour of semelfactives by looking at their semantic characteristics. The mixed semantic makeup in terms of features associated with unergativity and unaccusativity is directly reflected in the mixed syntactic behaviour. Moreover, it can be shown that those semelfactives that are in some semantic respects different from semelfactives in general (such as the more agentive and less affected köhint 'cough' and bólint 'nod') and are thus situated at the unergative edge of the unergative-unaccusative continuum show a correspondingly clear unergative behaviour:

Köhint displays unergative syntactic behaviour in terms of the association (or lack of) with the pseudo-object *egyet* and the verbal particle *meg*- and the co-occurence with semantically incorporated subjects:

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(17) a.
           \mathcal{A}
                 fiú
                       köhintett
                                   egy-et.
           the boy coughed
                                   one-ACC
           'The boy coughed./The boy made a cough.'
                       meg-köhintett.
           *A fiú
     b.
           the boy PRT-coughed.
           'The boy coughed./The boy made a cough.'
            *Fiú köhintett.
     С.
           boy coughed.
           'A boy coughed./Boys coughed.'
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Also, *köhint* does not follow the *-ik* paradigm in any dialect, and it is ungrammatical with resultatives:

- (18) \*Köhint-ik.
  cough-PRES.3SG
  'He coughs./He makes a cough.'
- (19) \*A fiú rekedt-re köhintett. the boy hoarse-unto coughed. 'The boy coughed himself hoarse.'

In terms of their semantic makeup, köhint and bólint are very different from typical semelfactives:

(i) high agentivity ⇒ unergative
 (ii) high volitionality ⇒ unergative
 (iii) high control ⇒ unergative
 (iv) low affectedness ⇒ unergative

If we look at the above picture in terms of clusters of properties, it is noteworthy that as far as the cluster we might call 'agent-theme' is concerned, semelfactives have a set of properties (low agentivity, low volitionality and low control) that are typical of unaccusatives. However, measured along the conceptually related diagnostic of internal causation, semelfactives are predicted to be unergative. In terms of event structure, dynamicity and atelicity (in the sense of Smith 1991 and also of Tenny 1994 as measuring out is arguably not interpretable for the purely punctual events denoted by semelfactives) are associated with unergativity.

In terms of semantic classes, most semelfactives in Hungarian can be characterized as either verbs of emission or as verbs of undirected motion.<sup>6</sup> In Levin-Rappaport-Hovav (1995), verbs of emission are analyzed as verbs of motion which are unergatives on a manner of motion reading and unaccusative on a directed motion reading. It might be tempting to adopt this analysis for semelfactives in Hungarian, as many verbal particles do have a direction reading:

(20) A labda fel-pattant. the ball up-bounced 'The ball bounced up.'

Nevertheless, almost all semelfactives are grammatical with the verbal particle meg<sup>7</sup>, which clearly lacks a direction reading.<sup>8</sup> More generally, it is important to note that not all

<sup>&</sup>lt;sup>6</sup> In criticizing a more strongly worded version of the sentence above, an anonymous reviewer pointed out that a number of semelfactives in Hungarian are neither verbs of undirected motion nor of emission. While judgments here are often not clear-cut (e.g. billen 'tilt', a purported counterexample to my claim appears to be a verb of undirected movement to me), I concede that some semelfactives may not fall into either of the two verb classes above (such as *(meg)retten* ('get afraid')).

<sup>&</sup>lt;sup>7</sup> An anonymous reviewer claims that this is not true of some of the semelfactives discussed by me: \*meg-pattan (PRT-bounce), \*meg-robban (PRT-explode). In response, I would argue that megbattan is completely grammatical (as in A labda megbattant, mielőtt a hálóba vágódott. 'The ball bounced before it hit the net.'), while megrobban is somewhat archaic but still acceptable to at least some speakers.

<sup>&</sup>lt;sup>8</sup> It could be argued that *meg* refers to a return to the original state, i.e., the state that obtained prior to the event denoted by the semelfactives; and as such, has a direction reading. However, since

verbs of emission are semelfactives, thus, any explanation of the mixed syntactic behaviour of semelfactives that is solely based on their being verbs of emission would apply to non-semelfactive verbs of emission as well, which would be highly unfortunate as it is only semelfactives (and not other verbs of emission) that display the mixed behaviour discussed here.

In sum, as far as event structure is concerned, semelfactives are predicted to be unergative. In terms of argument structure, semelfactives display features that are conducive to unaccusativity (low agentivity, low volitionality and low control) and also ones that are conducive to unergativity (internal causation). This mixed semantic characterisation in terms of unergativity/unaccusativity results in a mixed unergative/unaccusative syntactic behaviour.

### 7.2 A syntactic model for semelfactives

The question remains how the relationships described above are to be modelled in a more exact syntactic framework. We adopt the standard approach whereby the internal argument (the object or the subject of an unaccusative verb) is merged inside VP, whereas the external argument (the subject of transitives and unergatives) is merged outside VP (e.g. in Spec vP). Unaccusativity as a semantics-syntax interface phenomenon can then be most straightforwardly modelled by assuming that it is the predicate (or the event denoted by the predicate) that places restrictions on the types of arguments, in terms of semantic features, that it can accept.

With most verb classes, the composition of desired semantic features ensures that the argument has a semantic characterisation more or less clearly associated with either the Agent or Theme (proto)role, which in turn means that the argument is to be merged either as an external or an internal argument. In the case of semelfactives, however, the semantic restrictions imposed by the verb (predicate) on the argument define a set of semantic features that is strongly mixed in terms of proto-agent and proto-theme features. This means that no unequivocal selection is to take place and both the external and the internal argument position are legitimate loci for merging the argument.

If the above explanation is correct, one would expect that depending on the actual locus of merging the argument, either the agent or the theme reading would be more accessible. The following pair of sentences seems to bear out this prediction:

(21) a. Magá-tól meg-mozdult.
itself-from PRT-moved
'It moved by itself.'
b. #Magá-tól mozdult egy-et.
itself-from moved one-ACC
'It moved by itself.'

In these sentences, *magától* asserts that the event took place without the interference of an external causer/instigator. Since in (21b), the subject clearly has an Agent reading (because the presence of *egyet* signifies that it was merged in the external argument

such a reading of meg is not independently motivated, such an explanation is close to being circular and we do not adopt it here.

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position), the reading asserted by *magától* (the lack of an external causer/instigator) is already present. This redundancy causes (21b) to be infelicitous (even if grammatical).<sup>9</sup>

As we mentioned in section 5.2, the above questions have been briefly touched upon in Csirmaz (2006). In her proposal, semelfactives are analyzed as unaccusatives. The pseudo-object *egyet* is taken to be merged in an adjunct position (i.e., not in the position of the internal argument), and the cooccurrence of *egyet* and the verbal particle (such as *meg*-) is ruled out by the Single Delimiter Constraint (Tenny 1994).

On closer scrutiny, the above proposal is open to criticism on both empirical and theoretical grounds. On the assumption that semelfactives are unaccusatives, the results of the *magától*-test (21) are difficult to accommodate. Moreover, the analysis of semelfactives cooccuring with the pseudo-object is problematic from a theoretical perspective: the assumption is that while the pseudo-object *egyet* is generally merged in the position of the internal argument, in the case of semelfactives, it is merged as an adjunct. In the absence of any independent motivation of *egyet*-as-adjunct, this explanation is circular and arbitrary. In comparison, the proposal put forward in this paper actually predicts the outcome of the *magától*-test and has no need for stipulating a pseudo-object-as-adjunct.

Finally, it is important to note a peculiar characteristic of semelfactives:

(22) \*A fény villant. the light flashed. 'The light flashed.'

If we assume that in the above sentence, *a fény* is merged as an internal argument, we may resort to the well-known analysis of the incompatibility of verbs of coming-intobeing with specific subjects, which readily explains the ungrammaticality of (22).

However, in our analysis, *villan* is ready to accept *a fény* as an external argument too. In this case, we would firmly expect (22) to be grammatical. This is not the case: on an unergative reading, only a sentence with the pseudo-object *egyet* is acceptable:

(23) A fény villant egy-et. the light flashed one-ACC 'The light flashed.'

In the literature, *egyet* (similarly to verbal particles) is analysed as a situation delimiter (Csirmaz 2006, Tenny 1994): it is taken to telicize or delimit the event, with adding an end state or end point to it. In a descriptive vein, it can be established that in Hungarian, semelfactives obligatorily carry an overt marker of telicity (delimitedness), with the exception of the cooccurence with incorporated non-specific subjects. This can be explained as a case of grammaticalization: an originally optional, emphatic element (*egyet*) gaining the grammatical function of obligatorily encoding delimitedness in the case of semelfactives. This dovetails nicely with the recent observation put forward in Kardos (2011) that telicity needs to be overtly marked in Hungarian.

9 The use of *magától* can be felicitous with unergatives: *Feri magától fogat mosott* ('Feri brushed his b without anyone telling him to do so'). However, in these sentences, *magától* has a special meaning

teeth without anyone telling him to do so'). However, in these sentences, magától has a special meaning ('at his own initiative, without there being external demand or request'). If we interpret magától with its general meaning, the resulting sentence is clearly infelicitous: #Feri magától fogat mosott ('Feri brushed his teeth by himself') vs. A könyv magától leesett ('The book fell by itself').

#### 8 Conclusion

In this paper, we explained the mixed unergative-unaccusative behaviour of semelfactives in Hungarian by recourse to semantic features. So far the hypothesis of an unergative-unaccusative continuum has been mainly examined for certain Indo-European languages (such as Italian, German, French and Dutch) and by means of a singe diagnostic (auxiliary selection) (Sorace 2000, Alexiadou 2004). This paper is a useful contribution inasmuch as it presents evidence corroborating the existence and semantic basis of an unergative-unaccusative continuum. The mixed syntactic behaviour of semelfactives is modeled by assuming that their single argument has two optional merge positions: this model has better empirical coverage than earlier proposals and has more desirable qualities from a theoretical point of view.

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