

Chapter 3 Event structure and aspect

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3. 1. Introduction

This chapter discusses event structural and lexical aspectual phenomena in Hungarian, whose aspectual system resembles that of Slavic languages in many ways and is in significant ways different from the aspectual system of English-type languages, though there are also similarities with the latter, as well. Section 3.2.1 shows how lexical aspectual properties such as telicity and durativity arise in the class of dynamic predicates, while Section 3.2.2 explores various diagnostic tests signalling event complexity and the aspectual class membership of verbal predicates. Section 3.2.3 illustrates the four Vendlerian classes and the class of semelfactives with further examples, and Section 3.2.4 is concerned with the semantic contribution of verbal particles, direct objects and pseudo-objects to the aspectual interpretation of the sentence. Section 3.3 provides an inventory of Kiefer’s eight aktionsarten: the iterative, the frequentative, the diminutive, the semelfactives, the delimitative, the inchoative, the resultative and the submersive aktionsarten. Section 3.4 discusses instances of secondary predication including particle verb constructions, resultatives, depictives, bare nominals and infinitives. Section 3.5 provides some bibliographical notes about the topics discussed in the chapter.

Before I proceed, two comments are in order: (i) In this work I assume that lexical aspect and grammatical aspect are independent (albeit related) grammatical categories, as proposed by Smith (1991/1997), the former being linked to various nodes in the vP, whereas the latter generally being associated with the functional domain above vP. This chapter focuses on the former domain. (ii) Particle verbs will feature heavily in the discussion for their lexical aspectual effects in the sentence. As particles and their base verbs arguably form distinct syntactic units, they will generally be presented with a hyphen between the particle and the verb both in the text and the numbered examples despite the fact that they are spelled solid in Hungarian orthography. Particles with the exception of *meg* will be translated into English in the glosses, whereas *meg* will be glossed as ‘Perf’ in line with the conventions of this book, even though I will mainly discuss arguments for their telicizing function and largely disregard the grammatical aspectual category of the perfective in this chapter.

3. 2. Event structure and lexical aspect

3.2.1. Aspectual classes and event structure: compositionality, tests, and types

The classification of verbal predicates into various aspectual types has long been of central importance to scholars working on event structure and lexical aspect. The reason for this is that the aspectual class membership of verbal predicates directly determines their grammatical properties including their morphological properties and their interaction with various functional categories. Three grammatically relevant properties of verbal predicates that are often considered in investigations of aspectual classes are dynamicity, durativity, and telicity, i.e. the property of having an inherent endpoint. The conflation of these properties gives rise to the classification in Table 1, which was proposed by Vendler (1957/1967) and which has been assumed by many scholars as the standard aspectual classification of verbal predicates up to this day.

Table 1: The Vendlerian aspectual classes

	DYNAMIC	DURATIVE	TELIC
<i>states</i>	-	+	-
<i>activities</i>	+	+	-
<i>accomplishments</i>	+	+	+
<i>achievements</i>	+	+	+

Vendler distinguishes between states, activities, accomplishments, and achievements. States are different from members of the other three classes in that they are not characterized by dynamicity and they do not have an inherent endpoint. Activities contrast with accomplishments and achievements in that the former have a homogeneous internal structure, while the latter are heterogeneous by virtue of having an inherent endpoint. Accomplishments contrast with achievements in that the former have some duration, while the latter are momentaneous. To illustrate each of these aspectual classes, I provide some examples in (1).

- (1) states: *szeret* ‘like/love’, *gyűlöl* ‘hate’, *ismer* ‘know’, *tartalmaz* ‘contain’
 activities: *sétál* ‘walk’, *fut* ‘run’, *újságot olvas* lit. ‘newspaper read’, *táncol* ‘dance’
 accomplishments: *fel-épít egy házat* ‘build a house’, *meg-ír egy cikket* ‘write a paper’, *el-olvas egy könyvet* ‘read a book’, *el-szaval egy verset* ‘recite a poem’
 achievements: *el-tör egy vázát* ‘break a vase’, *el-éri a hegycsúcsot* ‘reach the hilltop’, *meg-érkezik* ‘arrive’, *meg-hal* ‘die’

The class membership of a given verb or verbal expression can be identified with the help of various diagnostics. Some of these are commonly used across a variety of languages, while others are language-specific. In what follows I will focus on those that can be applied to Hungarian verbal expressions so that I can subsequently give an overview of various verb classes in this language. Before that, however, I briefly discuss what components of the discourse contribute to determining temporal properties of events denoted by verbal predicates.

3.2.1.1. The compositionality of event structure properties

It is widely held that event structure properties like telicity/boundedness and durativity are generally determined not only on the basis of the aspectual meaning of the verb heading the predicate, as is suggested in Vendler (1957/1967), but they are calculated compositionally based on what the verb, its argument(s), and sometimes even context contributes to the meaning of the verbal predicate (see Verkuyl 1972, 1993, Dowty 1979, Tenny 1994, Smith 1991/1997, Krifka 1989, 1992, 1998, Hay et al. 1999, among others). First, I illustrate this with how telicity obtains in English in the case of consumption predicates like *eat* and creation predicates like *build*.

- (2) a. John ate a kilogram of rice in/*for an hour.
 b. John ate rice for/*in an hour.
 (3) a. Peter built a house in/?for a year.
 b. Peter built houses for/*in a year.

As evidenced by the compatibility of the frame adverbial *in an hour* and the incompatibility of the durative adverbial *for an hour*, the predicate in (2a) is telic (Vendler 1957/1967). This is due to the fact that the patient argument *a kilogram of rice* measures out the event progressing in an incremental fashion by virtue of supplying specific information about the extent of the event participant along which change (i.e. consumption) occurs (Tenny 1994). Put it more precisely by using Krifka’s (1989) terminology, a telic interpretation arises since (i) the verb *eat* encodes an incremental relation (a homomorphism) that holds between the structure of the patient and the structure of the event and (ii) the patient argument has quantized reference, a property which is inherited by the event argument. This, i.e. the quantized nature of the verbal predicate, gives rise to a telic interpretation. If, by contrast, the patient is not specific enough as to its quantity (i.e. it is non-quantized), an atelic interpretation arises, as shown in (2b). Likewise, predicates like *build* in (3) display the same aspectual behavior. The quantized internal argument *a house* gives rise to a telic reading, as in (3a), while the non-quantized argument *houses* yield atelicity, as in (3b). A similar pattern is also observable in the case of some other predicate types. See, for instance, the motion predicates of (4) and (5).

- (4) a. John ran a mile in/*for an hour.
 b. John ran for/?in an hour.
 (5) a. Charles swam ten laps in/*for two hours.
 b. Charles swam for/*in hours.

In predicates like (4) and (5), it is the path that can measure out the event on the condition that it has quantized reference. In (4a) and (5a), this condition is met and hence a telic reading arises, while (4b) and (5b) are atelic in the absence of a quantized path argument.

In addition to components like verbs and arguments, context can also play a role in aspectual composition. Consider (6).

- (6) a. Kate warmed a plate for/in 10 minutes.
b. Mary wiped the table for/in 10 minutes.

The examples in (6) are characterized by aspectual duality. The verbal expression *warm a plate* in (6a) is a degree achievement (Dowty 1979) expressing a change in the temperature of the referent of the affected argument *a plate*. In this example, a telic interpretation can arise, as evidenced by the compatibility of the temporal adverbial *in 10 minutes*, if context allows the listener to assign an endpoint to the denoted event (i.e. it is known what temperature is attained by the plate at the culmination of the event). If such contextual information is not available, atelicity obtains (Hay et al. 1999). Likewise, English surface context verbs like *wipe* are also characterizable in terms of variable telicity, as shown in (6b). It is again dependent on context whether or not telicity or atelicity arises. In the absence of contextual information, it is generally a telic interpretation that arises such that the event is over when the action expressed by the verb *wipe* has been applied to the entire surface. On the other hand, atelicity can also arise if – given specific contextual cues – “the specific pattern of motion and contact characteristic of the verb is understood as repeated indefinitely over the surface” (Levin and Sells 2009: 311). (For more on the aspectual properties of English surface contact verbs, see, for instance, Rappaport Hovav and Levin 2002.)

Signs of the compositionality of event structure properties like telicity are also observable in Hungarian (É. Kiss 2008, Csirmaz 2008, Maleczki 2008). First, I illustrate this with the examples in (7) and (8), which are the Hungarian equivalents of the English examples in (2) and (3). I use the temporal adverbials *egy óra alatt* ‘in an hour’ and *egy órán át* ‘for an hour’ to probe for (a)telicity. Compatibility with the former indicates the availability of a telic interpretation, whereas compatibility with the latter is a sign of atelicity (for more on these and other aspectual tests, see Section 3.2.1.2.2).

- (7) a. János egy óra alatt evett egykiló rizst.
János an hour under eat.Past.3Sg a kilo rice.Acc
‘János ate a kilogram of rice in an hour.’
b. János egy órán át / *egy óra alatt rizst evett.
János an hour.Sup through / an hour under rice.Acc eat.Past.3Sg
‘János ate rice for an hour.’
- (8) a. Sára egy év alatt épített egy házat.
Sára a year under build.Past.3Sg a house.Acc
‘Sára built a house in a year.’
b. Sára egy éven át / *egy év alatt házakat épített.
Sára a year.Sup through / a year under house.Pl.Acc build.Past.3Sg
‘Sára built houses for a year.’

The examples in (7a) and (8a) show that the presence of a quantized internal argument can give rise to a telic interpretation in predicates containing verbs like *eszik* ‘eat’ and *épít* ‘build’, whereas a non-quantized patient argument yields atelicity, as in (7b) and (8b). A similar pattern arises in the domain of motion predicates, just like in English. I illustrate this with (9) and (10).

- (9) a. János fél óra alatt öt 400 méteres kört futott.
János half hour under five 400 meter.Adj lap.Acc run.Past.3Sg
‘János ran five 400-meter laps in half an hour.’
b. János órákon át / *fél óra alatt 400 méteres köröket futott.
János hour.Pl.Sup through/ half hour under 400 meter.Adj lap.Pl.Acc run.Past.3Sg
‘János ran 400-meter laps for hours.’

- (10) a. Károly fél óra alatt öt hosszt úszott.
Károly half hour under five lap.Acc swim.Past.3Sg
'Károly swam five laps in half an hour.'
- b. Károly fél órán át / * egyfél óra alatt 50 méteres hosszokat úszott.
Károly half hour.Sup through/ a half hour under 50 meter.Adj lap.Pl.Acc swim.Past.3Sg
'Károly swam (50-meter) laps for half an hour.'

If the path measures out the event by virtue of having quantized reference, a telic reading becomes available, as illustrated in (9a) and (10a). Otherwise the predicate is atelic and hence incompatible with the temporal adverbial *fél óra alatt* 'in half an hour', as in (9b) and (10b).

Expressions like *a konyhába* 'into the kitchen' in (11b) also contribute to the telic interpretation of predicates by virtue of naming the goal point reached at the termination of the denoted eventuality.

- (11) a. Kati órákig futott.
Kati hour.Pl.Ter run.Past.3Sg
'Kati ran for hours.'
- b. Kati 10perc alatt a konyhába futott.
Kati 10 minute under the kitchen.Ill run.Past.3Sg
'Kati ran to the kitchen in 10 minutes.'

When it comes to the examination of the role of context in the (un)bounded interpretation of verbal predicates, an important contrast emerges between English and Hungarian. Specifically, contextual cues do not play a role in whether Hungarian verbal predicates like those in (12) and (13) receive a bounded or unbounded interpretation.

- (12) a. Kati 10 percen át / *10 perc alatt melegített egy tányért.
Kati 10 minute.Sup through/ 10 minute under warm.Past.3Sg a plate.Acc
'Kati warmed a plate for 10 minutes.'
- b. Kati 10 perc alatt / *10 percen át fel-melegített egy tányért.
Kati 10 minute under / 10 minute.Sup through up-warm.Past.3Sg a plate.Acc
'Kati warmed a plate in 10 minutes.'
- (13) a. Kati 10 percen át / *10 perc alatt törölte egy asztalt.
Kati 10 minute.Sup through/10 minute under wipe.Past.3Sg a table.Acc
'Kati wiped a table for 10 minutes.'
- b. Kati 10 perc alatt/*10percen át le-törölte egy asztalt.
Kati 10 minute under/ 10 minute.Sup through down-wipe.Past.3Sg a table.Acc
'Kati wiped a table in 10 minutes.'
- c. Kati 10 perc alatt/*10percen át szárazra törölte egy asztalt.
Kati 10 minute under/ 10 minute.Sup through dry.Sub wipe.Past.3Sg a table.Acc
'Kati wiped a table dry in 10 minutes.'

What is important to note here is that predicates containing verbs like *melegít* 'warm' and *töröl* 'wipe' contrast with their English counterparts in that they cannot receive a telic interpretation without a verbal particle like *fel* 'up' in (12b) or *le* 'away' in (13b) or a resultative expression like *szárazra* 'dry.Sub' in (13c) regardless of the quantized nature of the affected argument. Since contextual cues do not have a role in telicity in Hungarian with these predicates, aspectual duality of the type in (6) does not arise in the case of *melegített egy tányért* 'warmed a plate' and *törölte egy asztalt* 'wiped a table'. (For arguments for the telicizing role of verbal particles and resultative expressions, see Section 3.2.2.1.)

Another aspectual property that has been used to illustrate the compositionality of event structure properties is durativity. I illustrate this first with the English examples in (14), which I took from Beavers (2012: 49, (2.49a) and (2.49c)).

- (14) a. The settler will cross the border in an hour.
b. The settlers will cross the border in an hour.

The examples above differ in the internal complexity of the theme, whose referent undergoes a change of location. In particular, the theme is atomic (i.e. it is not decomposable into subparts) in (14a) and complex in (14b). This gives rise to the following aspectual contrast: The predicate in (14a) receives a single, punctual interpretation, which is evidenced by the fact that the temporal adverbial *in an hour* can only refer to the interval preceding the crossing event. The example in (14b), on the other hand, has multiple interpretations such that the temporal adverbial refers to (i) the duration of the crossing event or (ii) the interval preceding the crossing event. This is a sign of durativity.

Similar effects are observable in Hungarian as well. Consider (15).

- (15) a. Az utas öt órákor leszállt a vonatról.
 the passenger five hour.Tmp get_off.Past.3Sg the train.Del
 ‘The passenger got off the train at five o’clock.’
- b. Az utasok öt órákor leszálltak a vonatról.
 the passenger.Pl five hour.Tmp get_off.Past.3Pl the train.Del
 ‘The passengers got off the train at five o’clock.’

The predicates in (15a) and (15b) are different in that the theme in the former has an atomic internal structure, while in the latter it is complex. Similarly to English, this contrast gives rise to an aspectual difference such that (15a) is punctual, whereas (15b) is durative. Evidence for this comes from the different interpretations that are assigned to the predicates in the presence of the time point adverbial *öt órákor* ‘at five o’clock’. In particular, while in (15a) the temporal adverbial refers to the point in time when the event denoted by the predicate occurred, in (15b), it refers to the time of only a proper subpart of the denoted event, i.e. when the last passenger got off the train (for more on time point adverbials, see Section 3.2.1.2.2). In addition, the examples in (16), where the aspectual verb *be-fejez* ‘finish’ is characterized by allowing accomplishments and rejecting achievements (cf. Section 3.2.1.2.2), lend further support to the claim that the durative/punctual nature of the event denoted by the predicate *le-száll a vonatról* ‘get off the train’ is affected by the complexity of the theme.

- (16) a. ??Az utas be-fejezte a leszállást.
 the passenger in-finish.Past.3Sg the getting_off.Acc
 ‘The passenger finished getting off the train.’
- b. Az utasok be-fejezték a leszállást.
 the passenger.Pl in-finish.Past.3Pl the getting_off.Acc
 ‘The passengers finished getting off the train.’

The data above show that aspectual properties like telicity and durativity are often a confluence of what various elements of the discourse contribute to the meaning of the predicate not only in languages like English, but also in Hungarian. The next question, which has long been posed in the literature, is what kind of classes verbal predicates fall into. As was briefly discussed at the outset of this section, Vendler (1957), for instance, proposes a four-way distinction between states, activities, achievements, and accomplishments. Bach (1981, 1986) identifies three classes: states, processes, and events. Pustejovsky (1991, 1995) also distinguishes between three basic event types: states, processes, and transitions. What these three-way distinctions have in common is that they basically subsume Vendler’s accomplishments and achievements under a single class, i.e. the class of events and the class of transitions, respectively. More recently, a two-way classification has been proposed between verbs describing an ordered set of changes, which is often referred to as a scalar change, typically associated with result verbs, and verbs expressing an unordered change or a non-scalar change, an important property of manner verbs, as argued by Rappaport Hovav and Levin (2010). For more on the encoding of manner and result in Hungarian verbal predicates, see Section 3.4. In what follows I focus on verb classes in Hungarian. I begin by reviewing some diagnostic tests that are generally used to probe for the aspectual properties of verbal predicates. Then, I offer an overview of the predicate types that have been identified in the literature. I first discuss predicates that fit into the Vendlerian classes and then I look into predicates that exhibit properties different from those of the Vendlerian types.

3.2.1.2 Diagnostic tests

In this section I review some diagnostic tests which are most commonly used to isolate verb classes in Hungarian, in general, and to determine event structure properties, in particular. First, in Section 3.2.1.2.1, I

focus on tests diagnosing whether events are decomposable or non-decomposable into subevents. Then, in Section 3.2.1.2.2, I discuss compatibility with temporal adverbials and aspectual verbs so that I can lay the groundwork for the aspectual classes of Section 3.2.1.2.3.

3.2.1.2.1 Diagnostic tests of event complexity

It is now widely accepted that certain events can be decomposed into various subevents like a process subevent and a result state, to which various grammatical phenomena make reference. For instance, certain manner adverbials give rise to various interpretations depending on which subpart of the denoted event they refer to (cf. Pustejovsky 1991). Consider the examples from Gyuris and Kiefer (2008: 236, (13)).

- (17) a. János udvariasan el-távozott.
 János politely away-leave.Past.3Sg
 ‘János left politely.’
- b. János udvarias-an beszélt.
 János politely speak.Past.3Sg
 ‘János spoke politely.’

In (17a), there is a scope distinction due to the adverbial *udvariasan* ‘politely’, which gives rise to two different readings: (i) it is either the action of leaving to which *udvariasan* ‘politely’ refers, in which case the sentence means ‘János left in a polite manner’ or (ii) it is the entire event culminating in a state in which János is no longer present over which the adverbial has scope. In this latter case, the sentence is interpreted in a way that it was polite of János to leave. This ambiguity suggests that the event denoted by the predicate is complex, i.e. it is decomposable into temporally independent subparts, a process and a state. By contrast, in (17b), the adverbial has scope over the action of speaking only, which in turn indicates that the predicate is associated with a simple event structure.

Another grammatical phenomenon that makes reference to the internal structure of events involves the use of anaphoric pronouns. This is illustrated in (18) taken from Gyuris and Kiefer (2008: 237, (15)).

- (18) A fizikus meg-próbálta meg-keményíteni a fémét. Ez öt év után sikerült neki.
 the physicist Perf-try.Past.DefObj.3Sg Perf-harden.Inf the metal.Acc this five year after manage.Past.3Sg Dat.3Sg
 ‘The physicist tried to harden the metal. It took him five years to get it done.’

What is relevant regarding (18) is that the pronoun *ez* ‘this’ in the second sentence can only refer to a proper part of the event denoted by the verbal predicate in the first sentence. This can be explained just in case we associate the predicate with a complex event structure consisting of a causing subevent, i.e. a process part, on the one hand, and a caused subevent, i.e. a result state, on the other. The pronoun only refers to the result state that obtains at the culmination of the denoted event expressed by the first sentence.

Next, the assumption that certain events are characterized by having a complex internal structure enables us to account for the semantic relationship between sentences like (19a) and (19b).

- (19) a. János le-festette a kerítést.
 János down-paint.Past.DefObj.3Sg the fence.Acc
 ‘János painted the fence.’
- b. A kerítés le van festve.
 the fence down be.3Sg painted
 ‘The fence is painted.’

There is an entailment relationship between (19a) and (19b) such that the former entails the latter. This can be captured if it is assumed that (19a) is associated with an event that is decomposable into a process subevent and a result state, whereas (19b) describes a state such that it is the result state that constitutes the caused subevent of (19a). For more examples of this sort, see Kiefer (2006: 227).

Finally, I describe the *almost*-test, which is again used to distinguish between predicates associated with a simple event structure and predicates that have a complex event structure (see Dowty 1979, Pustejovsky 1991, Kiefer 2006, Gyuris and Kiefer 2008, Piñón 2008). It has been claimed that the former characterizes activities like *run* and accomplishments like English *eat an apple* or Hungarian *evett egy almát* ‘ate an apple’, while the latter is characteristic of accomplishments like English *ate himself dead* or Hungarian *halálra ette magát* ‘ate himself dead’ (see Levin and Rappaport Hovav 2004). The relevant

property of the adverbial *almost* is that it can have scope over either the whole event denoted by the predicate or a proper subpart of that event. When modifying predicates having a simple event structure, *almost* has scope over the whole event, giving rise to the effect that the verbal predicate has a single interpretation such that the denoted event did not commence. By contrast, when occurring with accomplishments describing complex events, *almost* can have scope over either the whole event containing a causing event and a caused event or only the caused result state. This has the effect that the verbal predicate can be assigned multiple readings. By way of illustration, I first provide Piñón's (2008: 91, (5)) English examples in (20).

- (20) a. Rebecca almost painted a picture.

counterfactual: Rebecca did not begin painting a picture.

scalar: Rebecca did not finish painting a picture.

- b. Rebecca almost painted pictures.

counterfactual: Rebecca did not begin painting pictures.

In (20a), the adverbial *almost* gives rise to either a counterfactual reading such that Rebecca did not begin painting a picture, or a scalar reading such that Rebecca did not finish painting a picture (Rapp and von Stechow 1999). This variability does not characterize (20b), as in this case, the sentence can only mean that the activity denoted by the predicate did not commence. This suggests that a complex event structure is to be attributed to the former, where the adverbial has scope over the entire painting event or only the final state wherein the painting exists, and a simple event structure to the latter, where the adverbial can only pick out the entire event.

Also relevant to this discussion is the claim that accomplishments should not be attributed with a uniform characterization such that all have complex event structures, as was proposed in Pustejovsky (1991, 1995), among others. For instance, Rappaport Hovav and Levin (2001) and Levin and Rappaport Hovav (2004) argue that accomplishments like those containing reflexive objects as *Kate screamed herself hoarse* denote events that are decomposable into a causing subevent (i.e. a process) and a caused result state, which are temporarily independent, whereas others like *The pond froze solid* are associated with a simple event structure. The latter class of accomplishments is further illustrated by predicates denoting the consumption of an individual like *ate an apple* and *drank a beer* and expressions like *read a book* or *memorized a poem*. According to Levin and Rappaport Hovav (2004), a common aspectual property of predicates like *ate an apple* and *read a book* is that in each case, although the events the predicates denote involve two subevents conceptually (the event of consumption and the disappearance of an apple in the case of *ate an apple* and the event of scanning a book and the event of forming a mental representation of a book in the case of *read a book*), from the point of view of the grammar, it is best to analyze the event structure of such predicates as simple by virtue of the fact that the two subevents are temporally dependent, unlike in the case of accomplishments like *Kate screamed herself hoarse*.

This analysis has also been proposed for Hungarian predicates like *evett egy almát* 'ate an apple', which contrast with predicates like *meg-evett egy almát* 'ate an apple' in that the latter can be argued to be associated with a complex structure (Pethő and Kardos 2014). Here I provide a single argument for this proposal by using the *majdnem* 'almost'-test to probe for event complexity. Consider the examples from Pethő and Kardos (*ibid.*).

- (21) a. János majdnem evett egy almát.

János almost eat.Past.3Sg an apple.Acc

'János almost ate an apple.'

counterfactual: János did not begin eating an apple.

- b. János majdnem meg-evett egy almát.

János almost Perf-eat.Past.3Sg an apple.Acc

'János almost ate an apple.'

counterfactual: János did not begin eating an apple.

scalar: János did not finish eating an apple.

The example in (21a) receives a single reading such that the activity of eating did not commence, whereas (21b) has multiple interpretations such that it is either the case that János did not begin eating an apple or

that he did not finish it. This can be explained if we attribute a simple event structure to (21a) and claim that the adverbial has scope over the entire event, and a complex event structure to (21b), where *majdnem* ‘almost’ can pick out either the entire event or only the final state corresponding to a state of affairs in which the apple is gone. For more on the *almost*-test in Hungarian with particle verbs and also with verbs appearing with pseudo-objects like *egyet* ‘one.Acc’, see Kardos and Farkas (2022).

Having reviewed some tests which are aimed at determining whether or not events expressed by verbal predicates can be decomposed into various subevents, I now turn to some other aspectual tests, which check compatibility with temporal adverbials and aspectual verbs. This is necessary since, following (Kiefer 2009), I will mainly rely on these tests in the characterization of various verb classes in Hungarian.

3.2.1.2.2 Diagnostic tests with temporal adverbials and aspectual verbs

Perhaps the most common diagnostics that linguists use to determine a verbal expression’s aspectual class membership are those examining compatibility with various temporal adverbials. In the Hungarian aspectual literature, Kiefer (2006, 2009), for instance, distinguishes between five temporal adverbials in his characterization of Hungarian verb classes, in general, and that of the internal structure of events described by various verbal predicates, in particular. As for the latter, Kiefer assumes three types of subevents, namely states, activities or processes and punctual events, following Engelberg (2000). In what follows, I first review the five temporal adverbial tests discussed in Kiefer (2006, 2009) and briefly address what some of these tests tell us about event structure.

I begin with the *X idő alatt* ‘in X amount of time’ test, which I illustrate in (22).

(22) *alatt* ‘in’-adverbials

- a. Kati 10 perc alatt ki-sétált az állomásra.
Kati 10 minute under out-walk.Past.3Sg the station.Sub
‘Kati walked to the station in 10 minutes.’
- b. János egy év alatt két házat épített.
János a year under two house.Acc build.Past.3Sg
‘János built two houses in a year.’
- c. Mari egy perc alatt észrevette az ajándékot.
Mari a minute under notice.Past.DefObj.3Sg the gift.Acc
‘Mari noticed the gift in a minute.’
- d. Károly két perc alatt meg-találta a kulcsot.
Károly two minute under Perf-find.Past.DefObj.3Sg the key.Acc
‘Károly found the key in two minutes.’
- e. *Sári egy óra alatt futott.
Sári an hour under run.Past.3Sg
- f. *Feri 10 perc alatt táncolt.
Feri 10 minute under dance.Past.3Sg
- g. *Kati öt perc alatt utálta Jánost.
Kati five minute under hate.Past.DefObj.3Sg János.Acc
- h. *Péter egyóra alatt pihent.
Péter an hour under rest.Past.3Sg

As is clear from the examples above, *alatt* ‘in’-adverbials are compatible with accomplishments like (22a) and (22b) and achievements like (22c) and (22d) and they are incompatible with activities like (22e) and (22f) and states like (22g) and (22h). In each of the first four examples, the adverbial refers to the amount of time that was necessary for the goal point lexicalized in the predicate to be reached. For instance, in (22b), it is one year that was necessary for the two houses to come into existence, while in (22d), it was two minutes that was necessary for Károly to end up in a state in which he had the key. An important difference between accomplishments and achievements is that whereas the process that leads to the attainment of a final state constitutes part of the event structure of the former, it is not part of the latter. What falls out of this is that

the predicates that are compatible with *alatt* ‘in’-adverbials share the property of having a result state component. This is the goal point where the events that these predicates express culminate.

Second, I illustrate the *X időn át* ‘for X amount of time’-test. The adverbials that are used in this test come in various forms, as shown in (23).

(23) *át* ‘for’-adverbials

- a. Mari éveken át élt külföldön.
 Mari year.Pl.Sup through live.Past.3Sg abroad.Sup
 ‘Mari lived abroad for years.’
- b. Feri évekig gyűlölte az apját.
 Feri year.Pl.Ter hate.Past.DefObj.3Sg the father.Poss.3Sg.Acc
 ‘Feri hated his father for years.’
- c. Anna órákon keresztül énekelt.
 Anna hour.Pl.Sup through sing.Past.3Sg
 ‘Anna sang for hours.’
- d. János két napot dolgozott.
 János two day.Acc run.Past.3sg
 ‘János worked for two days.’

The examples above show that the adverbials of this test, e.g. *éveken át* ‘for years’, *évekig* ‘for years’, *órákon keresztül* ‘for hours’, and *két napot* ‘for two days’, are compatible with states like (23a) and (23b) and activities like (23c) and (23d). All of these adverbials describe the temporal extent of the event, which can be a process or a state expressed by the predicate.

Third, I discuss time point adverbials like *hat órakor* ‘at six o’clock’ in (24a) and *öt órakor* ‘at five o’clock’ in (24b).

(24) *Time point adverbials*

- a. Sári hat órakor el-tört egy vázát.
 Sári six hour.Tmp away-break.Past.3Sg a vase.Acc
 ‘Sári broke a vase at six o’clock.’
- b. Mariöt órakor meg-halt.
 Mari five hour.Tmp Perf-die.Past.3Sg
 ‘Mari died at five o’clock.’

What these predicates have in common is that they all express momentaneous events which are associated with a result state, e.g. the state in which the vase was broken in (24a) and the state in which Mari was dead in (24b). The adverbials *hat órakor* ‘at six o’clock’ and *öt órakor* ‘at five o’clock’ express at which point in time the events denoted by the respective predicates occurred. Gyuris and Kiefer (2009: 257) point out that time point adverbials are also compatible with punctual predicates that do not express a change of state. For illustration, consider (25).

- (25) a. Mariöt órakor fel-kiáltott.
 Mari five hour.Tmp up-shout.Past.3Sg
 ‘Mari shouted at five o’clock.’
- b. Kati öt órakor fel-sóhajtott.
 Kati five hour.Tmp up-sigh.Past.3Sg
 ‘Kati sighed at five o’clock.’

In addition, accomplishments can also be modified by time point adverbials. In this case, however, it is not the time of the entire event that the adverbial refers to, as in (24) and (25), but only a proper part of it.

- (26) a. Károly hat órakor meg-nézte a híradót.
 Károly six hour.Tmp Perf-watch.DefObj.Past.3Sg the news.Acc
 'Károly watched the news at six o'clock.'
- b. János délben meg-írt egy emailt.
 János noon.Ine Perf-write.Past.3Sg an email.Acc
 'János wrote an email at noon.'

The time point adverbials in these examples refer to the initial subpart of the denoted events. That is, (26a) and (26b) can only be interpreted in a way that Károly started watching the news at six o'clock and János started writing an email at noon, respectively. (For more examples, see Section 3.2.1.3.3).

The fourth test that Kiefer (2006, 2009) uses in his characterization of aspectual classes and event structure properties is the test checking compatibility with adverbials denoting the length of a result state.

(27) *Adverbials denoting the length of a result state*

- a. János 10 percre ki-futott a kertbe.
 János 10 minute.Sub out-run.Past.3Sg the garden.Ill
 'János ran into the garden for 10 minutes.'
- b. Kati 10 percre fel-szaladt az emeletre.
 Kati 10 minute.Sub up-run.Past.3Sg the upstairs.Sub
 'Kati ran upstairs for 10 minutes.'

The examples in (27a) and (27b) both describe events that contain a process that leads to some result state. In each case, the adverbial *10 percre* 'for the period of 10 minutes' modifies the result state in a way that it describes the interval during which this state obtains. Importantly, it is not all predicates associated with a process and a result state that are compatible with this type of adverbial, as illustrated in (28a) and (28b), which I took from (Gyuris and Kiefer (2008: 261, (83c)) and (Kiefer 2009: 255, (27b)), respectively.

- (28) a. *Tibor egy napra ki-mosta a ruhát.
 Tibor a day.Sub out-wash.Past.DefObj.3Sg the dress.Acc
- b. *Fél órára ki-vasalta az ingét.
 half hour.Sub out-iron.Past.DefObj.3Sg the shirt.Poss.3Sg.Acc

These data show that, although the adverbials of this test do not allow us to identify result states in general, once we know that a predicate is compatible with an adverbial like *10 percre* 'for the period of 10 minutes', *egy napra* 'for the period of a day' and *fél órára* 'for the period of half an hour', we can conclude that there is a result state component in the event structure of this predicate (Kiefer 2009: 255).

Fifth, Kiefer also discusses temporal adverbials that describe an endpoint relative to a state or a process.

(29) *Adverbials denoting an endpoint relative to a state or a process*

- a. János tegnapig gyűlölte Annát.
 János yesterday.Ter hate.Past.3Sg Anna.Acc
 'János hated Anna until yesterday.'
- b. Éjfélíg el-borozgatott.
 midnight.Ter away-drink_wine_at_a_leisurely_pace.Past.3Sg
 'S/he drank wine at a leisurely pace until midnight.'
- c. Éjfélíg el-dolgoztatott.
 midnight.Ter aways-work_at_a_leisurely_pace.Past.3Sg
 'S/he worked at a leisurely pace until midnight.'

In (29a), the adverbial *tegnapig* 'until yesterday' expresses the point in time until which the state denoted by the verbal predicate *gyűlölte Annát* 'hated Anna' obtained, whereas *éjfélíg* 'until midnight' in (29b) and (29c) describes the point in time until which the process expressed by *el-borozgat* 'drink wine at a leisurely pace' and *el-dolgoztat* 'work at a leisurely pace', respectively, lasts. Kiefer (2009: 256) points out an interesting property of *el-borozgat* 'drink wine at a leisurely pace' and *el-dolgoztat* 'work at a leisurely pace': It is only

adverbials like *éjfélig* ‘until midnight’ that are perfectly acceptable with these verbs. *Át* ‘for’-adverbials, as in (30a), are rather odd, while *alatt* ‘in’-adverbials are absolutely ungrammatical, as shown in (30b).

- (30) a. ??Öt órá-n át el-dolgoztatott.
 five hour.Sup through away-work_at_a_leisurely_pace.Past.3Sg
- b. *Öt óra alatt el-dolgoztatott.
 five hour under away-work_at_a_leisurely_pace.Past.3Sg

Finally, I close this section with a brief description of the test checking compatibility with aspectual verbs like *el-kezd* ‘begin’ and *be-fejez* ‘finish’, a criterion that can be used to probe for the aspectual property of durativity. For illustration, consider the examples below, where (31a) and (31b) are from Kiefer (2006: 265, (18b) and (18c)).

- (31) a. Péter el-kezdett futni.
 Péter away-begin.Past.3Sg run.Inf
 ‘Peter began running.’
- b. *A fiúk el-kezdték el-érni a hegycsúcsot.
 the boy.Pl away-begin.Past.3Pl away-reach.Inf the hilltop.Acc
 ‘The boys began reaching the hilltop.’
- (32) a. János be-fejezte a maraton közvetítését.
 János in-finish.Past.DefObj.3Sg the marathon broadcasting.Acc
 ‘János finished broadcasting the marathon.’
- b. Károly be-fejezte a levél meg-írását.
 Károly in-finish.Past.DefObj.3Sg the letter Perf-writing.Acc
 ‘Károly finished writing the letter.’

Verbs like *el-kezd* ‘begin’ and *be-fejez* ‘finish’ can only occur in the environment of predicates expressing events that have some duration. This condition is met in (31a) and (32a) and hence the examples are acceptable. By contrast, the example in (31b) is ungrammatical since the predicate *el-éri a hegycsúcsot* ‘reach the hilltop’ describes a punctual eventuality, an achievement. It is also worth noting that, although sentences containing an accomplishment in the presence of aspectual verbs like *be-fejez* ‘finish’ are often semantically redundant, they are grammatical, as in (32b).

3.2.1.3 Predicate classes

Now that we have reviewed various aspectual diagnostics, we are ready to isolate different predicate classes in Hungarian. Thus is what follows in this section, which builds on Kiefer (2006, 2009). I first discuss the well-known Vendlerian classes of states, activities, accomplishments, and achievements, and then I also look into predicates that do not fall into any of these classes.

3.2.1.3.1 States

As was mentioned in Section 3.2.1, stative predicates are durative and lacking in dynamicity. They are also characterizable by the subinterval property, i.e. they hold for any subpart of the whole time interval associated with them (cf. Dowty 1986). For example, the predicate in (33a) applies to the time interval between June and August and any subinterval of that interval (e.g. the interval between June and July), while (33b) expresses a state that holds for the life time of Anna and any subinterval of it (e.g. her childhood).

- (33) a. János júniustól augusztusig Londonban élt.
 János June.Abl August.Ter London.Ine live.Past.3Sg
 ‘János lived in London from June to August.’
- b. Anna egész életében szerette Jánost.
 Anna whole life.Poss.3Sg.Ine love.Past.DefObj.3Sg János.Acc
 ‘Anna loved János all her life.’

As for their compatibility with temporal adverbials, they can occur with *át*-adverbials and time point adverbials but they resist *alatt*-adverbials and adverbials describing endpoints given their homogeneous internal structure.

(34) a. János egy napig/öt órákor tudta a választ.
 János a day.Ter/ five hour.Tmp know.Past.DefObj.3Sg the answer.Acc
 ‘János knew the answer for a day/at five o’clock.’

b. *János egy napalatt/egy napra tudta a választ.
 János a day under/a day.Sub know.Past.DefObj.3Sg the answer.Acc

Interestingly, they are also generally incompatible with aspectual verbs like *el-kezd* ‘begin’ despite their being durative.

(35) a. *József el-kezdte tudni a választ.
 József away-begin.Past.DefObj.3Sg know.Inf the answer.Acc

b. ??József el-kezdett Londonban élni.
 József away-begin.Past.3Sg London.Ine live.Inf

Further, states cannot be viewed progressively, as illustrated in (36).

(36) a. *János éppen tudta a választ, amikor meg-csörrent a telefon.
 János just know.Past.DefObj.3Sg the answer.Acc, when Perf-ring.Past.3Sg the telephone

b. *János éppen szerette Marit, amikor Kati be-lépett a szobába.
 János just love.Past.DefObj.3Sg Mari.Acc, when Kati in-enter.Past.3Sg the room.Ill

3.2.1.3.2 Activities

Activities are similar to states in that they have the subinterval property, they are durative and void of an inherent endpoint. They also pattern with states in the respect that they are compatible with *út*-adverbials and time point adverbials, but resist *alatt*-adverbials and adverbials describing endpoints.

(37) a. János egy óráig/öt órákor sétált.
 János an hour.Ter/five hour.Tmp walk.Past.3Sg
 ‘János walked/was walking for an hour/at five o’clock.’

b. *János egy óra alatt/egy órára sétált.
 János a hour under/an hour.Sub walk.Past.3Sg

In contrast to states, however, they are compatible with aspectual verbs like *el-kezd* ‘begin’, as evidenced by (38).

(38) a. Károly el-kezdett sétálni.
 Károly away-begin.Past.3Sg walk.Inf
 ‘Károly began walking.’

b. Éva el-kezdett dolgozni.
 Éva away-begin.Past.3Sg work.Inf
 ‘Éva began working.’

A number of activities are also compatible with the adverbial *almost*, which diagnoses a simple event structure for them given that they receive a single interpretation in the environment of this adverbial (see Section 3.2.1.2.1).

- (39) a. Mari majdnem futott.
 Mari almost run.Past.3Sg
 ‘Mari almost ran.’
 i.e. ‘Mari didn’t begin running.’
- b. Sára majdnem nevetett.
 Sára almost laugh.Past.3Sg
 ‘Sára almost laughed.’
 i.e. ‘Sára didn’t begin laughing.’
- c. *Péter majdnem dolgozott.
 Péter almost work.Past.3Sg

The examples above show that (i) activities modified by *almost* receive a counterfactual interpretation only and that (ii) for some reason not all activities tolerate this adverbial.

3.2.1.3.3 Accomplishments and achievements

Accomplishments and achievements are similar in that they are both dynamic and have an inherent endpoint (i.e. they are telic). They are also different in that accomplishments are durative, whereas achievements are momentary. These properties have a number of grammatical reflexes, which I now briefly review. First, neither type of predicates has the subinterval property. Consider (40).

- (40) a. Mari el-olvasott egy könyvet.
 Mari away-read.Past.3Sg a book.Acc
 ‘Mari read a book.’
- b. Sára meg-találta a kulcsot.
 Sára Perf-find.Past.DefObj.3Sg the key.Acc
 ‘Sára found the key.’

In (40a) and (40b) the predicates do not apply to any proper subpart of the interval with which they are associated. For example, if Mari read a book from 6 p.m. to 9 p.m., one cannot truthfully say (40a) at 8 p.m.

Second, both types of predicates are compatible with *alatt*-adverbials, time point adverbials and adverbials describing endpoints, but they do not admit *át*-adverbials.

- (41) a. János egy óra alatt/öt órakor/öt órára el-olvasott egy cikket.
 János an hourunder/five hour.Tmp/five hour.Sub away-read.Past.3Sg an article.Acc
 ‘János read an article in an hour/at five o’clock/by five o’clock.’
- b. *János egy órán át el-olvasott egy cikket.
 János a hour.Sup through away-read.Past.3Sg an article.Acc
- (42) a. János egy óra alatt/öt órakor/öt órára meg-találta a kulcsot.
 János an hourunder/five hour.Tmp/five hour.Sub Perf-find.Past.DefObj.3Sg the key.Acc
 ‘János found the key in an hour/at five o’clock/by five o’clock.’
- b. *János egy órán át meg-találta a kulcsot.
 János a hour.Sup through Perf-find.Past.DefObj.3Sg the key.Acc

Importantly, accomplishments like (41a) and achievements like (41a) are interpreted in different ways in the environment of adverbials like *egy óra alatt* ‘in an hour’, *öt órakor* ‘at five o’clock’, and *öt órára* ‘by five o’clock’. *Alatt*-adverbials refer to the time interval of the denoted eventuality in the case of accomplishments, while, in the case of achievements, they describe the time interval that precede the eventuality expressed by the predicate. Adverbials like *öt órakor* ‘at five o’clock’ denote a time point that corresponds to a state of affairs where the eventuality commences in the case of accomplishments and they describe time points at which achievements occur. Adverbials like *öt órára* ‘by five o’clock’, on the other hand, express points in time that correspond to a state of affairs where the endpoint inherent in the predicate is attained. That is, in (41a) János reached the end of the article and in (42a) János had the key at five o’clock. An important difference between the two types of predicates when it comes to these adverbials is that the process that it took to get to this endpoint is inherent in the meaning of accomplishments but not that of achievements.

Third, whereas achievements receive a single interpretation in the presence of *almost*, accomplishments like (43b) are ambiguous.

- (43) a. Sára majdnem meg-találta a kulcsot.
 Sára almost Perf-find.Past.DefObj.3Sg the key.Acc
 ‘Sára almost found the key.’
 i.e. Sára didn’t find the key.
- b. Mari majdnem el-olvasta a verset.
 Mari almost away-read.Past.DefObj.3Sg the poem.Acc
 ‘Mari almost read the poem.’
 i.e. Mari didn’t begin reading the poem.
 or Mari didn’t finish reading the poem.

As was illustrated in Section 3.2.1.2.1, it is not all accomplishments that receive multiple interpretations with *almost*. Examples like (21a), repeated here as (44), receive a counterfactual interpretation only.

- (44) János majdnem evett egy almát
 János almost eat.Past.3Sg an apple.Acc
 ‘János almost ate an apple.’

i.e. János did not begin eating an apple.

As mentioned, the fact that such predicates receive a single interpretation may be an indication of their having a simple event structure, in which respect they pattern with activities, whereas the semantic ambiguity in (43b) may be a sign of event complexity.

Fourth, accomplishments and achievements display a distinct behavior when viewed progressively. While accomplishments are generally compatible with the progressive, achievements are not possible with this aspect. This point is illustrated in (45a) and (45b).

- (45) a. Kati éppen mászott fel egy fára, amikor meg-látott egy kutyát.
 Kati just climb.Past.3Sg up a tree.Sub, when Perf-see.Past.3Sg a dog.Acc
 ‘Kati was climbing up a tree when she saw a dog.’
- b. *Kati éppen érte el a hegycsúcsot.
 Kati just reach.Past.3Sg away the hilltop.Acc

Gyarmathy (2014: 176) observes that some verbs that express punctual events can actually appear in the progressive on the condition that they have an extended incremental argument. This is shown in (46), which I took from Gyarmathy (2014: 181, (3.36)).

- (46) A vonat éppen érkezett be az állomásra.
 the train just arrive.Past.3Sg in the station.Sub
 ‘The train was arriving at the station.’

In this example the extended nature (i.e. the complex internal structure) of the theme *a vonat* ‘the train’ gives rise to the interpretation that there has been an extended change at the termination of which the train was at the station. This enables the listener to view the eventuality progressively.

A final property with respect to which accomplishments and achievements differ is their compatibility with aspectual verbs like *el-kezd* ‘begin’ and *be-fejez* ‘finish’. Whereas the former tolerate these verbs, however redundant they are in some cases, the latter cannot occur in such environments (cf. Section 3.2.1.2.2).

3.2.1.3.4 Semelfactives

A fifth class that we can isolate in Hungarian, similarly to many other languages, is the class of semelfactives (see Smith 1991/1997). As is well known, a characteristic property of these predicates is that they can be interpreted iteratively, in which case they pattern with activities, or instantaneously, in which case they resemble achievements. In English, for instance, the adverbials *once* and *for 10 minutes* can reinforce these two types of interpretation. Consider (47).

- (47) a. The camera flashed once.

- b. The camera flashed for 10 minutes.

Just like achievements, (47a) expresses a momentary situation, whereas (47b) has a process-type interpretation, which brings this example in line with activities. As noted by Gyarmathy (2014: 180), the Hungarian counterparts of verbs like *flash* often come in two different morphological forms depending on the kind of situation that they describe. I illustrate this with (*fel*)-*villan* ‘flash once’ and *villog* ‘flash repeatedly’ in (48), where in (48a) the pseudo object *egyét* ‘one.Acc’ indicates the availability of a single-event interpretation. (For more on *egyét* ‘one.Acc’, see Section 3.2.2.2).

- (48) a. A fényképezőgép fel-villant egyszer/ villant egyet.
 the camera up-flash.Past.3Sg once flash.Past.3Sg one.Acc
 ‘The camera flashed once.’

- b. A fényképezőgép 10 percig villogott.
 the camera 10 minute.Ter flash.Past.3Sg
 ‘The camera flashed for 10 minutes.’

The example in (48a) contrasts with (48b) in that the former describes a momentary situation, whereas the latter has an iterative interpretation. A similar pattern is characteristic of the verb pairs (*meg*)-*csillan* ‘sparkle once’ – *csillog* ‘sparkle repeatedly’, *csattan* ‘snap once’ – *csattog* ‘snap repeatedly’, and *kattan* ‘click once’ – *kattog* ‘click repeatedly’, as shown in (49), (50), and (51).

- (49) a. Egy fénysugár meg-csillant egyszer az autón.
 a ray_of_light Perf-sparkle.Past.3Sg once the car.Sup
 ‘A ray of light sparkled on the car once.’

- b. A fénysugár 10 percig csillogott.
 the ray_of_light 10 minute.Ter sparkle.Past.3Sg
 ‘The ray of light sparkled for 10 minutes.’

- (50) a. Az ostor csattant egyet.
 the whip snap.Past.3Sg one.Acc
 ‘The whip snapped once.’

- b. Az ostor 10 percig csattogott.
 the whip 10 minute.Ter snap.Past.3Sg
 ‘The whip snapped for 10 minutes.’

- (51) a. A zár kattant egyet.
 the lock click.Past.3Sg one.Acc
 ‘The lock clicked once.’

- b. A zár egy percig kattogott.
 the lock one minute.Ter click.Past.3Sg
 ‘The lock clicked for a minute.’

At the same time, some verbs in this class can also be ambiguous, similarly to their English counterparts. I exemplify this with (52), which I took from Kiefer (2009: 247, (12a) and (12b)).

- (52) a. Két órakor tüsszentett.
 two hour.Tmp sneeze.Past.3Sg
 ‘He sneezed at two o’clock.’

- b. Két órán át tüsszentett.
 two hour.Sup through sneeze.Past.3Sg
 ‘He sneezed for two hours.’

The time point adverbial *két órakor* ‘at two o’clock’ diagnoses a single-event interpretation for (52a), while the *át*-adverbial in (52b) brings out the iterative interpretation.

An important difference between achievements like *el-éri a hegycsúcsot* ‘reach the hilltop’ and semelfactives like *kattan* ‘click once’ is that whereas the former can be taken to constitute the endpoint of

an interval preceding the denoted event, the latter is independent of any preceding or subsequent interval (see also Kiefer 1992: 809).

3.2.1.3.5 Other predicates

In Kiefer (2009: 245) predicates like *meg-áll* ‘stop’, *fel-száll a vonatra* ‘get on the train’ and *le-száll a vonatról* ‘get off the train’ also form an individual class. The reason for this is that, although members of this class are similar to achievements like *el-török* ‘break’ and semelfactives like *csattan* ‘snap’ in expressing punctual events, they are also associated with a subsequent state, as evidenced by their compatibility with adverbials describing the length of this state. Consider (53).

- (53) A busz két percre meg-állt.
 the bus two minute.Sub Perf-stop.Past.3Sg
 ‘The bus stopped for two minutes.’

In (53) the temporal adverbial describes the length of state that corresponds to the state of affairs in which the bus came to a halt. This kind of modification is not compatible with achievements and semelfactives, as shown in (54).

- (54) a. *János két percre el-tört egy vázát.
 János two minute.Sub away-break.Past.3Sg a vase.Acc
 b. *Az ostor két percre csattant egyet.
 The whip two minute.Sub snap.past.3Sg one.Acc

Yet another group of predicates that Kiefer (2009: 249) treats as separate from those above are predicates like *végig-ül* ‘sit through’. Consider (55).

- (55) a. Kati végig-ülte a szemináriumot.
 Kati to-sit.Past.DefObj.3Sg the seminar.Acc
 ‘Kati sat through the seminar.’
 b. Kati végig-ette a menüt.
 Kati to-eat.Past.DefObj.3Sg the menu.Acc
 ‘Kati ate through the menu.’

These predicates are special in that they do not admit any temporal adverbial listed in Section 3.2.1.2.2. This is illustrated in (56).

- (56) a. *Kati végig-ülte a szemináriumot egy óra alatt/egy óráig/egy órakor/egy órára.
 Kati to-sit.Past.DefObj.3Sg the seminar.Acc an hour under/an hour.Ter/an hour.Tmp/an hour.Sub
 b. *Kati végig-ette a menüt egy óra alatt/egy óráig/egy órakor/egy órára.
 Kati to-sit.Past.DefObj.3Sg the menu.Acc an hour under/an hour.Ter/an hour.Tmp/an hour.Sub

Kiefer (*ibid.*) points out that the incompatibility above is due to the fact that the object argument serves as a temporal modifier in these sentences and there is simply no room left for another such modifier.

3.2.2. The aspectual role of verbal particles, objects and pseudo-objects

I devote the remainder of Section 3.2 to a more detailed characterization of the aspectual role of verbal particles and objects in Hungarian. In Section 3.2.2.1 I first examine particles more closely, and then, in Section 3.2.2.2., I provide insights into how objects including quasi-objects determine the aspectual make-up of verbal predicates.

3.2.2.1 Verbal particles

Verbal particles have long been at the forefront of attention in Hungarian linguistics for posing interesting questions regarding their structural and semantic properties. They have been analyzed as perfectivizing (Wacha 1989, Kiefer 1992, 2006, Kiefer and Ladányi 2000) or telicizing elements (É. Kiss 2005, 2008, Kardos 2012, 2016, 2019, Gyarmathy 2014, Kardos and Farkas 2022). In this section I will review arguments for the latter, more recent proposal. The role of verbal particles in the encoding of various aktionsarten will be discussed in Section 3.3.

The gist of the first argument for the telicizing role of verbal particles lies in the fact that, as was mentioned in Section 3.2.1.1, Hungarian dynamic predicates (more precisely, non-creation/non-consumption

predicates), are generally either strictly atelic or telic, i.e. they do not show signs of aspectual variability, unlike, for instance, certain degree achievements and surface contact verbs in English. The data in (12), repeated below as (57), suggest that it is particles like *fel* ‘up’ that serve as telicity marking elements, i.e. their presence in the sentence gives rise to a strictly telic interpretation and their absence yields invariable atelicity.

- (57) a. Kati 10 percen át / *10 perc alatt melegített egy tányért.
 Kati 10 minute.Sup through/ 10 minute under warm.Past.3Sg a plate.Acc
 ‘Kati warmed a plate for 10 minutes.’
- b. Kati 10 perc alatt / *10 percen át fel-melegített egy tányért.
 Kati 10 minute under/ 10 minute.Sup through up-warm.Past.3Sg a plate.Acc
 ‘Kati warmed a plate in 10 minutes.’

The example in (57a) above contrasts with its English counterpart from (6a), repeated below as (58), in that the latter can receive either a telic or an atelic reading depending on contextual factors.

- (58) Kate warmed a plate for/in 10 minutes.

As was noted earlier in this chapter, the example above can be interpreted in a way that the affected argument *a plate* reaches a contextually salient degree in temperature at the termination of the denoted event or, in the absence of contextual cues, the predicate is understood as expressing a warming event in the course of which the temperature of the plate increases to some extent.

A second argument for the telicizing nature of verbal particles like *el* ‘away’ and *meg* in (59b) and (60b) has to do with the semantic effects that these elements impose on the affected argument. Specifically, there is a constraint in Hungarian such that in the presence of such verbal particles the theme must be specific about its quantity, as illustrated below. For further examples, see Szili (2001) and É. Kiss (2005, 2008), among others.

- (59) a. *Éva el-olvasott könyvet.
 Éva away-read.Past.3Sg book.Acc
- b. Éva el-olvasott egy könyvet.
 Éva away-read.Past.3Sg a book.Acc
 ‘Éva read a book.’
- (60) a. *Mari meg-evett almákat .
 Mari Perf-eat.Past.3Sg apple.Pl.Acc
- b. Mari meg-evett három almát.
 Mari Perf-eat.Past.3Sg three apple.Acc
 ‘Mari ate three apples.’

Bare singulars like *könyvet* ‘book’ and bare plurals like *almákat* ‘apples’, which have cumulative reference, cannot occur in the presence of particle verbs like *el-olvas* ‘read’ and *meg-eszik* ‘eat’. These verbs require internal arguments that supply specific information about the quantity of their referent, as in the case of *egy könyvet* ‘a book’ and *három almát* ‘three apples’. This restriction also characterizes predicates containing resultative secondary predicates like *darabokra* ‘into pieces’ in (61) and *templommá* ‘into a church’ in (62).

- (61) a. *Kati darabokra tört poharat.
Kati piece.Pl.Sub break.Past.3Sg glass.Acc
- b. Kati darabokra tört egy poharat.
Kati piece.Pl.Sub break.Past.3Sg a glass.Acc
'Kati broke a glass into pieces.'
- (62) a. *A pápa templommá alakított kápolnákat.
the pope church.TrE turn.Past.3Sg chapel.Pl.Acc
- b. A pápa templommá alakított három kápolnát.
the pope church.TrE turn.Past.3Sg three chapel.Acc
'The pope turned three chapels into a church.'

The resultative phrases above are similar to the verbal particles *el* 'away' and *meg* in (59) and (60) in that the former also impose semantic constraints on the internal arguments such that they must supply specific information as to the quantity of their referent. Notice that in English, for instance, verbal particles like *up* and resultative expressions like *into pieces* do not restrict the quantificational properties of the internal argument. Consider (63).

- (63) a. Kate warmed up plates for 10 minutes/*in 10 minutes.
- b. Kate ate up apples for 10 minutes/*in 10 minutes.
- (64) a. John broke glasses into pieces for 10 minutes/*in 10 minutes.
- b. The pope turned chapels into a church for 10 years/*in 10 years.

The internal arguments in the examples above refer cumulatively and hence they cannot serve as delimiters to the denoted event. This gives rise to the effect that it is only an atelic interpretation that arises in each case, as evidenced by the acceptability of the *for*-adverbials and the unacceptability of the *in*-adverbials.

Finally, a third piece of evidence for the telicizing role of verbal particles is that they must be licensed in predicates expressing a momentary change, as illustrated in (65) and (66). For more illustration of this phenomenon, see É. Kiss (2008: 27).

- (65) a. *Mari halt.
Mari die.Past.3Sg
- b. Mari meg-halt.
Mari Perf-die.Past.3Sg
'Mari died.'
- (66) a. *Éva tört egy vázát.
Éva break.Past.3Sg a vase.Acc
- b. Éva el-tört egy vázát.
Éva away-break.Past.3Sg a vase.Acc
'Éva broke a vase.'

The data above exemplify situations that are associated with an inherent endpoint. In (65) this endpoint corresponds to a state of affairs where Mari is dead, whereas in (66) it is a state wherein the vase is broken. Such situations are generally expressed by predicates containing a particle verb (or a resultative construction, as in (61b)). The omission of the verbal particle yields an ungrammatical sentence, as shown in (65a) and (66a). This and the data above suggest that verbal particles like *meg*, *el* 'away' and *fel* 'up' lexicalize the goal point inherent to the telic situations expressed.

Potential counterexamples to this claim are provided in (67), where the achievements *tör egy darab kenyeret* 'break a piece of bread' and *szakít egy darab papírt* 'tear a piece of paper' are shown to be grammatical in the absence of a verbal particle.

- (67) a. *Éva tört egy darab kenyeret.*
Éva break.Past.3Sg a piece bread.Acc
 ‘Éva broke a piece of bread (off of a loaf of bread).’
- b. *Kati szakított egy darab papírt.*
Kati tear.Past.3Sg a piece paper.Acc
 ‘Kati tore a piece of paper (off of a larger piece of paper).’

The situations expressed by (67a) and (67b) contrast with (65b) and (66b) in that the former express creation events while the latter express change-of-state events. This has important consequences regarding the grammatical behavior of these predicates. Specifically, it has been observed (É. Kiss 2005, 2008, Kardos 2012, 2019) that while change-of-state predicates generally require a particle or a resultative expression to receive a telic interpretation, in the case of creation and consumption predicates a quantized theme will be sufficient for telicity. Some more examples illustrate this in (68).

- (68) a. *János egy év alatt épített egy házat.*
János a year under build.Past.3Sg a house.Acc
 ‘János built a house in a year.’
- b. *Sára egy óra alatt sütött egy kalácsot.*
Sára an hour under bake.Past.3Sg a sweetbread.Acc
 ‘Sára baked a loaf of sweetbread in an hour.’

Compatibility with the temporal adverbials *egy év alatt* ‘in a year’ and *egy óra alatt* ‘in an hour’ shows that the quantized themes *egy házat* ‘a house’ and *egy kalácsot* ‘a loaf of sweet bread’ satisfy the requirements for telicity. Interestingly, these creation predicates, which both contain indefinite themes, have different interpretations when they appear with a particle. Specifically, *épít* ‘build’ and *süt* ‘bake’ contrast with *fel-épít* ‘build’ and *meg-süt* ‘bake’ in that the latter require themes that are linked to an entity in the previous discourse (cf. Kálmán 1995: 227). I illustrate this with (69), which I adopted from É. Kiss (2005: 69, (29)).

- (69) *A háziasszony egész délelőtt a konyhában tüsténkedett,*
the housewife whole morning the kitchen.Ine work.Past.3Sg
és kettő-re meg-sütött egy kalácsot.
and two.Sub Perf-baked.Past.3Sg a sweetbread.Acc
 ‘The housewife was working in the kitchen the whole morning, and by two she baked a loaf of sweetbread.’

Aspectually, *meg-sütött egy kalácsot* ‘baked a loaf of sweet bread’ in (69) is interpreted telically, just like (68b), but, whereas the former expresses the coming into existence of a loaf of sweet bread that is familiar from context, (68b) describes a situation where the sweet bread is an independent entity, i.e. it is not discourse-linked.

At this point it is fitting to note that not all verbal particles have telicizing effects in Hungarian. As has been pointed out by Kiefer (2006), among others, predicates containing particle verbs like intransitive *fel-szolgál* ‘serve’ and intransitive *fel-olvas* ‘read out loud’ do not receive a bounded interpretation. This is illustrated in (70).

- (70) a. *Kati egész nap fel-szolgált.*
Kati whole day up-serve.Past.3Sg
 ‘Kati served guests all day.’
- b. *Péter egész nap fel-olvasott.*
Péter whole day up-read.Past.3Sg
 ‘Péter read out loud texts all day.’

In addition to these, particles sometimes accompany verbs expressing stative situations, which are again void of an inherent endpoint. This is shown in (71).

- (71) *Az asszony el-viselte a férje hűtlenségét.*
the woman away-bear.Past.3Sg the husband.Poss.3Sg infidelity.Poss.3Sg.Acc
 ‘The woman tolerated her husband’s infidelity.’

As was stated at the outset of this chapter, event structure properties like boundedness and durativity are calculated compositionally in Hungarian. It is verbal particles, resultative predicates and various arguments

that contribute to the lexical aspectual values of verbal predicates. So far we have seen how verbal particles, and to some extent, resultative predicates determine what aspectual interpretations may arise. Next I will discuss the aspectual contribution of arguments. Before that, however, I close this section with the proposal that Hungarian verbal particles have crucial effects on the complexity of the event denoted by the predicate such that they introduce a subevent into the event structure of the head verb thereby turning verbs associated with a simple event structure into verbs having a complex event structure containing a causing subevent (a process) and a caused subevent (a result state) (Pethő and Kardos 2014). The first argument for this is that given the Argument-Per-Subevent Condition according to which for each subevent in the event structure of a verb there must be an argument XP in the syntax (Rappaport Hovav and Levin 2001), this property of verbal particles explains why in their presence the theme argument cannot remain unexpressed, as illustrated in (72) and (73).

(72) a. Kati (egész nap) olvasott (egy könyvet).

Kati whole day read.Past.3Sg a book.Acc

‘Kati read (a book) (all day).’

b. Kati el-olvasott #(egy könyvet).

Kati away-read.Past.3Sg a book.Acc

(73) a. Mari egész nap evett.

Mari whole day eat.Past.3Sg

‘Mari ate all day.’

b. Mari meg-evett #(egy tortát).

Mari Perf-eat.Past.3Sg a cake.Acc

Whereas verbs like *olvas* ‘read’ and *eszik* ‘eat’ allow implicit objects, *el-olvas* ‘read’ and *meg-eszik* ‘eat’ require their object to appear on the syntactic surface. If this requirement is not fulfilled, the sentence will be ill-formed, as in (72b) and (73b). Interestingly, a small set of particle verbs such as *ki-takarít* ‘clean’ do allow implicit objects, as shown in (74), contra our expectations in light of the claim above.

(74) Kati ki-takarított.

Kati out-clean.Past.3Sg

‘Kati cleaned (her house/her bedroom/*her shoes/*her car).’

A peculiar characteristic of the verb *ki-takarít* ‘clean’ is that, unlike *olvas* ‘read’ and *eszik* ‘eat’, it allows the omission of conventional objects only, as is clear from the translation in (74), which may actually render this phenomenon as independent of the omissibility of objects in (72a) and (73a). See also É. Kiss (2004, 2005) for the observation that verbs like *ki-takarít* ‘clean’ and *el-mosogat* ‘do the dishes’ express established and institutionalized activities. Similar effects are observable in English, where the verb *clean* allows the omission of the object under very specific circumstances. Consider (75).

(75) It took Peter three hours to clean (his room/his house/*his shoes/*his car).

The effect of verbal particles on event complexity has other consequences as well. Specifically, the event template of expressions containing particle verbs cannot be further augmented with non-subcategorized arguments. In this respect they resemble English verbs like transitive *break* and *open*, which are assumed to be associated with a complex event structure. I illustrate this constraint on template augmentation (Rappaport Hovav and Levin 2001) first with the English example in (76), which I took from Rappaport Hovav and Levin (2005: 110, (34a)) and then with (77) from Hungarian, which is from Pethő and Kardos (2014).

(76) *My kids broke me into the poorhouse.

(77) *Az egér meg-evett egy lyukat a sajtba.

the mouse Perf-eat.Past.3Sg a hole.Acc the cheese.Ill

This restriction does not apply to bare verbs like *eszik* ‘eat’, which have a simple event structure. This is shown in (78).

- (78) Az egér evett egy lyukat a sajtba.
 the mouse eat.Past.3Sg a hole.Acc the cheese.Ill
 ‘The mouse ate a hole into the cheese.’

Finally, as demonstrated in Section 3.2.1.2.1, the *almost*-test also diagnoses a simple event structure for bare verbs like *eszik* ‘eat’ and a complex event structure for their counterparts containing a particle.

3.2.2.2 Objects and pseudo-objects

As mentioned in the previous sections, arguments can also figure into aspectual properties of predicates. Canonical examples illustrating this are verbs expressing the coming into existence or the disappearance of an entity. Consider (79) and (80).

- (79) a. János 10 perc alatt rajzolt egy kutyát.
 János 10 minute under draw.Past.3Sg a dog.Acc
 ‘János drew a dog in 10 minutes.’
- b. Kati egy óra alatt főzött egy fazék levest.
 Kati an hour under cook.Past.3Sg a pot soup.Acc
 ‘Kati cooked a pot of soup in an hour.’
- (80) a. Péter 10 perc alatt ivott két sört.
 Péter 10 minute under drink.Past.3Sg two beer.Acc
 ‘Péter drank two beers in 10 minutes.’
- b. Anna 10 perc alatt evett két fánkot.
 Anna 10 minute under eat.Past.3Sg two doughnut.Acc
 ‘Anna ate two doughnuts in 10 minutes.’

In these examples the object arguments are all quantized and serve as delimiters to the denoted eventuality. Thus these predicates can receive a telic interpretation, as evidenced by their compatibility with frame adverbials. By contrast, the bare singular and bare plural objects in (81) and (82), which refer cumulatively, do not measure out the respective events and thus the predicates in which they are contained receive an atelic interpretation.

- (81) a. János egész nap kutyákat rajzolt.
 János whole day dog.Pl.Acc draw.Past.3Sg
 ‘János drew dogs all day.’
- b. Kati egész délután levest főzött.
 Kati whole afternoon soup.Acc cook.Past.3Sg
 ‘Kati cooked soup all afternoon.’
- (82) a. Péter egész nap sört ivott.
 Péter whole day beer.Acc drink.Past.3Sg
 ‘Péter drank beer all day.’
- b. Anna egész nap fánkot evett.
 Anna whole day doughnut.Acc eat.Past.3Sg
 ‘Anna ate doughnuts all day.’

Another set of predicates for which the quantized nature of the object is sufficient for a telic reading to arise is exemplified in (83).

- (83) a. 10 perc alatt vasaltam (neked) egy inget.
 10 minute under iron.Past.1Sg (Dat.2Sg) a shirt.Acc
 ‘I ironed a shirt (for you) in 10 minutes.’
- b. Egy perc alatt mostam (neked) egy barackot.
 one minute under wash.Past.1Sg (Dat.2Sg) a peach.Acc
 ‘I washed a peach (for you) in a minute.’

A common property that the predicates immediately above and those in (79) and (80) share is that they all express situations in the course of which an entity comes into existence or becomes available (cf. Szabolcsi 1986); they all represent the creation pattern. On the other hand, predicates like *mos egy autót* ‘wash a car’ in (84), which express change-of-state events, do not receive a bounded interpretation in the presence of a quantized object only. In order for such a reading to arise, a verbal particle like *le* ‘down’ or a resultative expression like *tisztára* ‘clean.Sub’ must appear in the sentence (*ibid.*). (See also Section 3.2.2.1.)

- (84) a. ??Egy óra alatt mostam egy autót.
 an hour under wash.Past.1Sg a car.Acc
 ‘I washed a car in an hour.’
- b. Egy óra alatt le-mostam egy autót.
 an hour under down-wash.Past.1Sg a car.Acc
 ‘I washed a car in an hour.’
- c. Egy óra alatt tisztára mostam egy autót.
 an hour under clean.Sub wash.Past.1Sg a car.Acc
 ‘I washed a car clean in an hour.’

In contrast to created or consumed objects like those in (79) and (80), bounded objects in other predicate classes do not have a measuring-out function in Hungarian, unlike what is often observable in English, German, Dutch and Spanish. In other words, the quantized nature of the internal argument will not generally make verbal predicates telic in the verbal domain unless creation or consumption events are expressed. Consider (85) from Kardos and Szávó (2022).

- (85) a. Sára egy óráig/*egy óra alatt kalapált egy vaslemezt.
 Sára an hour.Ter/an hour under hammer.Past.3Sg an iron_plate.Acc
 ‘Sára hammered an iron plate for an hour.’
- b. Péter egy napig/*egy nap alatt takarított egy szobát.
 Péter a day.Ter/a day under clean.Past.3Sg a room.Acc
 lit. ‘Péter cleaned a room for a day.’
- c. Richárd egy napig/*egy nap alatt festett egy szobát. (on a non-creation reading)
 Richárd a day.Ter/ a day under paint.Past.3Sg a room.Acc
 lit. ‘Richárd painted a room for a day.’

The internal objects *egy vaslemezt* ‘an iron plate’ and *egy szobát* ‘a room’ do not allow the listener to determine endpoints to the hammering, cleaning and painting events in (85) despite the fact that they are specific about their quantity. In English, by contrast, a telic reading is easily available with such examples, as shown in (86).

- (86) a. Sara hammered an iron plate for/in an hour.
- b. Péter cleaned a room in a day/?for a day.
- c. Richard painted a room in a day/?for a day.

The English counterparts of the examples in (85) can each receive a telic reading; in (86b) and (86c) this reading is clearly the preferred one.

A bounded interpretation of the denoted event can also arise thanks to the aspectual contribution of pseudo-objects like *egyet* ‘one.Acc’, as in (87).

- (87) a. Táncoltunk egyet.
 dance.Past.1Pl one.Acc
 ‘We had a dance.’
- b. Sétáltunk egyet.
 walk.Past.1Pl one.Acc
 ‘We went for a walk.’

The interpretation of (87a) and (87b) is such that there is a certain period in time and we spent the largest subpart of this time dancing and walking, respectively (cf. Piñón 2001: 182). According to Kardos and Farkas (2022), verbal predicates with *egyed* ‘one.Acc’ express telic, non-maximal situations in these and other similar examples due to an aspectual operator encoded in *egyed* ‘one.Acc’, which “picks out a contextually specified non-maximal subpart of the events in the denotation of the verbal predicate” (*ibid.* 25). The telic interpretation of these examples is difficult to diagnose given that these predicates do not tolerate frame adverbials like *egy óra alatt* ‘in an hour’, as shown in (88).

- (88) a. *Egy óra alatt táncoltunk egyet.
 an hour under dance.Past.1Pl one.Acc
- b. *Egy óra alatt sétáltunk egyet.
 an hour under walk.Past.1Pl one.Acc

Piñón (2001: 182, fn 1) notes that a possible reason for the above incompatibility is that, similarly to *egy óra alatt* ‘in an hour’, *egyed* ‘one.Acc’ is a temporal adverbial diagnosing boundedness, and two temporal adverbials of the same type cannot appear in the sentence.

As originally observed by Kiefer (1992), there are two types of verbs that can occur with *egyed* ‘one.Acc’: intransitive activities like *táncol* ‘dance’ and *sétál* ‘walk’, whose aspectual structure is affected by *egyed* ‘one.Acc’ in a way that they end up being interpreted telically, as in (87), and semelfactives like *tüsszent* ‘sneeze’ and *kacsint* ‘wink’, as in (89).

- (89) a. Kati tüsszentett egyet.
 Kati sneeze.Past.3Sg one.Acc
 ‘Kati sneezed once.’
- b. Mari kacsintott egyet.
 Mari wink.Past.3Sg one.Acc
 ‘Mari winked once.’

(89a) and (89b) express that, at some point in time, there was a single sneezing event and a single winking event, respectively. By contrast, canonical transitive verbs and verbs allowing implicit objects are incompatible with *egyed* ‘one.Acc’ interpreted as a pseudo-object. This is shown in (90), where (90a) and (90b) are well-formed with *egyed* as a real object.

- (90) a. *El-törtem/ Meg-ittam egyed.
 away-break.Past.1Sg/Perf-drink.Past.1Sg one.Acc
- b. *Ittam/ettem egyed.
 drink.Past.1Sg/eat.Past.1Sg one.Acc

Piñón (2001) argues that this follows from the fact that *egyed* ‘one.Acc’ contributes an internal argument to the argument structure of verbs such that it occupies the object position in the sentence. Since transitive verbs like *el-tör* ‘break’ and *meg-iszik* ‘drink’ already have an internal argument, there is simply no room for *egyed* in the argument structure of these verbs. A similar reasoning is applicable to verbs with implicit objects if we assume that these verbs do have both external and internal arguments, though the latter do not appear on the syntactic surface. This actually also explains why *egyed* ‘one.Acc’ is incompatible with complex predicates like *levelet ír* lit. ‘letter write’ and *újságot olvas* lit. ‘newspaper read’ and unaccusatives like *vérzik* ‘bleed’ and *szenved* ‘suffer’. Consider the examples from Piñón (2001: 184, (8) and 185, (10a) and (10b)).

- (91) a. *Mari levelet írt egyet.
 Mari letter.Acc write.Past.3Sg one.Acc
- b. *Újságot olvastam egyet.
 newspaper.Acc read.Past.1Sg one.Acc
- (92) a. *A katona vérzett egyet.
 the soldier bleed.Past.3Sg one.Acc
- b. *A harcos szenvedett egyet.
 the fighter suffer.Past.3Sg one.Acc

In the analysis of Kardos and Farkas (2022), the impossibility of the co-occurrence of the pseudo-object *egyét* ‘one.Acc’ and *meg*-type verbal particles follows if we assume that *egyét* ‘one.Acc’ and *meg*-type particles compete for the same position, [Spec, AspP], flanked by VP and vP in the Hungarian sentence. Further, the co-occurrence of unaccusative verbs and *egyét*-type pseudo-objects is also ruled out since the pseudo-object cannot receive accusative case in unaccusative structures.

Similar to *egyét* ‘one.Acc’ are pseudo-objects like *jót* ‘good.Acc’ and *nagyot* ‘big.Acc’ in that they also give rise to bounded interpretations. Another common property is that *jót* ‘good.Acc’ and *nagyot* ‘big.Acc’ are also incompatible with temporal adverbials like *egy óra alatt* ‘in an hour’, as shown in (93).

- (93) a. *Jót/nagyot táncoltunk* (**egy óra alatt*).
 good.Acc/big.Acc dance.Past.1Pl (*an hour under)
 ‘We had a good/long dance.’
- b. *Jót/nagyot sétáltunk* (**egy óra alatt*).
 good.Acc/big.Acc walk.Past.1Pl (*an hour under)
 ‘We had a good walk/went for a long walk.’

As Kiefer (2006: 56) notes, *jót* ‘good.Acc’ contributes to the predicate that the referent of the agent enjoyed the activity denoted by the verb for a good amount of time, whereas *nagyot* ‘big.Acc’ only adds that the referent of the agent spent an extended amount of time doing the activity denoted by the verb. Both these elements can also show up after the verb, but in this case they must be preceded by the indefinite article *egy* (cf. É. Kiss 2005: 70).

- (94) a. *Táncoltunk egy jót/nagyot*.
 dance.Past.1Pl a good.Acc/big.Acc
 ‘We had a good/long dance.’
- b. *Sétáltunk egy jót/nagyot*.
 walk.Past.1Pl a good.Acc/big.Acc
 ‘We had a good walk/went for a long walk.’

Unergative verbs like *táncol* ‘dance’ and *sétál* ‘walk’ can also appear with pseudo-objects represented by reflexive pronouns in the presence of a verbal particle or a result predicate, as shown by É. Kiss (2005: 62). In such cases the predicates receive a telic interpretation. See also Section 3.4.

- (95) a. Kati egyóra alatt ki-táncolta magát.
 Kati an hour under out-dance.Past.DefObj.3Sg self.Acc
 ‘It took Kati an hour to dance until she has had enough.’
- b. Kati egyóra alatt betegre táncolta magát.
 Kati an hour under sick.Sub dance.Past.DefObj.3Sg self.Acc
 ‘Kati danced herself sick in an hour.’
- (96) a. János egyóra alatt ki-sétálta magát.
 János an hour under out-walk.Past.DefObj.3Sg self.Acc
 ‘It took János an hour to walk until he has had enough.’
- b. János egyóra alatt fáradtra sétálta magát.
 János an hour under tired.Sub walk.Past.DefObj.3Sg self.Acc
 ‘János walked himself tired in an hour.’

Similarly to most particle verbs, *ki-táncol* lit. ‘out-dance’ and *ki-sétál* lit. ‘out-walk’ do not allow the omission of the object (*ibid.*). This point is illustrated in (97).

- (97) a. *Kati ki-táncolt. (on intended reading)
 Kati out-dance.Past.3Sg
- b. *János ki-sétált. (on intended reading)
 János out-walk.Past.3Sg

According to É. Kiss (2005: 62), this follows since verbal particles like *ki* ‘out’ above require a theme which can function as the subject of secondary predication. This regularity is also expected in light of the Argument-Per-Subevent Condition (Rappaport Hovav and Levin 2001) if such particles have event structure effects such that they introduce a caused subevent into the argument structure of the verb that they accompany (see Section 3.2.2.1), though also see Kardos and Pethő (2019) on some problems that arise with the Argument-Per-Subevent Condition in light of some English and Hungarian data. For a recent analysis of various aspectual pseudo-objects in Hungarian, see Farkas (2021).

3.3. Aktionsarten

3.3.1. General description

In this section I provide a detailed characterization of a word-level aspectual category which is often referred to as *aktionsart* in the literature. In determining what is meant by this notion, I follow Kiefer (2006), which is, to my knowledge, the most detailed and precise classification of various *aktionsarten* in Hungarian to date. Kiefer (2006: 149) provides the following criteria for determining *aktionsarten*:

- (98) a. *Aktionsarten* are expressed by morphologically complex verbs.
- b. The morphological material that is responsible for the derivation of *aktionsarten* contributes additional meaning in a way that the meaning of the base verb remains intact.
- c. Verbal particles that are responsible for the derivation of *aktionsarten* have gone through grammaticalization and hence their original adverbial meaning is no longer transparent.
- d. *Aktionsarten* come about as a result of productive morphological processes.

In Hungarian it is the suffix *-gat/-get* and a variety of verbal particles that are responsible for the derivation of *aktionsarten*. Particles can thus often express more than one aspectual meaning. They can, for example, have a perfectivizing/telicizing function and they can also participate in the derivation of one or more *aktionsarten*. This is illustrated in (99).

- (99) Mari be-hisztizett.
 Mari in-whine.Past.3Sg
 ‘Mari whined strongly.’

In (99) the particle *be* ‘in’ carries more than one aspectual meaning: It has a perfectivizing/telicizing function and it also contributes that Mari got deeply involved in the whining activity expressed by the base verb.

Based on the criteria given in (98), Kiefer distinguishes between the following aktionsarten in Hungarian:

- (100) a. iterative
 b. frequentative
 c. diminutive
 d. semelfactive
 e. delimitative
 f. inchoative
 g. resultative
 h. submersive

As for (100g), Kiefer also isolates five more aktionsarten which have the common property of contributing that a specific result state attains at the termination of the eventuality denoted by the base verb. In what follows I discuss each aktionsart in (100) along with the various subtypes of (100g) by addressing ways in which they are morphologically marked, what additional meaning they contribute, how their derivation is constrained, and, if applicable, how they change the subcategorization properties of the base verb.

3.3.2 Types

3.3.2.1 The iterative aktionsart

The iterative aktionsart, marked by the morpheme *-gat/-get*, expresses that the action denoted by the base verb is carried out repeatedly over the course of regular or irregular intervals. This is evidenced by the compatibility of adverbials like *rendszeresen* ‘regularly’ and *egyszer-egyszer* ‘every once in a while’ with verbs containing this aktionsart, as shown in (101), which is a slightly modified version of Kiefer’s example (2006: 151, (12)).

- (101) a. János rendszeresen nyitogatta az ajtót.
 János regularly open_repeatedly.Past.DefObj.3Sg the door.Acc
 ‘János regularly kept opening the door.’
- b. János egyszer-egyszer nyitogatta az ajtót.
 János once-once open_repeatedly.Past.DefObj.3Sg the door.Acc
 ‘János kept opening the door every once in a while.’

The examples above are similar in that they both express that there is a repetition of the opening events denoted by the base verb *nyit* ‘open’, but they are also different in that (101a) illustrates a regular repetition of a series of events, whereas (101b) describes an irregular one.

The derivation of this aktionsart is constrained in a way that the base verb must be eventive such that it expresses a momentary situation, as in the case of *nyit* ‘open’ in (101), and *üt* ‘hit’ and *robbant* ‘explode’ in (102). Stative verbs are incompatible with the iterative *-gat/-get*, as evidenced by the ill-formedness of the verbs **tartalmazgat* and **létezzet*, where *tartalmaz* corresponds to *contain* and *létezik* corresponds to *exist* in English.

- (102) a. János ütögette a hátamat.
 János hit_repeatedly.Past.3Sg the back.Poss.1Sg.Acc
 ‘János kept hitting my back.’
- b. A katonák egész este bombákat robbantgattak.
 the soldier.Pl whole evening bomb.Pl.Acc explode_repeatedly.Past.3Pl
 ‘The soldiers kept exploding bombs all evening.’

3.3.2.2 The frequentative aktionsart

The frequentative aktionsart, marked by particle reduplication, is similar to the iterative aktionsart in that the former also expresses the repetition of events, but it is also different by virtue of being strictly associated with an irregular repetition of singular events. This is demonstrated in (103), where the (a) example containing the adverbial *egyszer-egyszer* ‘every once in a while’ and a verb having frequentative aktionsart is acceptable and expresses that a singular hitting event occurred every once in a while, whereas (b) is unacceptable due to the presence of *rendszeresen* ‘regularly’.

- (103) a. Péter egyszer-egyszer meg-meg-ütötte a hátamat.
 Péter once-once Perf-Perf-hit.Past.DefObj.3Sg the back.Poss.1Sg.Acc
 ‘Péter hit my back every once in a while.’
- b. ??Péter rendszeresen meg-meg-ütötte a hátamat.
 Péter regularly Perf-Perf-hit.Past.DefObj.3Sg the back.Poss.1Sg.Acc

Similarly to what is observable in the case of the iterative aktionsart, the derivation of the frequentative aktionsart is also constrained in a way that the base verb cannot be stative, which is demonstrated by the ill-formedness of verbs like **el-el-fér* ‘fit in (a place)’ and **meg-meg-tart* ‘hold’, but it has to be a verb describing a momentary situation, as in (103a) and (104a), or an activity, as in (104b).

- (104) a. Kati el-el-tört egy tányért.
 Kati away-away-break.Past.3Sg a plate.Acc
 ‘Kati sometimes broke a plate.’
- b. Kati el-el-táncolgatott a lányával.
 Kati away-away-dance_at_a_leisurely_pace.Past.3Sg the daughter.Poss.3Sg.Ins
 ‘Kati sometimes danced with her daughter at a leisurely pace.’

Another semantic restriction that is characteristic of this aktionsart is that it is not possible to reduplicate particles expressing that the eventuality denoted by the base verb is carried out too intensively, as shown in (105), where the particle *agyon* ‘over, to death’ is meant to indicate the excessive nature of the working activity by Mari.

- (105) *Mari agyon-agyon-dolgozta magát.
 Mari over-over.work.Past.DefObj.3Sg self.Acc

Furthermore, Kiefer also points out a phonological constraint such that particle reduplication, and hence the derivation of the frequentative aktionsart, is not possible in cases where the particle contains more than two syllables. This is shown in (106), where the particle *keresztül* corresponds to English *through*.

- (106) *Ádám keresztül-keresztül-sétált a hídon.
 Ádám through-through-walk.Past.3Sg the bridge.Sup

Finally, it is worth noting that this aktionsart often occurs with the iterative or the diminutive aktionsart. The former is illustrated in (107), where the verbal predicate expresses that there have been instances of a series of events wherein Dániel opened the doors.

- (107) Dániel ki-ki-nyitogatta az ajtókat.
 Dániel out-out-open_repeatedly.Past.DefObj.3Sg the door.Pl.Acc
 ‘Dániel sometimes kept opening the doors.’

In (104b), repeated here as (108), the frequentative aktionsart is shown to appear with the diminutive aktionsart, which is to be discussed in the next section.

- (108) Kati el-el-táncolgatott a lányával.
 Kati away-away-dance_at_a_leisurely_pace.Past.3Sg the daughter.Poss.3Sg.Ins
 ‘Kati sometimes danced with her daughter at a leisurely pace.’

3.3.2.3 The diminutive aktionsart

The diminutive aktionsart, marked by the morpheme *-gat/-get* just like the iterative aktionsart, expresses that the activity denoted by the base verb is carried out by reduced intensity. For example, *dolgozik* ‘work’ in (109a) is different from *dolgozgat* ‘work at a leisurely pace’ in (109b) in that the latter describes a situation where the agent carries out a working activity at a more relaxed, leisurely pace.

- (109) a. János dolgozott az irodában.
 János work.Past.3Sg the office.Ine
 ‘János worked in the office.’
- b. János dolgozgatott az irodában.
 Anna work_at_a_leisurely_pace.Past.3Sg the office.Ine
 ‘János worked in the office at a leisurely pace.’

The diminutive aktionsart is compatible with activity-type verbs like *dolgozik* ‘work’, but, given its semantic contribution, incompatible with (i) verbs expressing that the denoted activity is carried out too intensively and (ii) verbs expressing momentary situations. The former is illustrated in (110a), while the latter in (110b).

- (110) a. *János agyon-dolgozgatta magát.
 János over-work_at_a_leisurely_pace.Past.3Sg self.Acc
- b. *Mari el-törögette a tányért.
 Mari away-break_at_a_leisurely_pace.Past.3Sg the plate.Acc

As for the incompatibility demonstrated in (110b), it has also been argued that the semantic effect of the morpheme *-gat/-get* is such that it constrains the predicate in a way that the goal point of the denoted eventuality is existentially bound, which, however, clashes with the inherent telic property of predicates like *el-tör* ‘break’. As far as their aspectual structure is concerned, these predicates pattern with the conative construction in English (Kardos 2012, 2019). This is illustrated in (111) and (112), where both verbal expressions are interpreted atelicly despite the quantized nature of the incremental theme.

- (111) Kati 10 perc-ig/*10 perc alatt eszegetett egy almát.
 Kati 10 minute-for / 10 minute under eat_at_a_leisurely_pace.Past.3Sg an apple.Acc
 ‘Kati ate an apple at a leisurely pace for 10 minutes.’
- (112) Kate ate at an apple for 10 minutes / *in 10 minutes.

3.3.2.4 The semelfactive aktionsart

The semelfactive aktionsart, marked by the particle *meg*, expresses that there has been a single instance of the activity denoted by the base verb. For examples, consider the verb pairs below, which illustrate the contrast between the base verbs *simogat* ‘pat’ and *dörzsöl* ‘rub’ and their counterparts containing semelfactive *meg*.

- (113) a. Mari simogatott egy kutyát.
 Mari pat.Past.3Sg a dog.Acc
 ‘Mari was patting a dog.’
- b. Mari meg-simogatott egy kutyát.
 Mari Perf-pat.Past.3Sg a dog.Acc
 ‘Mari patted a dog.’
- (114) a. Kati dörzsölte a szemét.
 Kati rub.Past.DefObj.3Sg the eye.Poss.3Sg.Acc
 ‘Kati was rubbing her eyes.’
- b. Kati meg-dörzsölte a szemét.
 Kati Perf-rub.Past.DefObj.3Sg the eye.Poss.3Sg.Acc
 ‘Kati rubbed her eyes.’

As noted by Kiefer (2006: 164), this aktionsart seems to be productively derived from verbs expressing situations that are repeated inherently. This property is not to be confused with iterativity, which contributes the meaning that there is a repetition of several independent eventualities denoted by the base verb.

3.3.2.5 The delimitative aktionsart

The delimitative aktionsart, which is marked by the particle *el* ‘away’, expresses temporal boundedness. This property is not identical with telicity, as evidenced by the ill-formedness of the examples in (115) in the presence of the frame adverbial *két perc alatt* ‘in two minutes’. Verbal expressions of this kind express that an agent participant spends a certain amount of time carrying out the activity described by the base verb.

- (115) a. Éva (*két perc alatt) el-gondolkodott.
 Éva (*two minute under) away-think.Past.3Sg
 ‘Éva spent some time thinking about something.’
- b. János (*két perc alatt) el-mélázott a holdfényben.
 János (*two minute under) away-ponder.Past.3Sg the moonlight.Ine
 ‘János spent some time pondering over something in the moonlight.’
- c. József (*két perc alatt) el-dumált a barátjával.
 József (*two minute under) away-chat.Past.3Sg the friend.Poss.3Sg.Ins
 ‘József spent some time chatting with his friend.’

The examples above are meant to demonstrate that the delimitative aktionsart is common with verbs of thinking and verbs of conversing. In addition, verbs containing the diminutive morpheme *-gat/-get* can also productively participate in the derivation of this aktionsart, as shown in (116).

- (116) a. Dániel el-borozgatott a kertben.
 Dániel away-drink_wine_at_a_leisurely_pace-Past.3Sg the garden.Ine
 ‘Dániel spent some time drinking wine at a leisurely pace in the garden.’
- b. Anna el-rajzolgatott a teraszon.
 Anna away-draw_at_a_leisurely_pace.Past.3Sg the patio.Sup
 ‘Anna spent some time drawing at a leisurely pace on the patio.’

3.3.2.6 The inchoative aktionsart

The inchoative aktionsart, which is most often marked by the particle *el* ‘away’ and the pseudo-object *magát* ‘self.Acc’, contributes the meaning component that the activity described by the base verb commences. In other words, this aktionsart refers to the state of affairs that corresponds to the initial point of the interval associated with the activity-type base verb. This is exemplified in (117a), where the initial subpart of a laughing event is picked out by the particle. Likewise, in (117b) it is the initial subpart of a crying event that is described.

- (117) a. *Éva el-nevette magát.*
Éva away-laugh.Past.DefObj.3Sg self.Acc
 ‘Éva started to laugh.’
- b. *Dániel el-sírta magát.*
Dániel away-cry.Past.DefObj.3Sg self.Acc
 ‘Dániel started to cry.’

An inchoative meaning component can also be contributed by the particles *fel* ‘up’ and *meg*, as shown in (118).

- (118) a. *A baba fel-sírt.*
the baby up-cry.Past.3Sg
 ‘The baby started to cry.’
- b. *János meg-szerette Marit.*
János Perf-like/love.Past.DefObj.3Sg Mari.Acc
 ‘János started to like/love Mari.’

An interesting property of the complex verb in (118b) is that it is based on the stative verb *szeret* ‘like/love’ which becomes an eventive predicate once it is accompanied by the particle *meg*. For more examples of this sort, see Kardos and Pethő (2019).

3.3.2.7 *The resultative aktionsart*

The resultative aktionsart contributes the meaning that a specific result state, as lexicalized in the base verb, attains at the termination of the denoted eventuality. It is marked by a variety of particles including *ki* ‘out’, *be* ‘in’, *le* ‘down’, and *meg*, as shown in (119).

- (119) a. *Sára ki-fehértette az inget.*
Sára out-whiten.Past.DefObj.3Sg the shirt.Acc
 ‘Sára whitened the shirt.’
- b. *Anna be-árnyékolta a szobát.*
Anna in-dim.Past.DefObj.3Sg the room.Acc
 ‘Anna dimmed the room.’
- c. *Sára le-borotválta a lábát.*
Sára down-shave.Past.DefObj.3Sg the leg.Poss.3Sg.Acc
 ‘Sára shaved her leg.’
- d. *Zsófia meg-melegítette a levest.*
Zsófia Perf-warm.Past.DefObj.3Sg the soup.Acc
 ‘Zsófia warmed the soup.’

Kiefer notes that a resultative meaning component can actually be isolated in the case of a number of aktionsarten, which can thus be treated as subtypes of the resultative aktionsart. I now discuss each of these in turn.

3.3.2.7.1 *The aktionsart of totality*

The aktionsart of totality, which is marked by the particle *be* ‘in’, expresses that the activity denoted by the base verb applies to the entire surface described by the object. For example, (120a) describes a situation in which a piece of paper becomes dotted in its entirety and (120b) expresses that a notebook ends up containing lines from beginning to end.

- (120) a. János be-pötytözött egy darab papírt.
 János in-dot.Past.3Sg a piece paper.Acc
 ‘János dotted a piece of paper entirely.’
- b. Anna be-vonalazta a füzetet.
 Anna in-line.Past.DefObj.3Sg the notebook.Acc
 ‘Anna drew lines in the notebook from beginning to end.’

In examples illustrating the aktionsart of totality, the base verb is often a denominal verb, as in (120), where *pötty* ‘dot’ and *vonat* ‘line’ denote the objects that are applied to the surface expressed by the nominal expression *papírt* ‘paper.Acc’ in (120a) and *füzetet* ‘notebook.Acc’ in (120b). Other denominal verbs exemplifying this aktionsart are given in (121), where the nouns *krém* ‘moisturizer’ and *zsír* ‘lard’ refer to substances and in (122), where *doboz* ‘box’ and *zacskó* ‘plastic bag’ refer to containers.

- (121) a. Kati be-krémezte a lábát.
 Kati in-moisturize.Past.DefObj.3Sg the leg.Poss.3Sg.Acc
 ‘Kati put some moisturizer on her leg.’
- b. Margit be-zsírozta a tepsit.
 Margit in-put_lard_on.Past.DefObj.3Sg the baking_pan.Acc
 ‘Margit rubbed some lard on the baking pan.’
- (122) a. János be-dobozolta a tankönyveket.
 János in-box.Past.DefObj.3Sg the textbook.Pl.Acc
 ‘János boxed the textbooks.’
- b. Sára be-zacskózta a régi ruhákat.
 Sára in-put_in_a_plastic_bag.Past.DefObj.3Sg the old piece_of_clothes.Pl.Acc
 ‘Sára put the old clothes in a plastic bag.’

When containing deadjectival verbs like *sötétít* ‘darken’ and *nedvesít* ‘wet’, as in (123a) and (123b), the complex verb expresses a situation in which the object ends up in a state described by the underlying adjective. For example, in (123a) the room ends up in a state of darkness and in (123b) the towel becomes wet.

- (123) a. Anna be-sötétítette a szobát.
 Anna in-darken.Past.DefObj.3Sg the room.Acc
 ‘Anna darkened the room.’
- b. Kati be-nedvesítette a törölközőt.
 Kati in-wet.Past.DefObj.3Sg the towel.Acc
 ‘Kati wetted the towel.’

Finally, some motion verbs can also appear with *be* ‘in’ marking the aktionsart of totality. These verbs, which become transitive as a result of the derivation, express that the agent has been to every part of the place expressed by the object while carrying out the activity described by the base verb. For instance, in (124a) Mari has walked to every part of the city and in (124b) Péter has danced to every part of the stage.

- (124) a. Mari be-gyalogolta a várost.
 Mari in-walk.Past.DefObj.3Sg the city.Acc
 ‘Mari walked around the whole city.’
- b. Péter be-táncolta a színpadot.
 Péter in-dance.Past.DefObj.3Sg the stage.Acc
 ‘Péter danced around the whole stage.’

3.3.2.7.2 The saturative aktionsart

The saturative aktionsart, which is marked by the particle *ki* ‘out’ and the pseudo-object *magát* ‘self.Acc’ or the particle *be* ‘in’, adds the meaning that the activity described by the base verb has reached a contextually specified limit. For example, in (125a) the running activity reached a limit where the agent participant Feri

had enough of running, in (125b) the crying activity reached a limit where Helga had enough of crying, and in (125c) the bacon-eating activity reached a limit where Margit had enough bacon.

- (125) a. Feri ki-futotta magát.
 Feri out-run.Past.DefObj.3Sg self.Acc
 'Feri ran so much that he had enough of running.'
- b. Helga ki-sírta magát.
 Helga out-cry.Past.DefObj.3Sg self.Acc
 'Helga cried so much that she had enough of crying.'
- c. Margit be-szalonnázott.
 Margit in-eat_bacon.Past.3Sg
 'Mari ate so much bacon that she had enough of it.'

3.3.2.7.3 The terminative aktionsart

The terminative aktionsart, which is encoded in the particle *el* 'away', expresses that the denoted event comes to an end. The verbs that are associated with this meaning often take objects that refer to various pieces of music or things that can be uttered or recited. Some examples are given in (126), where (a) describes an eventuality in the course of which János played a song in its entirety, whereas (b) and (c) express that Anna told a story and Béla recited a poem from beginning to end.

- (126) a. János el-gitározott egy dalt.
 János away-play_guitar.Past.3Sg a song.Acc
 'János played a song on a guitar.'
- b. Anna el-mesélt egy történetet.
 Anna away-tell.Past.3Sg a story.Acc
 'Anna told a story.'
- c. Béla el-szavalt egy verset.
 Béla away-recite.Past.3Sg a poem.Acc
 'Béla recited a poem.'

3.3.2.7.4 The exhaustive aktionsart

The exhaustive aktionsart, which is encoded in the particles *agyon* 'over' and *tönkre* 'over', contributes the meaning that the agent of the base verb carries out the denoted activity in a way that he or she becomes exhausted. These particles are attached to activity-type verbs and the derived complex verbs obligatorily take the reflexive pronoun *magát* 'self.Acc'. Examples are given in (127), where (a), (b), and (c) describe events in which the agent participants worked, thought, and studied too much, respectively.

- (127) a. Péter agyon-dolgozta magát.
 Péter over-work.Past.DefObj.3Sg self.Acc
 'Péter overworked himself.'
- b. Károly agyon-gondolkodta magát.
 Károly over-think.Past.DefObj.3Sg self.Acc
 'Károly exhausted himself by thinking too much.'
- c. Sára tönkre-tanulta magát.
 Sára over-study.Past.DefObj.3Sg self.Acc
 'Sára exhausted herself by studying too much.'

3.3.2.7.5 The intensive aktionsart

The intensive aktionsart, marked by the particle *agyon* 'over', expresses that the denoted event is carried out in an excessive fashion and this in turn has an effect on the theme argument. Consider (128) for illustration, where in (a) the chicken gets overcooked, in (b) the beef gets overcooked, and in (c) the vegetables end up being too spicy.

- (128) a. Péter agyon-főzte a csirkét.
Péter over-cook.Past.DefObj.3Sg the chicken.Acc
'Péter overcooked the chicken.'
- b. Sára agyon-sütötte a marhát.
Sára over-fry.Past.DefObj.3Sg the beef.Acc
'Sára overcooked the beef.'
- c. Kati agyon-fűszerezte a zöldségeket.
Kati over-spice.Past.DefObj.3Sg the vegetable.Pl.Acc
'Kati added too much spice to the vegetables.'

3.3.2.8 The submersive aktionsart

The submersive aktionsart, which is marked by the particle *be* 'in', expresses that the agent participant ends up in an intensified psychological state, as in (129a), or that this participant gets deeply involved in the activity described by the verb, as in (129b) and (129c) (see also Nádasy 2003).

- (129) a. János be-szomorodott a filmtől.
János in-become_sad_Past.3Sg the film.Abl
'János became very sad because of the film.'
- b. Erzsébet be-sírt a nevetéstől.
Erzsébet in-cry.Past.3Sg the laughter.Abl
'Erzsébet cried from laughter.'
- c. József be-parázott a vizsgától.
József in-freak_out.Past.3Sg the exam.Abl
'József freaked out because of the exam.'

3. 4. Secondary predication

This section addresses different forms of secondary predication in Hungarian with a special focus on verbal particles, result predicates, goal-denoting expressions, depictives, bare plurals and infinitives.

3.4.1 Verbal particles, resultatives and goal-denoting expressions

Verbal particles like *meg* in *meg-eszik egy almát* 'eat an apple' and *el* in *el-fut* 'run away', result predicates like *laposra* lit. 'onto flat' in *laposra kalapálja a vasat* 'hammer the metal flat' and goal-denoting expressions such as *a kapuba* 'into the goal' in *a kapuba rúgja a labdát* 'kick the ball into the goal' have been given at least two types of analyses in recent decades. É. Kiss (2008a) and Csirmaz (2008a), among others, treat these elements as purely predicative expressions checking the [+Pred] feature of a predicative functional projection above VP in the Hungarian sentence. By contrast, in a recent analysis, Kardos and Farkas (2022) propose that telicizing particles, result predicates and goal-denoting expressions have an aspectual function, which they exert in the specifier of AspP flanked by VP and vP. The latter authors also claim that the class of particles is heterogeneous, further arguing that non-telicizing particles have a predicative function. For example, the particle *meg* clearly has an aspectual function in *meg-iszik egy sört* 'drink a beer', whereas *ki* 'out' in *az ing ki-lóg a nadrágból* 'the shirt hangs out of the pants' simply expresses that the shirt is outside the pants. Particles on this analysis are argued to differ from pseudo-objects like *egyét* 'one.Acc' (see Section 3.2.2.2) in that the former are associated with the features [+telic] and [+maximal] giving rise to telic and maximal events, whereas the latter are associated with the features [-telic] and [-maximal] thereby yielding telic, non-maximal events.

In addition to verbal particles, resultative predicates such as *pirosra* 'red.Sub' in *pirosra festette a kerítést* 'painted the fence red' may also predicate of some participant with respect to its final state in a

change-of-state event. The examples in (130a) and (130b) illustrate transitive resultatives, whereas those in (131a) and (131b) are intransitive resultatives.

(130) a. Anti tisztára seperte a járdát.

Anti clean.Sub sweep.Past.DefObj.3Sg the pavement.Acc

‘Anti swept the pavement clean.’

b. Elek darabokra törte a vázát.

Elek piece.Pl.Sub break.Past.DefObj.3Sg the vase.Acc

‘Elek broke the vase into pieces.’

(131) a. Az út keményre fagyott.

the road hard.Sub freeze.Past.3Sg

‘The road froze solid.’

b. A fiú nagyra nőtt.

the boy big.Sub grow.Past.3Sg

‘The boy grew big.’

Whereas in (130a) and (130b) the result predicates *tisztára* ‘clean.Sub’ and *darabokra* ‘into pieces’ describe the final states of the theme DPs *a járdát* ‘the pavement’ and *a vázát* ‘the vase’ in the sweeping and breaking events, respectively, in (131a) and (131b) it is the constituents *keményre* ‘hard.Sub’ and *nagyra* ‘big.Sub’ that express the states that the referents of the DPs *az út* ‘the road’ and *a fiú* ‘the boy’ end up in at the termination of the freezing and growing events in the respective examples.

Resultatives, similarly to verbal particles, have been recently treated as PPs (Hegedűs 2013, É. Kiss 2021), though É. Kiss (2008) analyzes verbal particles as AdvPs consisting of just a head. AP-resultatives are not available in Hungarian. As mentioned above, as far as their structural representation is concerned, at least two types of analyses can be found in the literature: resultatives have been analyzed as predicative elements checking the [+Pred] feature of the Pred head above VP (É. Kiss 2008) and also as event-maximizing elements base-generated as complements of V and moving to [Spec, AspP] to check the [+telic] and [+maximal] features of an Asp head above VP (Kardos and Farkas 2022).

Both weak and strong resultatives are observable in this language: Weak resultatives further specify the final state of the referent of the theme object, which is to some extent already encoded in the verb (132), whereas strong resultatives express states which are impossible to predict based on the meaning of the verb in the predicate (133). For more on this distinction, see Washio (1997).

Weak resultatives

(132) a. Kati pirosra festett egy kerítést.

Kati red.Sub paint.Past.3Sg a fence.Acc

‘Kati painted a fence red.’

b. Béla vörösre festette Sára haját.

Béla red.Sub dye.Past.DefObj.3Sg Sára hair.Poss.3Sg.Acc

‘Béla dyed Sára’s hair red.’

- c. A hideg keményre fagyasztotta az utat.
 the cold hard.Sub freeze.Past.DefObj.3Sg the road.Acc
 ‘The cold froze the road hard.’
- d. Ottó tisztára súrolt egy bográcsot.
 Ottó clean.Sub wipe.Past.3Sg a cauldron.Acc
 ‘Ottó wiped a cauldron clean.’

Strong resultatives

- (133) a. Gabi véresre verte Kálmánt.
 Gabi bloody.Sub beat.Past.DefObj.3Sg Kálmán.Acc
 ‘Gabi beat Kálmán bloody.’
- b. Eszter kékre-zöldre rúgdosta a szomszédját.
 Eszter blue.Sub-green.Sub kick.Past.DefObj.3Sg the neighbour.Poss.3Sg.Acc
 ‘Eszter kicked her neighbour black and blue.’
- c. Ákos rongyosra járta a cipőjét.
 Ákos ragged.Sub go.Past.DefObj.3Sg the shoe.Poss.3Sg.Acc
 ‘Ákos walked his shoes ragged.’
- d. Laci hólyagosra ugrálta a lábát.
 Laci blistered.Sub jump.Past.DefObj.3Sg the foot.Poss.3Sg.Acc
 ‘Laci jumped until his feet got blisters.’

A notable difference between (133a) and (133b) as well as (133c) and (133d) is that in (133a) and (133b) the objects are selected arguments, whereas in (133c) and (133d) they are not. As far as non-selected arguments are concerned, the following structures are also possible, where the non-selected object is a reflexive pronoun (see also É. Kiss 2021).

- (134) a. Kati hülyére dolgozta magát.
 Kati silly.Sub work.Past.DefObj.3Sg self.Acc
 ‘Kati worked herself silly.’
- b. Viktória halálra nevette magát.
 Viktória death.Sub laugh.Past.DefObj.3Sg self.Acc
 ‘Viktória laughed herself to death.’

In (134a) and (134b) the resultative PPs *hülyére* ‘silly.Sub’ and *halálra* ‘to death’ describe the final states of Kati and Viktória (typically in a non-literal sense) at the culmination of the working and laughing events, respectively.

Hungarian has been characterized as a satellite-framed language (Talmy 2000) along with English, German, Dutch and Finnish concerning which elements lexicalize the different parts of the events that verbal predicates express. In these languages the result/path component associated with change-of-state/location events is encoded outside the verb, whereas in verb-framed languages such as Spanish, Italian and Japanese this component is encoded in the verb. An oft-cited consequence of this is that in the former type of languages, resultatives, both strong and weak, are a common device in the expression of change-of-state/location events, whereas in the latter type of languages strong resultatives are generally not available (Washio 1997, Acedo-Matellán 2016). As often seen in strong satellite-framed languages such as English

(Acedo-Matellán 2016), resultative secondary predicates make the main predicate telic. This can also be seen in Hungarian, which is also classified by Acedo-Matellán (2016) as a strong satellite-framed language along with another Finno-Ugric language, Finnish.

(135) a. Ili egy óra alatt / *egy óráig véresre verte Kálmánt.

Ili an hour under/ an hour.Ter bloody.Sub beat.Past.DefObj.3Sg Kálmán.Acc

‘Ili beat Kálmán bloody in an hour.’

b. Tamás egy óra alatt / *egy óráig kékre-zöldre rúgdosta a szomszédját.

Tamás an hour under/ an hour.Ter blue.Sub-green.Sub kick.Past.DefObj.3Sg the neighbour.Poss.3Sg.Acc

‘Tamás kicked his neighbour black and blue in an hour.’

Compatibility with the *alatt*-adverbial *egy óra alatt* ‘in an hour’ and incompatibility with the *for*-adverbial *egy óráig* ‘for an hour’ show that the examples in (135a) and (135b) are clearly telic.

However, there are also important differences between Hungarian and English-like strong satellite-framed languages. First, result predicates and goal-denoting predicates may not remain in a post-verbal position in neutral sentences unless the primary predicate is a particle verb. A similar phenomenon is observable in weak satellite-framed languages such as Slavic languages and Latin. For more on this, see Chapter 5 in Acedo-Matellán (2016).

(136) a. *Kati festett egy kerítést pirosra. (intended as a neutral, perfective sentence)

Kati paint.Past.3Sg a fence.Acc red.Sub

b. *Béla festette Sára haját vörösre.

Béla dye.Past.DefObj.3Sg Sára hair.Poss.3Sg.Acc red.Sub

c. *Bálint kalapált egy vaslemezt laposra.

Bálint hammer.Past.3Sg an iron_plate.Acc flat.Sub

d. *Józsi verte Kálmánt véresre.

Józsi beat.Past.DefObj.3Sg Kálmán.Acc bloody.Sub

With particle verbs, the post-verbal position of result predicates is allowed.

(137) a. Kati le-festett egy kerítést pirosra.

Kati down-paint.Past.3Sg a fence.Acc red.Sub

‘Kati painted a fence red.’

b. Béla be-festette Sára haját vörösre.

Béla in-dye.Past.DefObj.3Sg Sára hair.Poss.3Sg.Acc red.Sub

‘Béla dyed Sára’s hair red.’

The above constraint is also observable with change-of-location predicates, as shown in (138).

(138) a. *János rohant a kertbe. (intended as a neutral, perfective sentence)

János rush.Past.3Sg the garden.Ill

a'. János a kertbe rohant.

János the garden.Ill rush.Past.3Sg

'János rushed into the garden.'

b. *Péter sétált a tóhoz.

Péter walk.Past.3Sg the pond.All

b' Péter a tóhoz sétált.

Péter the pond.All walk.Past.3Sg

'Péter walked to the pond.'

Once a particle like *ki* 'out' appears in the predicate, the examples in (138a) and (138b) become grammatical.

(139) a. János ki-rohant a kertbe.

János out-rush.Past.3Sg the garden.Ill

'János rushed out into the garden.'

b. Péter ki-sétált a tóhoz.

Péter out-walk.Past.3Sg the pond.All

'Péter walked out to the pond.'

Further restrictions concerning resultatives involve verbs of killing, which generally describe situations carried out in some manner and are also associated with some result state. Such situations are systematically expressed by particle verbs, as shown by **(meg-)gyilkol* 'murder', **(fel-)akaszt* 'hang', **(fel-)négyel* 'quarter', **(le-)mészárol* 'massacre', and for some reason, they resist the resultative predicate *halálra* 'to death', which is possible with pure activities (Kardos and Szávó 2022). Consider the examples in (140)-(142).

(140) a. A szomszédok **(meg-)gyilkoltak* egy idős férfit.

the neighbour.Pl Perf-murder.Past.3Pl an old man.Acc

'The neighbours murdered an old man.'

b. A katonák **(fel-)akasztották* az árulót.

the soldier.Pl up-hang.Past.DefObj.3Pl the traitor.Acc

'The soldiers hanged the traitor.'

(141) a. *?A szomszédok halálra gyilkoltak egy idős férfit.

the neighbour.Pl death.Sub murder.Past.3Pl an old man.Acc

b. *A katonák halálra akasztották az árulót.

the soldier.Pl death.Sub hang.Past.DefObj.3Pl the traitor.Acc

(142) A szomszédok halálra vertek/ kínoztak egy idős férfit.

the neighbour.Pl death.Sub beat.Past.3Pl/torture.Past.3Pl an old man.Acc

'The neighbours beat/tortured an old man to death.'

Whereas English *murder* and *hang* can readily co-occur with the resultative PP *to death*, Hungarian **?halálra gyilkol* 'murder somebody to death' and **halálra akaszt* 'hang somebody to death' sound unnatural or even ungrammatical, as shown in (141a) and (141b). By contrast, the result predicate *halálra* 'to death' is perfectly natural with the activity verbs *ver* 'beat' and *kínoz* 'torture', as illustrated in (142).

Another class of resultatives that is observable in Hungarian has been referred to in prior literature as the class of spurious resultatives (Washio 1997) or pseudo-resultatives (Levinson 2010). Some examples are given in (143).

(143) a. Ildikó szorosra fonta a haját.

Ildikó tight.Sub braid.Past.DefObj.3Sg the hair.Poss.3Sg.Acc

'Ildikó braided her hair tight.'

b. Ákos szorosra kötötte a cipőfűzőjét.

Ákos tight.Sub tie.Past.DefObj.3Sg the shoelace.Poss.3Sg.Acc

'Ákos tied his shoelaces tight.'

c. Bence finomra vágta a hagymát.

Bence fine.Sub cut.Past.DeObj.3Sg the onion.Acc

'Bence chopped the onion fine.'

d. A kávédaráló finomra őrölte a kávészemeket.

the coffee grinder fine.Sub grind.Past.DefObj.3Sg the coffee bean.Pl.Acc

'The coffee grinder ground the coffee beans fine.'

These examples are truth-conditionally different from true resultatives since it is not the state of the referent of the direct object that the result predicate in examples like (143a)-(143d) modifies, but some other argument that is left unexpressed in the sentence. The difference between the semantics of pseudo-

resultatives and that of true resultatives is also illustrated below with the availability of the following entailments or the lack thereof.

- (144) a. Ildikó szorosra fonta a haját. does not entail Ildikó haja szoros lett.
 Ildikó tight.Sub braid.Past.Def.3Sg the hair.Poss.3Sg.Acc. Ildikó hair.Poss tight become.Past.3Sg
 ‘Ildikó braided her hair tight.’ ‘Ildikó’s hair became tight.’
- b. Ildikó szőkére festette a haját. entails Ildikó haja szőke lett.
 Ildikó blonde.Sub dye.Past.DefObj.3Sg the hair.Poss.3Sg.Acc Ildikó hair.Poss blonde become.Past.3Sg
 ‘Ildikó dyed her hair blonde.’ ‘Ildikó’s hair became blonde.’

Whereas the sentence in (144a) does not entail that Ildikó’s hair became tight at the culmination of the braiding event, in (144b) Ildikó’s hair became blonde as a result of the dying event. This signals a fundamental difference with respect to what pseudo-resultatives like *szorosra* ‘tight.Sub’ in (144a) modify and what true resultatives like *szőkére* ‘blonde.Sub’ in (144b) express.

3.4.2 Depictives

Depictives form another class of secondary predicates in Hungarian similarly to many other languages, but they have been shown to be more peripheral elements than verbal particles or resultatives. Surányi and Hegedűs (2013) argue that the former do not form complex predicates with the verb and they join the derivation by adjunction as evidenced by the fact that they disallow subextraction. This is shown in (145).

- (145) *Mire jött be János nagyon büszkén?
 what.Sub come.Past.3Sg in János very proudly
 ‘What was John proud of when he came in?’

adapted from Surányi and Hegedűs (2013: (26a))

Depictives typically occur with stage-level predicates, which also characterizes other languages (Rapoport 1991), but individual-level predicates are also possible under specific conditions. Consider (146).

- (146) a. János bölcsen tért haza a spirituális utazásról.
 János wisely arrive.Past.3Sg home_to the spiritual journey.Del
 ‘It was wisdom that János acquired during the spiritual journey (and not some other property) when he came home.’
- b. Bölcsen János tért haza a spirituális utazásról.
 wisely János arrive.Past.3Sg home_to the spiritual journey.Del
 ‘It was János who was wise when he came home from the spiritual journey (and not someone else).’

adapted from Pintér (2020: 317, (14)-(15))

Building on McNally’s (1993) work, Pintér (2020) argues that two conditions need to hold so that individual-level predicates can serve as depictive secondary predicates in Hungarian: (i) the primary predicate needs to express a contextually relevant boundary and (ii) the individual-level predicate must be a focused constituent or a contrastive topic. In (146a), for example, the depictive *bölcsen* ‘wisely’ is focused, whereas in (146b) *János* is focused and *bölcsen* ‘wisely’ is a contrastive topic.

In examples like (147), depictives necessarily modify the causing event and the object in it, but not the result state.

- (147) János vizesen rövidre vágta Mari haját.
 János wet short.Sub cut.Past.DefObj.3Sg Mari hair.Poss.3Sg.Acc
 és mire Mari haja rövid lett, meg-száradt.
 and what.Sub Mari hair.Poss short become.Past.3Sg, Perf-dry.Past.3Sg
 ‘János cut Mari’s hair short wet and by the time Mari’s hair became wet, it had dried.’

As shown by (147), the depictive *vizesen* ‘wet’ necessarily describes Mari’s hair at the beginning of the cutting event, but not necessarily at the culmination of this event. For similar phenomena with respect to English, see (Bruening 2018).

With particleless verbs, the canonical position of depictives is the preverbal focus position, as illustrated in (148).

(148) a. János vizesen fésülte Mari haját.

János wet comb.Past.DefObj.3Sg Mari hair.Poss.3Sg.Acc

‘Mari’s hair was wet (and it was not some other property Mari’s hair had) when János combed it.’

b. Ákos nedvesen vágta Balázs haját.

Ákos wet cut.Past.DefObj.3Sg Balázs hair.Poss.3Sg.Acc

‘Balázs’s hair was wet (and it was not some other property Balázs’s hair had) when Ákos cut it.’

With the verbs in (148), the postverbal position of depictives in neutral perfective sentences yields ungrammaticality, similarly to resultatives.

(149) a. *János fésülte Mari haját vizesen. (unavailable on a perfective reading)

János comb.Past.DefObj.3Sg Mari hair.Poss.3Sg.Acc wet

b. *Ákos vágta Balázs haját nedvesen.

Ákos cut.Past.DefObj.3Sg Balázs hair.Poss.3Sg.Acc wet

With particle verbs like *meg-fésül* ‘comb’, they may also precede and follow the verb, in which case they are not focused. For more examples, see (É. Kiss 2021).

(150) a. János vizesen meg-fésülte Mari haját.

János wet Perf-comb.Past.DefObj.3Sg Mari hair.Poss.3Sg.Acc

‘János combed Mari’s hair wet.’

b. János meg-fésülte Mari haját vizesen.

János Perf-comb.Past.DefObj.3Sg Mari hair.Poss.3Sg.Acc wet

‘János combed Mari’s hair wet.’

Depictives and resultatives may also co-occur in a single clause in a fixed order, which seems to be a cross-linguistic phenomenon (Den Dikken and Dékány 2022). In Hungarian, depictives must precede resultatives in the preverbal section of the sentence, the reverse order gives rise to ungrammaticality. This is illustrated in (151) and (152).

(151) a. János vizesen simára fésülte Mari haját.

János wet smooth.Sub comb.Past.DefObj.3Sg Mari hair.Poss.3Sg.Acc

‘János combed Mari’s hair smooth wet.’

b. Ákos nedvesen rövidre vágta Balázs haját.

Ákos wet short.Sub cut.Past.DefObj.3Sg Balázs hair.Poss.3Sg.Acc

‘Ákos cut Balázs’s hair short wet.’

- (152) a. *János simára vizesen fésülte Mari haját.
 János smooth.Sub wet comb.Past.DefObj.3Sg Mari hair.Poss.3Sg.Acc
- b. *Ákos rövidre nedvesen vágta Balázs haját.
 Ákos short.Sub wet cut.Past.DefObj.3Sg Balázs hair.Poss.3Sg.Acc

3.4.3 Bare nominals and infinitives

Similarly to verbal particles and resultatives, bare nominals and infinitives have also been argued to form complex predicates with the verb. Some examples are given in (153) and (154).

- (153) a. János almát evett.
 János apple.Acc eat.Past.3Sg
 'János ate apples.'
- b. Sára újságot olvasott.
 Sára newspaper.Acc read.Past.3Sg
 'Sára read newspapers.'

- (154) a. Béla úszni fog.
 Béla swim.Inf will.3Sg
 'Béla will/is going to swim.'
- b. Anna tanulni fog.
 Anna study.Inf will.3Sg
 'Anna will/is going to study.'

As for the latter structure, multiple infinitives may also appear in the verbal complex, as in (155).

- (155) a. Béla úszni fog akarni.
 Béla swim.Inf will.3Sg want.Inf
 'Béla will want to swim.'
- b. Anna tanulni fog akarni.
 Anna study.Inf will.3Sg want.Inf
 'Anna will want to study.'

Bare nominals have a telicizing function when they appear with a P-element such as illative *-ba* and allative *-hoz* in (156a) and (156b), respectively.

- (156) a. Erzsike iskolába ment.
 Erzsike school.Ill go.Past.3Sg
 'Erzsike went to school.'
- b. Juli fodráshoz ment.
 Juli hairdresser.All go.Past.3Sg
 'Juli went to a hair salon.'

As pointed out by É. Kiss (2002: 70), bare nominals may also bear an inessive, superessive or adessive case, as in (157).

(157) a. János iskolában marad.

János school.Ine remain.3Sg
'János remains in school.'

b. János meccsen van.

János match.Sup be.3Sg
'János is at a football match.'

c. János egész délelőtt orvosnál ült.

János whole morning doctor.Ade sit.Past.3Sg
'János was at the doctor's all morning.'

adapted from É. Kiss (2002: 70, (101a), (101c), (101d))

In (157a) the bare nominal *iskola* 'school' bears the inessive suffix *-ban*, whereas in (157b) and (157c), the bare nominals *meccs* 'match' and *orvos* 'doctor' bear the superessive suffix *-en* and the adessive suffix *-nál*, respectively. Each case-marked nominal expresses the location of the situation expressed by the verbal predicate in the sentence. For more on the grammar of bare nominals and infinitives, see Chapters 4 and 7.

3.5 Bibliographical notes

There are two types of claims regarding the aspectual role of verbal particles in Hungarian. Kiefer (1992), Piñón (1995), Kiefer and Ladányi (2000), É. Kiss (2002) and Alberti (2004) analyzed verbal particles such as *meg* as perfectivizing elements, whereas more recent works such as É. Kiss (2008a), Csirmaz (2008a) Kardos (2012, 2016) and Kardos and Farkas (2022) have argued for their direct telicizing function.

É. Kiss (2008) contains several chapters about various event structural phenomena, focusing on the structural position of verbal particles, the interaction of lexical and grammatical aspect, and the interaction of verbal particles with different functional categories. É. Kiss (2008a), for example, provides a syntactic analysis of verbal particles arguing for their predicative nature as the primary driving force behind their movement to the immediately preverbal position, whereas Csirmaz (2008b) discusses the grammar of non-thematic objects, devoting special attention to their aspectual contribution to the sentence. É. Kiss (2008b) examines the interaction of verbal particles with focus, whereas Csirmaz (2008c) and Surányi (2008) discuss how event structure is affected by negation.

In more recent works, Kardos (2012, 2016) and Kardos and Farkas (2022) argue for the event-maximizing role of verbal particles and result predicates and propose that it is this function that determines where these elements end up in the syntax: both verbal particles and result predicates are claimed to occupy [Spec, AspP] sandwiched between VP and vP, along with pseudo-objects like *egyét* 'one.Acc', which, however, yield non-maximal events. Building on this work, Martínez Vera (2021) proposes a four-way typology of maximalization strategies employed by languages in light of the (event) aspectual properties of degree achievements, where Hungarian illustrates one of the four language types by marking event maximalization and requiring lexical maximal degrees in the presence of event-maximizing elements. Furthermore, particle reduplication is given a morphosyntactic account by Lipták and Saab (2019), whereas Hegedűs (2021) is a syntactic treatment of restitutive and counterdirectional verbal particles.

Farkas (2021) provides a detailed analysis of three classes of pseudo-objects and shows that they behave like aspectual cognate objects in languages where such objects are semantically and morphologically related to the verb. As far as the aspectual contribution of thematic objects are concerned, a plethora of works have been written about predicates involving created or consumed objects including Wacha (1978), Kiefer (1992, 2006), Maleczki (1995, 2008), É. Kiss (2005), Piñón (2008) and Kardos (2019).

Resultatives are discussed in much detail in Hegedűs (2013), whereas depictives are the topic of de Groot (2008) and Pintér (2020), and they are also briefly touched upon by É. Kiss (2021). Bare nominals and infinitives are discussed in detail in Chapters 4 and 7. For further literature on them, see the references in these chapters.