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## THE SYNTAX AND SEMANTICS OF VÉGIG

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# 1. Introduction\*

*Végig* (lit. 'end-TERM, i.e., '(up) to the (very) end, from beginning to end, throughout', pronounced [ve:giɛ], with initial stress) is one of the most productive verbal prefixes (a.k.a. preverbs) in Hungarian (Fülei-Szántó 1989: 313). A striking sign of this productivity is its ability to transitivize strictly intransitive verbs, as witnessed by the contrasts in (1)-(4)<sup>1</sup>.

- (1) a. Réka *végig*\*táncolta az éjszaká-t.  
Réka *végig*-danced the night-ACC  
'Réka danced throughout the night.'

- b. \*Réka táncolta az éjszakát.  
Réka danced the night-ACC

- (2) a. Tamás *végig*\*dolgozta a het-et.  
Tamás *végig*-worked the week-ACC  
'Tamás worked throughout the week.'

- b. \*Tamás dolgozta a het-et.  
Tamás worked the week-ACC

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<sup>1</sup> I render *végig* as 'végig' in the glosses and vary its free translation as appropriate. Anticipating somewhat, I employ a dot (·) to separate *végig* from the verb when *végig* is used in its object-related interpretation (they would be written together in Hungarian orthography) and write *végig* as a separate word when it is used in its time-related interpretation (in accordance with Hungarian orthography). In addition, I make use of the following abbreviations in the glosses:

ABL	ablative ('from')	INE	inessive ('in')	PV	preverb
ACC	accusative	INF	infinitive	SUB	sublative ('onto')
COMP	complementizer	INS	instrumental ('with')	SUP	superessive ('on')
DEL	delative ('off of')	NEG	negative	TER	terminative ('up to')
ILL	illative ('into')	PART	participle		

The sources of the naturally occurring examples are: *HIX írsia* and *HIX para* (Internet discussion lists in Hungarian), *Népszabadság* (a Hungarian daily), *Pesti Est* (a Hungarian weekly), and *Presszó* (a Hungarian film, 1998).

- (3) a. *Végig\*csókolóztaák* az egész filmet. (*Presszó*)  
*végig*-kissed-one-another-3PL the whole film-ACC  
 'They kissed throughout (the duration of) the whole film.'
- b. \**Csókolózták* az egész film-et.  
 kissed-one-another-3PL the whole film-ACC
- (4) a. De Niro és Crystal *végig*\*veszekszik a mozi-t [...] (Népszabadság)  
 De Niro and Crystal *végig*-quarrel the film-ACC [...]  
 'De Niro and Crystal quarrel throughout the film [...]'
- b. \*De Niro és Crystal veszekszik a mozi-t.  
 De Niro and Crystal quarrel the film-ACC

The (b)-sentences in (1)-(4) are ungrammatical because the intransitive verbs *táncol* 'dance', *dolgozik* 'work', *csókolózik* 'kiss one another', and *veszekedik* 'quarrel' do not subcategorize for an accusative case marked object, whereas the addition of *végig* evidently enables them to do so. I will refer to this use of *végig* as its *transitivizing function*.<sup>2</sup>

However, *végig* does not always function as a transitivizer. In fact, it may appear together with many intransitive verbs without affecting their argumentstructure at all, as the following variations on (1)-(4) demonstrate:<sup>3</sup>

- (5) a. Réka *végig* táncolt az éjszaka.  
 Réka *végig* danced the night  
 'Réka danced throughout the night.'
- b. Réka táncolt az éjszaka.  
 Réka danced the night  
 'Réka danced during the night.'
- (6) a. Tamás *végig* dolgozott a hét-en.  
 Tamás *végig* worked the week-SUP  
 'Tamás worked throughout the week.'

<sup>2</sup> In (3a) the context is that of a couple who went to the cinema and kissed throughout the film. In (4a), although the noun *mozi* literally means 'cinema', here it is used colloquially to mean 'film'. De Niro and Crystal are actors in the film and they quarrel throughout.

<sup>3</sup> Hungarian has both a *definite* and an *indefinite* verbal conjugation, the choice between the two depending on whether the accusative case marked object is definite or indefinite (where the absence of an accusative case marked object triggers the indefinite conjugation). Accordingly, the verbs in (1)-(4) appear in the definite conjugation, whereas those in (5)-(8) show up in the indefinite conjugation. Since the distribution of these two conjugations has no direct bearing on *végig*, I do not mark them in the glosses.

- b. Tamás dolgozott a hét-en.  
 Tamás worked the week-SUP  
 'Tamás worked during the week.'
- (7) a. Az egész film alatt *végig* csókolózták.  
 the whole film-SUP under *végig* kissed-one-another-3PL  
 'They kissed throughout (the duration of) the whole film.'
- b. Az egész film alatt csókolózták.  
 the whole film-SUP under kissed-one another-3PL  
 'They kissed during the whole film.'
- (8) a. De Niro és Crystal a mozi alatt *végig* veszekszik.  
 De Niro and Crystal the cinema under *végig* quarrel  
 'De Niro and Crystal quarrel throughout the cinema.'
- b. De Niro és Crystal a mozi alatt veszekszik.  
 De Niro and Crystal the cinema under quarrel  
 'De Niro and Crystal quarrel during the cinema.'

In contrast to the (b)-sentences of (1)-(4), the corresponding ones in (3)-(8) are grammatical, precisely because the verbs here are not forced to take an accusative case marked object that they do not subcategorize for. I will refer to this use of *végig* as its *verb phrase modifying function*.

Comparing the (a)-sentences of (1)-(4) with those of (5)-(8), we find that each pair receives the same interpretation. For example, both (1a) and (5a) assert that Réka danced throughout the night — it seems that any situation that makes the first sentence true must make the second true as well. Yet how does this synonymy come about? And how is this synonymy to be reconciled with the intuition that *végig* is more intimately connected to the verb in the (a)-sentences of (1)-(4) than it is in the corresponding sentences of (5)-(8), as shown by the fact that it transitivizes the verb in the former but not the latter? In section 5.3.2. I will show how these two functions of *végig* can contribute to the same meanings at the sentence level.

A third — and probably the most common — use of *végig* is to 'affect' an existing argument of the verb. This use differs from the transitivizing function of *végig* in (1)-(4) in that it does not add an accusative case marked argument to the verb but rather asserts something about an already existing (and not necessarily accusative case marked) argument, as the following pairs of examples demonstrate:<sup>4</sup>

<sup>4</sup> In (10a) it would be more natural to use a bare plural subject in preverbal position: *Könnök folytak Tamás arc-án* 'tears flowed Tamás face-POSS.3SG-SUP'.

- (9) a. Mivel a nyári kánikulában nem nagyon várható, hogy az  
since the summer heatwave-INE NEG very probable COMP the  
emberek aprólkosan végig-böngész-szék a moziműsor-t [...] (Pesti Est)  
people minutely végig-browse-IMP.3PL the cinema-program-ACC [...] 'Since during the summer heatwave it isn't very probable that people will minutely browse the cinema program from beginning to end [...]'
- b. Mivel a nyári kánikulában nem nagyon várható, hogy az  
since the summer heatwave-INE NEG very probable COMP the  
emberek aprólkosan böngész-szék a moziműsor-t [...] 'people minutely browse-IMP.3PL the cinema-program-ACC [...]'  
'Since during the summer heatwave it isn't very probable that people will minutely browse the cinema program [...]'
- (10) a. A könnyek végig-folyt-ak Tamás arc-á-n.  
the tears végig-flowed-3PL Tamás face-POSS.3SG-SUP  
'The tears flowed all over Tamás's face.'
- b. Folyt-ak a könnyek Tamás arc-á-n.  
flowed-3PL the tears Tamás face-POSS.3SG-SUP  
'The tears flowed on Tamás's face.'
- (11) a. Végig-repedt a föld.  
végig-cracked the earth  
'The earth cracked all over.'
- b. Repedt a föld.  
cracked the earth  
'The earth cracked.'

In (9a) *végig* 'affects' an accusative case marked object, stating that its referent fully participates in the event denoted by the verb; in (10a) it says the same about the referent of a superessive case marked complement; and in (11a), about the referent of a nominative case marked subject. The (b)-sentences show that the respective verbs select for the type of argument in question independently of *végig*, in contrast to what we saw in the (b)-sentences of (1)-(4). I will refer to this use of *végig* as its verb modifying function.

In sum, we have three functions of *végig* — but how is the verb modifying function related to the transitivity and verb phrase modifying functions? In section 2 I will argue that the verb modifying function is best grouped together with the transitivity function of *végig*, because both operate on the verb as opposed to the verb phrase.

Despite its productivity, *végig* has received comparatively little attention in the literature on Hungarian, and when it has received attention, as in Fülöp-Szántó (1989, 1991), the discussion takes the form of a number of examples together with commentary. While Fülöp-Szántó's examples and observations are useful, they fall short of an explicit analysis of *végig*. First, Fülöp-Szántó concentrates exclusively on *végig* as a preverb, whereas I will argue that there is also *végig* as an adverb and will offer treatments of both. Fülöp-Szántó's neglect of *végig* as an adverb has the consequence that he ignores the verb phrase modifying function of *végig* and misses the striking similarity between it and the transitivity function, as witnessed in the (a)-sentences in (1)-(4) and (5)-(8). And second, a major challenge in analyzing *végig* lies in giving a compositional semantics that accounts for its distributional properties, something that Fülöp-Szántó does not attempt.

## 2. Two interpretations

The immediate task is to argue for the view that *végig* has two main interpretations and to classify the transitivity, verb phrase modifying, and verb modifying functions of *végig* with respect to them.

The first sense of *végig* is what I will call its *object-related* interpretation, as illustrated in (12). Intuitively, the object-related interpretation states that the referent of the internal argument of the verb fully participates in the event denoted by the verb.

- (12) a. Felszabadult sóhaj söpört végig tegnap a budapesti tözsde-n.  
liberated sigh swept végig yesterday the Budapest stock-exchange-SUP  
(*Népszabadság*)  
'A sigh of relief swept throughout the Budapest Stock Exchange yesterday.'
- b. A konferencia résztvevő-i végig-hallgatt-ák az előadás-t.  
the conference participants-POSS.PL.3SG végig-listened-to-3PL the lecture-ACC  
'The conference participants listened to the lecture from beginning to end.'
- c. Réka végig-olvasta a cikk-et.  
Réka végig-read the article-ACC  
'Réka read the article from beginning to end.'

In (12a) we understand that every stockbroker at the Budapest Stock Exchange sighed; in (12b), that every part of the lecture was listened to by the conference participants; and in (12c), that every part of the article was read by Réka.

By 'object-related' I understand 'object' more broadly than as 'singular physical object'. Of the examples in (12), perhaps only the Budapest Stock Exchange in (12a) and the article in (12c) are viable candidates for the status of singular physical objects. Note, though, that Budapest Stock Exchange in (12a) is really the *group* of stockbrokers working at the Budapest Stock Exchange (since people sigh, not stock exchanges). In contrast, the



lecture in (12b) is no doubt a rendition or *event* that the conference participants can listen to. An even clearer example of an event as the object for *végig* is given in (13), where the author urges that every part of the process of privatization be carried out.<sup>5</sup>

- (13) A költségvetési egyensúly-t helyre kell állítani [...] a magánosítás-t  
the budget balance-ACC PV must restore-INF [...] the privatization-ACC  
pedig végig kell vinni. (Népszabadság)  
and végig must take-INF  
'A balanced budget must be restored [...] and privatization must be carried out to the very end.'

Since *végig* in its object-related interpretation treats articles, lectures, the Budapest Stock Exchange, and privatization on a par, this justifies my use of 'object' in a broad sense in 'object-related', as not restricted to singular physical objects.

The second sense of *végig* is what I will call its *time-related* interpretation, as exemplified in (14). In this case, the intuition is that a certain time is 'filled' by the event denoted by the verb.

- (14)a. Aki sportolt valaha versenyszerűen, az még inkább  
who pursued-some-sport ever competitively, that person more-likely  
ismer-heti ez-t az érzés-t: akar-ok győző-ni, akar-ok jobb  
know-POT.3SG this-ACC the feeling-ACC want-1SG win-INF want-1SG better  
len-ni, de ha az edző néha nem hajt-ana végig  
be-INF but if the trainer sometimes NEG drive-POT  
erőszak-kal is az edzés-en [...] (HIX ázsia)  
force-INST also the workout-SUP [...] végig  
'Whoever has pursued some sport competitively is more likely to know the following feeling: I want to win, I want to be better, but if the trainer wouldn't sometimes also drive me by force from beginning to end during the workout [...].'

- b. A diákok végig ott maradt-ak a buli-n.  
the students végig there stayed-3PL the party-SUP  
'The students stayed at the party until the end.'

- c. Réka végig olvasta a cikk-et, amíg Tamás zuhanyozott.  
Réka végig read the article-ACC while Tamás took-a-shower  
'Réka read the article all time while Tamás took a shower.'

In (14a) the athlete is driven by force throughout the workout; in (14b) the students stayed as long as the party lasted; and in (14c), in contrast to (12c), Réka need not have finished reading the article — what is asserted is that she spent the whole time reading the article while Tamás took a shower.

Henceforth I will often employ superscripts to make clear which interpretation of *végig* is at issue in a given example. Specifically, the superscripts 'o' (*végig<sup>o</sup>*) and 't' (*végig<sup>t</sup>*) will signal the object- and time-related interpretations, respectively, and the absence of a superscript will leave the intended interpretation open.

The time in question for the time-related interpretation of *végig* may not always be explicitly described in the sentence. For example, the following variant of (12c) is acceptable even though the relevant time has to be inferred from the context of use:

- (15) Réka végig<sup>t</sup> olvasta a cikk-et.  
Réka végig read the article-ACC  
'Réka read the article throughout the time in question.'

The difference between the object- and time-related interpretations of *végig* can be made more palpable by employing the adverb *mindvégig* (lit. 'all-*végig<sup>t</sup>*') as a diagnostic for the time-related interpretation. This can be done because the meaning of *mindvégig* is unambiguous and is equivalent to the time-related interpretation of *végig*, as the synonymy of the pair in (16) indicates.

<sup>5</sup> Sometimes the verb that *végig* in its object-related interpretation combines with differs in selectional restrictions from the resulting combination. In such cases a greater or lesser degree of lexicalization is at work. For example, although the verb *víz* (the infinitive is *vinni*) 'take' in (13) is transitive, without *végig* it cannot take an event-denoting noun phrase (e.g. *magánosítás* 'privatization') as its object. See footnote 6 for another example.

- (16) a. Castañeda *mindvégig* az-t állította, hogy a könyv-e-i-ben  
 Castañeda all-*végig* that-ACC claimed COMP the books-POSS.3SG-PL-INE  
 írtak szó-ról szó-ra megtörtént-ek, ő semmi-t  
 things-written word-DEL word-SUB took-place-3PL he nothing-ACC  
 nem talált ki. (HIX *para*)  
 NEG invented PV<sub>out</sub>  
 'Castañeda claimed until the very end that the things written in his books took place word for word and that he didn't make up anything.'

- b. Castañeda *végig*<sup>t</sup> azt állította, hogy [...]'  
 'Castañeda claimed until the very end, that [...]'

If *mindvégig* and the time-related interpretation of *végig* are equivalent, it follows that if we substitute *mindvégig* for *végig* in (12b) and (12c), as in (17), then the object-related interpretation of *végig* will no longer be available, which is indeed the case.<sup>6</sup>

- (17) a. A konferencia résztvevő-i *mindvégig* hallgatt-ák az előadás-t. (Cf.(12b))  
 the conference participants-POSS.PL-3SG all-*végig* listened-to-3PL the lecture-ACC  
 'The conference participants listened to the lecture throughout the time in question.'  
 b. Réka *mindvégig* olvasta a cikk-et. (Cf.(12c))  
 Réka all-*végig* read the article-ACC  
 'Réka read the article throughout the time in question.'

By comparison, the substitution of *mindvégig* for *végig* in (14) preserves the latter's time-related interpretation, as seen in (18).

- (18) a. Aki sportolt valaha versenyszerűen, az még inkább ismerheti ezt az érzést: akarok  
 győzni, akarok jobb lenni, de ha az edző néha nem hajlana *mindvégig* erőszakkal  
 is az edzésen [...] (Cf. (14a))  
 'Whoever has pursued some sport competitively is more likely to know the following feeling: I want to win, I want to be better, but if the trainer wouldn't sometimes also drive me by force from beginning to end during the workout [...]'  
 b. A diákok *mindvégig* ott maradtak a bulin. (Cf. (14b))  
 'The students stayed at the party until the end.'  
 c. Réka *mindvégig* olvasta a cikket, amíg Tamás zuhanyozott. (Cf.(14c))  
 'Réka read the article all the time while Tamás took a shower.'

Given this diagnostic for the time-related interpretation of *végig*, let us consider how the three functions of *végig* introduced in the previous section pattern. Since the examples of the object-related interpretation in this section are all instances of the verb modifying function of *végig*, it is reasonable to suppose that the verb modifying function in general falls under the object-related interpretation and that *végig* in this case cannot be replaced by *mindvégig* without requiring a shift to the time-related interpretation. This is verified for the (a)-sentences of (9)-(11) as follows:

- (19) a. Mivel a nyári kánikulá-ban nem nagyon várható, hogy  
 since the summer heatwave-INE NEG very probable COMP  
 az emberek aprólkosan *mindvégig* böngész-szék a moziműsor-t (Cf.(9a))  
 the people minutely all-*végig* browse-IMP.3PL the cinema-program-ACC  
 'Since during the summer heatwave it isn't very probable that people will minutely browse the cinema program throughout the time in question.'  
 b. *Mindvégig* folyt-ak a könnyek Tamás arc-á-n. (Cf.(10a))  
 all-*végig* flowed-3PL the tears Tamás face-POSS.3SG-SUP  
 'Tears flowed on Tamás's face throughout the time in question.'  
 c. *Mindvégig* repedt a föld. (Cf.(11a))  
 all-*végig* cracked the earth  
 'The earth cracked throughout the time in question.'

Turning to the transitivity function of *végig*, it is immediately clear that *mindvégig* cannot replace *végig* in the (a)-sentences of (1)-(4), which is evidence that the transitivity function also falls under the object-related interpretation:

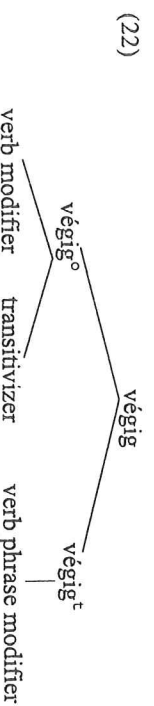
- (20) a. \*Réka *mindvégig* táncolta az éjszaká-t. (Cf.(1a))  
 Réka all-*végig* danced the night-ACC  
 b. \*Tamás *mindvégig* dolgozta a het-et. (Cf.(2a))  
 Tamás all-*végig* worked the week-ACC  
 c. \**Mindvégig* csókolóz-t-ák az egész film-et. (Cf.(3a))  
 all-*végig* kissed-3PL the whole film-ACC  
 d. \*De Niro és Crystal *mindvégig* veszekszik a mozi-t [...] (Cf.(4a))  
 De Niro and Crystal all-*végig* quarrel the cinema-ACC [...]

<sup>6</sup> This substitution is not always possible, e.g. in (12a), where *végig*<sup>2</sup>-*söpör* has a nonliteral sense of 'sweep' that *söpör* (lit. 'sweep') without *végig*<sup>2</sup> lacks.

Finally, the verb phrase modifying function of *végig* evidently falls under the time-related interpretation, as is shown by the fact that *végig* in this case can be easily replaced by *mindvégig* in the (a)-sentences of (5)-(8) without inducing a shift in meaning:<sup>7</sup>

- (21) a. Réka az éjszaka során mindvégig táncolt. (Cf. (5a))  
 Réka the night course-POSS.3SG-SUP all-*végig* danced  
 'Réka danced throughout the night.'  
 b. Tamás a hét folyamán mindvégig dolgozott. (Cf. (6a))  
 Tamás the week course-POSS.3SG-SUP all-*végig* worked  
 'Tamás worked throughout the week.'  
 c. Az egész film alatt mindvégig csókolózott-ak. (Cf. (7a))  
 the whole film under all-*végig* kissed-3PL  
 'They kissed throughout (the duration of) the whole film.'  
 d. De Niro és Crystal a mozi alatt mindvégig veszekszik. (Cf. (8a))  
 De Niro and Crystal the film under all-*végig* quarrels  
 'De Niro and Crystal quarrel during the film.'

In conclusion, we arrive at the classification depicted in (22), where *végig* has both an object-related and a time-related interpretation, and where the verb modifying and transitivity functions of *végig* are instances of the object-related interpretation and its verb phrase modifying function is an instance (actually the only instance) of the time-related interpretation.



### 3. Preverb or adverb?

Thus far I have argued that *végig* has two main interpretations with three functions, as displayed in (22). The next task is to clarify the categorial status of *végig* with respect to them, and here there are really only two plausible candidates: preverb or adverb.<sup>8</sup> I contend

<sup>7</sup> In (21a) and (21b) the time-denoting noun phrase has to appear in a postpositional phrase before *mindvégig*, whereas in (5a) and (6a) it may appear unmodified at the end of the clause. This seems to be due to an admittedly somewhat mysterious syntactic difference between *mindvégig* and the time-related interpretation of *végig*. Note, however, that the examples in (20) do not improve with other word orders.

<sup>8</sup> The categories *preverb* and *adverb* are used for expediency. I remain agnostic as to whether they are

that the choice between these two options depends on the function of *végig*: whereas *végig* in its verb modifying function is conditionally analyzable as an adverb or a preverb, *végig* in its transitivity function is only analyzable as a preverb, and *végig* in its time-related interpretation is only analyzable as an adverb, as summarized in (23).

- (23) a. *végig*<sup>o</sup> [verb modifier] ⇒ [Adv *végig*] (if the verb has a preverb)  
 ⇒ [Prev *végig*] (otherwise)  
 b. *végig*<sup>o</sup> [transitivity] ⇒ [Adv *végig*]  
 c. *végig*<sup>t</sup> ⇒ [Adv *végig*]

The rule for the verb modifying function of *végig* in (23a) contains a default and there by expresses something more complex than simple optionality: it states in effect that *végig* in its verb modifying function is analyzed as an adverb only if a preverb is present; otherwise (i.e., when no preverb is present) it is analyzed as a preverb.<sup>9</sup>

For those unfamiliar with Hungarian, a word about the difference between preverbs and adverbs is in order.<sup>10</sup> In brief, preverbs are separable verbal pre-fixes; adverbs are not. As separable verbal prefixes, preverbs are subject to different phonological and morphosyntactic restrictions than adverbs are, and this is how we can tell them apart. Perhaps the foremost morphosyntactic restriction on preverbs is that a verb may be associated with at most one preverb. Consequently, if the question is whether item *X* is a preverb in a given clause, and if we observe that *X* can co-occur with item *Y* that we know independently to be a preverb, then we may conclude that *X* is not a preverb in that clause. Another restriction is that preverbs always occur immediately before the verb in neutral clauses.<sup>11</sup> (whence the designation 'preverb'), whereas adverbs generally exhibit more freedom in their placement.

#### 3.1. Not always a preverb

I will first show that there are cases in which *végig* in either its verb modifying function or its time-related interpretation must be analyzed as an adverb, i.e., it is not feasible for *végig* in either of these uses to be always analyzed as a preverb.

The examples in (24) demonstrate that *végig* in its verb modifying function is compatible with the presence of a preverb.

reducible to other syntactic categories.

<sup>9</sup> There may be speakers for whom *végig* in its verb modifying function is always analyzed as a preverb, in which case the rule in (23a) could be simplified. However, although the use of *végig* as an adverb in its verb modifying function may be somewhat marked for many speakers, it cannot be categorically ruled out.

<sup>10</sup> Preverbs are a favorite topic in the syntactic literature on Hungarian. Kiefer (see 1994: sect. 2), E. Kiss (1994: sect. 7), and Piñón (1995), to cite only a few works.

<sup>11</sup> Neutral clauses in Hungarian are clauses that lack a contrastively focussed constituent (see Kálmán et al. 1989).

- (24) a. Tamás végig<sup>o/#t</sup> át-lapozta a könyv-et.  
 Tamás végig PV<sub>through</sub>-ran-through the book-ACC  
 'Tamás ran through (i.e., turned through the pages of) the book.'
- b. A konferencia résztvevő-i végig<sup>o/#t</sup> meg-hallgatt-ák az előadás-t.  
 the conference participants-POSS.PL.3SG végig PV-listened-to the lecture-ACC  
 'The conference participants listened to the lecture from beginning to end.'
- c. Réka végig<sup>o/#t</sup> el-olvasta a cikk-et.  
 Réka végig PV<sub>away</sub>-read the article-ACC  
 'Réka read the article from beginning to end.'

Since each sentence in (24) contains an item that is indisputably a preverb (whether *át*, *meg*, or *el*), we conclude that *végig* here is not a preverb. Such data show that the first clause of the rule in (23a) is needed.

Although the examples in (24) are acceptable, it must be acknowledged that it is preferable to employ *végig* in its verb modifying function as a preverb if possible. In particular, the use of *végig* in (24) seems to add no or very little content to the sentences and it is this redundancy that speakers tend to find bothersome upon reflection. Consequently, the following variations on the sentences in (24), in which the original preverb is dropped and *végig* appears as the preverb, are definitely favored over those in (24):

- (25) a. Tamás végig<sup>o/#t</sup> át-lapozta a könyvet. (Cf. (24a))  
 'Tamás ran through (i.e., turned through the pages of) the book.'
- b. A konferencia résztvevői végig<sup>o</sup>-hallgatták az előadást. (Cf. (24b))  
 'The conference participants listened to the lecture from beginning to end.'
- c. Réka végig<sup>o</sup>-olvasta a cikket. (Cf. (24c))  
 'Réka read the article from beginning to end.'

Further evidence that the categorial status of *végig* differs in (24) and (25) stems from the observation that *végig* exhibits greater freedom in placement in the former than it does in the latter. Specifically, *végig* may also appear after the verb in (24) with no change in meaning, as the following versions of the sentences in (24) demonstrate:

- (26) a. Tamás át-lapozta végig<sup>o/#t</sup> a könyvet. (Cf. (24a))  
 'Tamás ran through (i.e., turned through the pages of) the book.'

- b. A konferencia résztvevői meg-hallgatták végig<sup>o/#t</sup> az előadást. (Cf. (24b))  
 'The conference participants listened to the lecture from beginning to end.'
- c. Réka el-olvasta végig<sup>o/#t</sup> a cikket. (Cf. (24c))  
 'Réka read the article from beginning to end.'

However, this flexibility in placement does not extend to *végig* in (25), as the ungrammaticality of the following sentences attests:<sup>12</sup>

- (27) a. \*Tamás lapozta végig<sup>o/#t</sup> a könyv-et. (Cf. (25a))  
 Tamás ran-through végig the book-ACC
- b. \*A konferencia résztvevő-i hallgatt-ák végig<sup>o</sup> az előadás-t. (Cf. (25b))  
 the conference course-POSS.3SG-SUP listened-to-3PL végig the lecture-ACC
- c. \*Réka olvasta végig<sup>o</sup> a cikk-et. (Cf. (25c))  
 Réka read végig the article-ACC

Thus, the contrast between (26) and (27) lends further support to the claim that *végig* is an adverb in (24) and a preverb in (25).

The examples in (28) show that *végig* in its time-related interpretation must be analyzable as an adverb, given that it can also co-occur with items that are indisputably preverbs.

- (28) a. A két diák végig<sup>t/#o</sup> el-beszélgettet a villamos-on.  
 the two student végig PV<sub>away</sub>-talked the tram-SUP  
 'The two students talked on the tram throughout the time in question.'
- b. A kerámikus végig<sup>t/#o</sup> el-dolgozgatott a műhely-ben.  
 the ceramist végig PV<sub>away</sub>-worked-off-and-on the workshop-INE  
 'The ceramist worked off and on in the workshop throughout the time in question.'
- c. Réka végig<sup>t/#o</sup> fel-olvasott az ór-án.  
 Réka végig PV<sub>up</sub>-read-aloud the class-SUP  
 'Réka read aloud throughout the class.'

Since *végig* is an adverb in (28), we expect it to exhibit flexibility in placement, as it in fact does.<sup>13</sup>

<sup>12</sup> The sentences in (27) are grammatical only if the subject arguments are contrastively focussed. This is because focussed constituents must appear in immediate preverbal position in Hungarian.



- (29) a. A két diák el-beszélgetetett végig<sup>t/°</sup> a villamoson. (Cf. (28a))  
 'The two students talked on the tram throughout the time in question.'  
 b. A kerámiкус el-dolgozgatott végig<sup>t/°</sup> a műhelyben. (Cf. (28b))  
 'The ceramist worked off and on in the workshop throughout the time in question.'  
 c. Réka fel-olvasott végig<sup>t/°</sup> az órán. (Cf. (28c))  
 'Réka read aloud throughout the class.'

Since it is clear that *végig* has to be analyzed as an adverb when a preverbis present, the issue turns on how it should be analyzed when no other preverb is around. I will now offer two arguments in favor of the claim (stated in (23)) that *végig* in its verb modifying function is analyzed as a preverb when no preverb is present, that *végig* in its transitivizing function is always analyzed as a preverb, and that *végig* in its time-related interpretation is never analyzed as a preverb.

### 3.2. Stress assignment

For the first argument I will assume the following generalization about stress assignment in neutral clauses:<sup>14</sup>

- A preverb forms a domain for stress assignment with the verb that follows it, whereas an adverb forms its own domain for stress assignment.
- The first (syllable of the first) nonclitic element of a domain for stress assignment receives a primary stress.
- Neither preverbs nor adverbs are clitics.

It follows from this generalization that if *végig* is a preverb, then it is stressed in combination with the verb, whereas if it is an adverb, it is stressed independently of the verb, as schematized in (30), where 'Φ' denotes the relevant phonological domain for stress assignment.

- (30) [Φ [Prev végig] verb] (one primary stress)  
 [Φ [Adv végig]] [Φ verb] (two primary stresses)

<sup>13</sup> An anonymous reviewer finds the examples in (29) unacceptable, but not speakers seem to agree. In such examples it is important to pronounce both *végig* and the postpositional phrase that follows it as independent phonological units so that *végig* is not construed as a modifier of the postpositional phrase.

<sup>14</sup> Although the exact name of the domain for stress assignment is not crucial in what follows, I take it to be the clitic group, based on my reading of Vogel (1989). Oddly enough, Vogel herself does not think that a preverb forms a clitic group with the verb that follows it, claiming instead that the preverb and verb belong to an intonational phrase (pp. 339, 349). I believe that Vogel is mistaken about not having the preverb and the verb constitute a phonological unit, especially since she makes the clitic group available anyway.

The rules in (23) together with this generalization about stress assignment predict the acceptable and unacceptable stress patterns in (31) for the case of *végig* and *olvas* 'read', depending on how *végig* is interpreted.

- (31) a. [Φ végig<sup>o</sup> olvas] [Φ olvas]  
 [Φ végig<sup>t</sup>] [Φ olvas]  
 b. \* [Φ végig<sup>t</sup>] [Φ olvas]  
 \* [Φ végig<sup>t</sup> olvas]

That these are indeed the acceptable and unacceptable stress patterns for *végig* plus *olvas* is more obvious if we put them in context, as in (32) and (33), respectively (repeated from (12c) and (14c)).

- (32) a. Réka [Φ végig<sup>o</sup> olvasta] a cikket.  
 'Réka read the article from beginning to end.'

- b. Réka [Φ végig<sup>t</sup>] [Φ olvasta] a cikket, amíg Tamás zuhanyozott.  
 'Réka read the article all the time while Tamás took a shower.'

- (33) a. \*Réka [Φ végig<sup>t</sup>] [Φ olvasta] a cikket.  
 b. \*Réka [Φ végig<sup>t</sup> olvasta] a cikket, amíg Tamás zuhanyozott.

The generalization about stress assignment supports the claim, schematized in (30), that *végig* in its object-related interpretation is always analyzed as a preverb when no other preverb is present and that *végig* in its time-related interpretation is always analyzed as an adverb, for otherwise we would expect stress patterns such as those in (31b) to be well-formed, and yet they are not.

Since *végig* in (32a) is used in its verb modifying function, let us verify that *végig* in its transitivizing function also patterns in this way, taking *végig-táncol* 'végig-dance' from (1a) as our example:

- (34) [Φ végig<sup>o</sup> táncol]  
 \* [Φ végig<sup>t</sup>] [Φ táncol]

Finally, the fact that *mindvégig* also forms its own domain for stress assignment lends further credence to the claim that *végig* in its time-related interpretation is always an adverb and never a preverb:

- (35) [Φ mindvégig] [Φ verb]  
 \* [Φ mindvégig verb]



3.3. *Auxiliary placement*

The second argument concerns the relative placement of auxiliary verbs such as *fog* 'will', *akar* 'want', and other syntactically similar auxiliaries. For this argument I will presuppose the following syntactic generalization about the syntax of neutral clauses (see Kálmán et al. 1989).

- If an auxiliary occurs with a verb that has a preverb, then the auxiliary appears between the preverb and the (infinitival form of the) verb, in that order.
- If an auxiliary occurs with a verb that does not have a preverb, then the auxiliary follows the (infinitival form of the) verb.

If this generalization is applied to *végig*, the auxiliary verb *fog* 'will', and a main verb, the following pattern is expected, depending on whether *végig* is analyzed as a preverb or an adverb:

- (36) [Prev *végig*] *fog verb*  
[Adv *végig*] *verb fog*

The rules in (23) together with this syntactic generalization lead us to predict the acceptable and unacceptable patterns in (37) for *végig* and *olvás* 'read', which is what we in fact observe.

- (37) a. *végig*<sup>o</sup> *fog verb*  
*végig*<sup>t</sup> *verb fog*
- b. \**végig*<sup>o</sup> *verb fog*  
\**végig*<sup>t</sup> *fog verb*

Again, this prediction is easiest to evaluate in context (cf. (32) and (33)):

- (38) a. Réka két óra alatt *végig*<sup>o</sup>/#<sup>t</sup> *fogja olvas-ni* a cikk-et.  
Réka two hour under *végig* will read-INF the article-ACC  
'Réka will read the article from beginning to end in two hours.'
- b. Réka két órá-n át *végig*<sup>t</sup>/#<sup>o</sup> *olvás-ni fogja* a cikk-et.  
Réka two hour-SUP through *végig* read-INF will the article-ACC  
'Réka will read the article for two hours.'
- (39) a. #Réka két óra alatt *végig*<sup>o</sup> *olvasni fogja* a cikket.  
b. #Réka két órá-n át *végig*<sup>t</sup> *fogja olvasni* a cikket.

The generalization about auxiliary placement offers additional support of the rules in (23), namely, that *végig* in its object-related interpretation is analyzed as a preverb when no other preverb is present and that *végig* in its time-related interpretation is always analyzed as an adverb, for otherwise we would expect the patterns in (37b) to be acceptable, and yet they are not.

Once again, we verify that *végig* in its transitivity function is also a preverb, adapting (1a) for the purpose:

- (40) a. Réka *végig*<sup>o</sup> *fogja táncol-ni* az éjszaká-t.  
Réka *végig* will dance-INF the night-ACC  
'Réka will dance throughout the night.'

- b. \*Réka *végig*<sup>o</sup> *táncol-ni fogja* az éjszaká-t.  
Réka *végig* dance-INF will the night-ACC

As a final point, *mindvégig* patterns syntactically just like *végig* in its time-related interpretation (cf. (35)), which confirms that the latter is indeed an adverb:

- (41) *mindvégig verb fog*  
\**mindvégig fog verb*

4. *Interaction with aspect*

I have argued that *végig* has two main interpretations with three functions and is a preverb or adverb according to the rules in (23). But this still leaves a good deal unsaid about *végig*. For example, nothing said so far would rule out the possibility of *végig* in its time-related interpretation co-occurring with *végig* in its object-related interpretation. Certainly there would be nothing syntactically problematic about the following type of string:

- (42) [Adv *végig*<sup>t</sup>] [Prev *végig*<sup>o</sup>] *verb*

Yet such strings do not occur—in fact, they are *semantically* anomalous. The reason for this anomaly is that the two interpretations of *végig* impose contradictory aspectual requirements, as a look at how *végig* interacts with Vendler's (1967) four aspectual classes will make clear.

4.1. *States*

States are compatible with the time-related interpretation of *végig* but not with its object-related interpretation. More precisely, the time-related interpretation of *végig* but not its object-related interpretation may apply to states:

- (43) a. Tamás végig<sup>t'/#o</sup> szerette Rékát.  
 Tamás végig loved Réka-ACC  
 'Tamás loved Réka throughout the time in question.'
- b. A diákok végig<sup>t'/#o</sup> ott maradtak a buli-n.  
 the students végig there stayed-3PL the party-SUP  
 'The students stayed at the party throughout the time in question.'
- c. Réka végig<sup>t'/#o</sup> tudta a helyes választ.  
 Réka végig knew the correct answer-ACC  
 'Réka knew the correct answer throughout the time in question.'

This is confirmed by the substitutability of *mindvégig* for *végig* in (43) without inducing a shift in meaning and the compatibility of *végig* with a durative adverbial but not with a time-span adverbial, as demonstrated for (43a) in (44).<sup>15</sup>

- (44) a. Tamás mindvégig szerette Rékát.  
 'Tamás loved Réka throughout the time in question.'
- b. Tamás husz év-en át végig<sup>t'/#o</sup> szerette Rékát.  
 Tamás twenty year-SUP through végig loved Réka-ACC  
 'Tamás loved Réka for twenty years.'
- c. #Tamás husz év-en alatt végig szerette Rékát.  
 Tamás twenty year-SUP under végig loved Réka-ACC

#### 4.2. Activities

Activities pattern like states in being compatible with the time-related interpretation of *végig* but incompatible with its object-related interpretation. Again, this means that the time-related interpretation of *végig* but not its object-related interpretation may apply to activities:

- (45) a. Réka végig<sup>t'/#o</sup> level-et írt.  
 Réka végig letter-ACC wrote  
 'Réka wrote letters throughout the time in question.'

<sup>15</sup> Durative and time-span adverbials were tacitly introduced in (38) and (39). In Hungarian, temporal *át*-phrases are durative adverbials, whereas temporal *alatt*-phrases are time-span adverbials. In general, durative adverbials are compatible with states and activities and incompatible with accomplishments and achievements, whereas time-span adverbials exhibit the opposite pattern.

- b. Tamás végig<sup>t'/#o</sup> dolgozott a könyvtár-ban.  
 Tamás végig worked the library-INE  
 'Tamás worked in the library throughout the time in question.'
- c. A turisták végig<sup>t'/#o</sup> város-t nézt-ek.  
 the tourists végig town-ACC looked-at-3PL  
 'The tourists did sightseeing throughout the time in question.'

Just as with states, we can explicitly verify this pattern by substituting *mindvégig* for *végig* and checking for compatibility with durative and time-span adverbials, as shown for (45a) in (46).

- (46) a. Réka mindvégig levelet írt.  
 'Réka wrote letters throughout the time in question.'
- b. Réka két órán át végig<sup>t'/#o</sup> levelet írt.  
 'Réka wrote letters for two hours.'
- c. #Réka két óra alatt végig levelet írt.  
 Réka two hour under végig letter-ACC wrote

#### 4.3. Accomplishments

In contrast to states and activities, accomplishments are compatible with the object-but not the time-related interpretation of *végig*. This effect is clearest if we combine *végig* with a preverb-verb combination that denotes an accomplishment (see (24) for similar examples):<sup>16</sup>

- (47) a. Tamás végig<sup>o/#t</sup> ki-cserélte a körték-et.  
 Tamás végig PV<sub>out</sub>-changed the light-bulbs-ACC  
 'Tamás changed all of the light bulbs.'
- b. A diákok végig<sup>o/#t</sup> meg-beszélt-ék a feladat-ot.  
 the students végig PV-discussed-3PL the assignment-ACC  
 'The students discussed the assignment from beginning to end.'
- c. Réka végig<sup>o/#t</sup> ki-ejtette a hosszú finn szó-t.  
 Réka végig PV<sub>out</sub>-pronounced the long Finnish word-ACC  
 'Réka pronounced the long Finnish word from beginning to end.'

<sup>16</sup> It can be shown that the preverb-verb combinations *ki-cserél* 'change', *meg-beszél* 'discuss', and *ki-ejt* 'pronounce' in (47) are accomplishments: for example, they are compatible with time-span and not with durative adverbials.

If only the object-related interpretation of *végig* is available in (47), then we should not be able to reproduce the pattern exemplified in (44) and (46) for the time-related interpretation of *végig*. Indeed, as demonstrated for (47a) in (48), *mindévégig* cannot be substituted for *végig* in (47) and time-span but not durative adverbials are acceptable.

- (48) a. #Tamás mindévégig ki-cserélte a körték-et.  
 Tamás all-*végig* PV<sub>out</sub>-changed the light-bulbs-ACC
- b. #Tamás két órá-n át végig ki-cserélte a körték-et.  
 Tamás two hour-SUP through *végig* PV<sub>out</sub>-changed the light-bulbs-ACC
- c. Tamás két óra alatt végig<sup>o</sup>/<sub>#t</sub> ki-cserélte a körték-et.  
 Tamás two hour under *végig* PV<sub>out</sub>-changed the light-bulbs-ACC  
 'Tamás changed all of the light bulbs.'

Note that the transitivizing function of *végig* diverges from its verb modifying function with respect to compatibility with time-span adverbials. Specifically, if *végig* transitivizes a verb, then the resulting preverb-verb combination cannot be modified by a time-span adverbial, not to mention a durative adverbial, as shown for (1a) in (49).

- (49) a. #Réka hét óra alatt végig-táncolta az éjszaká-t.  
 Réka seven hour under *végig*-danced the night-ACC
- b. #Réka hét órá-n át végig-táncolta az éjszaká-t.  
 Réka seven hour-SUP through *végig*-danced the night-ACC

The unacceptability of (49a) is puzzling at first, for it suggests that if *végig* transitivizes a verb, then the result is not an accomplishment, contrary to what we saw for *végig* in its verb modifying function in (48c). However, it should be emphasized that the test for compatibility with time-span adverbials is not all-revealing: although compatibility with time-span adverbials indicates an accomplishment (or achievement) status, not all accomplishments are modifiable by a time-span adverbial. In particular, the preverb-verb combinations in (1)-(4) may be accomplishments despite their incompatibility with time-span adverbials.

I claim that the reason why examples like (49a) are unacceptable is that the accusative case marked object already functions as a temporal adverbial measuring the duration of the event and that two such adverbials seem to be prohibited. Evidence that *az éjszakát* in (49a) does indeed function as a temporal measure adverbial is provided by the fact that it can be replaced by an explicit time-denoting noun phrase:

- (50) Réka végig<sup>o</sup>-táncolta az-t a hét órá-t.  
 Réka *végig*-danced that-ACC the seven hour-ACC  
 'Réka danced throughout those seven hours.'

Thus, when *végig* transitivizes a verb, as in (1)-(4), the resulting preverb-verb combination are accomplishments, and the fact that they are incompatible with time-span adverbials is a consequence of the accusative case marked objects acting as temporal measure adverbials for events, where I assume that there is a prohibition against two such temporal measure adverbials cooccurring in a clause.

A final remark is that if *végig* is used in its verb modifying function as a preverb, the verb that *végig* modifies need not denote an accomplishment but the result of the modification does denote an accomplishment:

- (51) Réka két óra alatt végig<sup>o</sup>-olvasta a cikk-et. (Cf. (12c), (38a))  
 Réka two hour under *végig*-read the article-ACC  
 'Réka read the article from beginning to end in two hours.'

If *olvast* 'read' in (51) denoted an activity, then given the discussion in the previous section we would have to explain why it is nevertheless compatible with the object-related interpretation of *végig*. The simplest assumption, and the one that I will make, is that *olvast* in (51) is aspectually underspecified between an activity and an accomplishment and that the addition of *végig* specifies an accomplishment interpretation.<sup>17</sup>

#### 4.4. Achievements

Achievements are incompatible with the time-related interpretation of *végig*, and they appear to yield mixed results with its object-related interpretation:

- (52) a. ?Réka végig<sup>o</sup>/<sub>#t</sub> meg-nyerte a futóverseny-t.  
 Réka *végig* PV<sub>up</sub>-won the foot-race-ACC  
 'Réka won the race from beginning to end.'
- b. #Réka végig fel-ismerte Tamás-t.  
 Réka *végig* PV<sub>up</sub>-recognized Tamás-ACC

The example in (52a) is acceptable if interpreted to mean that the race was made up of smaller races all of which Réka won. It is unacceptable if understood to mean that there was only a single race and hence only a single winning by Réka. The sentence in (52b), in

<sup>17</sup> Another way of putting this point would be to say that *végig* in its verb modifying function as a preverb perfectivizes the verb that it applies to. I avoid talk of 'perfectivization' because it invites misleading comparisons with aspect in the Slavic languages, but the intuition behind 'specifying an accomplishment interpretation' could be sloganized in this way.

contrast is unacceptable because there was only a single recognizing of Tamás by Réka. Whereas it is plausible to win a race in stages, it is not plausible to recognize someone in stages. What the object-related interpretation of *végig* requires, in other words, is that the achievement denote a series of instantaneous events.

If the objects in (52) are pluralized, then we obtain sentences that are unquestionably acceptable:

- (53) a. Réka *végig*<sup>o/#t</sup> meg-nyerte a futóversenyek-et.  
 Réka *végig* PV-won the foot-races-ACC  
 'Réka won the races from beginning to end.'
- b. Réka *végig*<sup>o/#t</sup> fel-ismerte a diákok-at.  
 Réka *végig* PV<sub>up</sub>-recognized the students-ACC  
 'Réka recognized all of the students.'

The effect of the plural object in (53) is to make it clear that a series of instantaneous events is at issue, and it is a series of events that the semantics of *végig* in its object-related interpretation demands.

##### 5. Analyzing *végig*

The analysis of *végig* that I will present presupposes a domain of physical objects ( $x, y, z, \dots$ ), one of events ( $e, e', e'', \dots$ ), and one of times ( $t, t', t'', \dots$ ), together with a *proper part* relation ( $\subset$ ) on all three, a *temporal precedence* relation ( $<$ ) on events and times, and a *temporal trace* function ( $\tau$ ) from events to times (intuitively,  $\tau$  maps events to their 'run times').

The notions of *part*, *overlap*, *sum*, and *atom* are defined in terms of the proper part relation and identity as in (54), where  $a, b, c, \dots$  are unsorted variables for physical objects, events, or times.

- (54) a.  $a \subseteq b =_{\text{def}} a \subset b \vee a = b$   
 (a is part of b)
- b.  $a \circ b =_{\text{def}} \exists c [c \subseteq a \wedge c \subseteq b]$   
 (a and b overlap)
- c.  $\sigma(P) =_{\text{def}} \{a \mid \exists b [b \circ a \leftrightarrow \exists c [P(c) \wedge c \circ b]]\}$   
 (the sum of objects of type P)
- d.  $\text{Atom}(a) =_{\text{def}} \neg \exists b [b \subset a]$   
 (a is an atom)

The relations of *initial proper part* and *initial part* are defined in (55) for events and times in terms of proper part, temporal precedence, and identity, where  $v, v', v'', \dots$  are unsorted variables for events or times.

- (55) a.  $v \subset_{\text{ini}} v' =_{\text{def}} v \subset v' \wedge \neg \exists v'' [v'' \subseteq v' \wedge v' \wedge v'' < v]$   
 (v is an initial proper part of v')

- b.  $v \subseteq_{\text{ini}} v' =_{\text{def}} v \subset_{\text{ini}} v' \vee v = v'$   
 (v is an initial part of v')

If an event or time has an initial proper part, then it is *temporally extended*:

- (56)  $\text{Extend}(v) =_{\text{def}} \exists v' [v' \subset_{\text{ini}} v]$   
 (v is temporally extended)

For example, whereas intervals consisting of at least two instants are temporally extended, instants themselves are not. If an event or time is not temporally extended, then it is *instantaneous*.

A number of axioms regulate the behavior of the proper part and temporal precedence relations.<sup>18</sup> Beginning with the proper part relation, if one object is a proper part of a second, then the second is not a proper part of the first (*asymmetry*, (57a)); if one object is a proper part of a second which is in turn a proper part of a third, then the first object is a proper part of the third (*transitivity*, (57b)); if one object is a proper part of another, then there is at least one other proper part of the latter that does not overlap with the former (*witness*, (57c)); and any nonempty set of objects has exactly one sum (*uniqueness of sums*; (57d)).

- (57) a.  $a \subset b \rightarrow \neg(b \subset a)$   
 (asymmetry of proper part)
- b.  $a \subset b \wedge b \subset c \rightarrow a \subset c$   
 (transitivity of proper part)
- c.  $a \subset b \rightarrow \exists c [c \subset b \wedge \neg(c \circ a)]$   
 (witness for proper part)
- d.  $\exists a [P(a)] \rightarrow \exists a [v \circ b \mid b \circ a \leftrightarrow \exists c [P(c) \wedge c \circ b]]$   
 (uniqueness of sums)

<sup>18</sup> The axioms in (57)–(61) may be thought of as the 'bare minimum' for an ontology with the proper part and temporal precedence relations. Further axioms are imaginable (e.g. concerning the atomicity or density of times), but for present purposes those presented here suffice.



The temporal precedence relation is also both asymmetric and transitive:

- (58) a.  $v < v' \rightarrow \neg(v' < v)$   
(asymmetry of temporal precedence)

- b.  $v < v' \wedge v' < v'' \rightarrow v < v''$   
(transitivity of temporal precedence)

The connection between the overlap relation and the temporal precedence relation is expressed in (59): overlap entails the absence of temporal precedence.

- (59)  $v \circ v' \rightarrow \neg(v < v')$   
(overlap implies the lack of temporal precedence)

Next, the domain of times is *linear*, i.e., there are no parallel times:

- (60)  $t < t' \vee t' < t \vee t \circ t'$   
(no parallel times)

A final axiom constrains the behavior of the temporal trace function by stating that if one event is a proper part of a second, then the temporal trace of the first is a proper part of the temporal trace of the second:

- (61)  $e \subset e' \rightarrow \tau(e) \subset \tau(e')$   
(overlap among events implies overlap of their temporal traces)

I will adopt an event semantics in which verbs are generally analyzed as relations between events and physical objects or events (Kritika 1992; Parsons 1990), where 'event' is broadly understood as covering processes and states as well (i.e., in the sense of *eventuality*). For simplicity, I do not make explicit use of thematic relations, as they are not directly relevant for the semantics of *végig*. Finally, I disregard tense and analyze sentences as event predicates, leaving implicit the existential binding of the event argument as a last step of the derivations.

### 5.1. *Aspectual matters*

In order to account for the interaction of *végig* with aspect, I have to say something about the analysis of aspect. Since *végig* treats states and activities alike, it suffices for present purposes to draw a three-way distinction between states/activities, accomplishments, and achievements. For reasons of space, I will restrict myself to those aspectual matters that are crucial for the analysis of *végig*, and these are: the aspectual classes (states/activities, accomplishments, and achievements) on the one hand, and

durative and time-span adverbials on the other. In what follows, the aspectual classes will be defined as second-order properties of the meanings of event and time predicates.

States/activities, construed as event predicates, satisfy the *divisibility* condition in (62), which asserts that if an event  $e$  is of type  $P$ , then  $e$  is extended and all of its extended initial parts are also of type  $P$ , where it is guaranteed that there is at least one event in the extension of  $P$  that has an extended initial proper part. Intuitively, this says that a state/activity of type  $P$ —provided that it has an extended initial proper part—could end sooner than it does and still be of type  $P$ .<sup>19</sup>

- (62)  $\text{Div}(P) =_{\text{def}} \forall v[P(v) \rightarrow \text{Extend}(v) \wedge \forall v'[v' \subseteq_{\text{ini}} v \wedge \text{Extend}(v') \rightarrow P(v')]] \wedge \exists v \exists v''[P(v') \wedge v'' \subset_{\text{ini}} v' \wedge \text{Extend}(v'')]$   
( $P$  is divisible)

An example of a state/activity is the event type *Réka-work*: if an event is of type *Réka-work*, then it is made up of initial subevents that are also of type *Réka-work*. Accomplishments and achievements, also taken to be event predicates, both satisfy the *wholeness* condition in (63), which asserts that if an event  $e$  is of type  $P$ , then  $e$  has no initial proper part  $e'$  that is of type  $P$ , where it is ensured that there is at least one event that satisfies  $P$ . More intuitively, an accomplishment or achievement of type  $P$  could not end sooner than it does and still be of type  $P$ .

- (63)  $\text{Whole}(P) =_{\text{def}} \forall v[P(v) \rightarrow \neg \exists v'[v' \subset_{\text{ini}} v \wedge P(v')]] \wedge \exists v[P(v)]$   
( $P$  is a whole)

Accomplishments are distinguished from achievements in that they satisfy the additional condition that they denote extended events. This condition is known as strict wholeness:

- (64)  $\text{Strict-whole}(P) =_{\text{def}} \text{Whole}(P) \wedge \forall v[P(v) \rightarrow \text{Extend}(v)]$   
( $P$  is a strict whole)

An example of an accomplishment is the event type *Réka-read-the-article-completely*: if an event is of this type, then it has no initial proper subevent in which *Réka* read the article completely, although it does have initial proper subevents (because events of reading take time). Note that achievements do not satisfy strict wholeness, because they may have instantaneous events in their denotation. For example, the event type *Réka-wins-the-race* is a whole but not a strict whole, precisely because an event in which *Réka* wins the race in a single stage is instantaneous, but one in which she wins the race in more than

<sup>19</sup> The quantification in (62) is restricted to *extended* initial parts because activities (unlike states) are generally not realized at instants.



one stage is extended, having initial proper parts (recall (52a) and (53a)).<sup>20</sup>

It can be shown that if an event type  $P$  is divisible, then it is not a whole (or equivalently, if  $P$  is a whole, then it is not divisible).

- (65) *Fact.*  $\text{Div}(P) \rightarrow \neg \text{Whole}(P)$

This fact allows for an event type to be neither divisible nor a whole. Intuitively, this is the case with event types that are aspectually underspecified between a state/actively and an accomplishment interpretation. Let us call such predicates *mixed*:

- (66)  $\text{Mixed}(P) =_{\text{def}} \neg(\text{Div}(P) \vee \text{Whole}(P))$   
( $P$  is mixed)

An example of a mixed event type might be *Reka-read-the-article* if it is taken to represent the aspectually underspecified English sentence *Reka read the article*:

- (67) *Reka* read the article for an hour/in an hour.

The analysis of durative adverbials (*di*-phrases in Hungarian) is given in (68), where  $C$  is a constant for a measure predicate of times. The idea is that adurative adverbial introduces a time  $t$  of  $C$ -duration that is the temporal trace of an event  $e$  of type  $P$  and asserts that for any extended initial part  $t'$  of  $t$  there is an initial subevent  $e'$  of  $e$  of type  $P$  that occurs at  $t'$ , where it is presupposed that  $t$  has at least one extended initial proper part.

- (68)  $C\text{-időn}$  at 'for  $C$ -time-SUP'  $\Rightarrow$   
 $\lambda P \lambda e [\exists t [C(t) \wedge \tau(e) = t \wedge P(e) \wedge$   
 $\forall t' [t' \subseteq_{\text{ini}} t \wedge \text{Extend}(t') \rightarrow \exists e' [e' \subseteq_{\text{ini}} e \wedge \tau(e') = t' \wedge P(e')]]] \wedge$   
 $\exists t' [t' \subseteq_{\text{ini}} t \wedge \text{Extend}(t')]] =_{\text{def}} \text{For-}C\text{-time}$

An instantiation of  $C$  in (68) is provided by the analysis of *két óráan át* 'for two hours':

- (69) *két óráan át* 'for two hours'  $\Rightarrow$   
 $\lambda P \lambda e [\exists t [2\text{-hours}(t) \wedge \tau(e) = t \wedge P(e) \wedge$   
 $\forall t' [t' \subseteq_{\text{ini}} t \wedge \text{Extend}(t') \rightarrow \exists e' [e' \subseteq_{\text{ini}} e \wedge \tau(e') = t' \wedge P(e')]]] \wedge$   
 $\exists t' [t' \subseteq_{\text{ini}} t \wedge \text{Extend}(t')]]]$

The format for time-span adverbials is given in (70). This analysis differs from that of durative adverbials in that it prohibits  $t$  from having an initial proper part  $t'$  that is the temporal trace of an initial proper subevent  $e'$  of  $e$  of type  $P$ :

- (70)  $C\text{-idő alatt}$  'in  $C$ -time'  $\Rightarrow$   
 $\lambda P \lambda e [\exists t [C(t) \wedge \tau(e) = t \wedge P(e) \wedge$   
 $\neg \exists t' [t' \subseteq_{\text{ini}} t \wedge e' \subseteq_{\text{ini}} e \wedge \tau(e') = t' \wedge P(e')]]]$   
 $=_{\text{def}} \text{In-}C\text{-time}$

This format is exemplified by the analysis of *két óra alatt* 'in two hours':

- (71) *két óra alatt* 'in two hours'  $\Rightarrow$   
 $\lambda P \lambda e [\exists t [2\text{-hours}(t) \wedge \tau(e) = t \wedge P(e) \wedge$   
 $\neg \exists t' [t' \subseteq_{\text{ini}} t \wedge e' \subseteq_{\text{ini}} e \wedge \tau(e') = t' \wedge P(e')]]]$

Several elementary results follow. If a durative adverbial applies to an event type  $P$ , then  $P$  is not a whole (i.e., not an accomplishment or an achievement). If, in addition, the predicate  $C$  representing the measure adverbial is a whole, then the result of applying the durative adverbial to  $P$  is a strict whole (i.e., an accomplishment). On the other hand, if a time-span adverbial applies to an event type  $P$ , then  $P$  is not divisible (i.e., not a state/activity). Moreover, if the predicate  $C$  is also a whole, then the result of applying the time-span adverbial to  $P$  is a whole. These four facts are formalized in (72).<sup>21</sup>

- (72) a. *Fact.*  $\exists e [\text{For-}C\text{-time}(e, P)] \rightarrow \neg \text{Whole}(P)$   
b. *Fact.*  $\exists e [\text{For-}C\text{-time}(e, P)] \wedge \text{Whole}(C) \rightarrow \text{Strict-whole}(\lambda e' [\text{For-}C\text{-time}(e', P)])$

<sup>21</sup> I give the proofs of (72a) and (72b) for the sake of illustration.

(72a). Assume an  $e$  and a  $P$  such that  $\text{For-}C\text{-time}$  holds of  $e$  and  $P$  for a choice of  $C$  and (for the reductio) that  $P$  is a whole. By (68) we infer  $e$  has at least one initial proper subevent  $e'$  of type  $P$ . But if  $P$  is a whole, then by (63)  $e$  lacks an initial proper subevent  $e'$  of type  $P$ , which contradicts the previous conclusion. Consequently,  $P$  is not a whole.

(72b). Assume an  $e$  and a  $P$  such that  $\text{For-}C\text{-time}$  holds of  $e$  and  $P$  for a choice of  $C$  that is a whole. By (68) the result of applying  $\text{For-}C\text{-time}$  to  $P$  is  $\lambda e' [\text{For-}C\text{-time}(e', P)]$ , which is a predicate of events of type  $P$  with duration  $C$ . Observe that any event  $e$  of this type is extended and yet at the same time lacks an initial proper subevent that is both of type  $P$  and of duration  $C$  (by the wholeness of  $C$  and (61)). But then  $\lambda e' [\text{For-}C\text{-time}(e', P)]$  satisfies the definition of a strict whole as given in (64).

- c. *Facti*.  $\exists e[\text{In-C-time}(e, P)] \rightarrow \neg \text{Div}(P)$
- d. *Facti*.  $\exists e[\text{In-C-time}(e, P)] \wedge \text{Whole}(C) \rightarrow \text{Whole}(\lambda e[\text{In-C-time}(e, P)])$

## 5.2. The time-related interpretation

Since the time-related interpretation of *végig* is simpler, I will begin with it. The idea is that *végig*<sup>t</sup> denotes a relation between events *e* and event types *P* such that *e* is of type *P*, has a contextually salient time *t* as its temporal trace, and for any extended initial part *t'* of *t* there is an initial subevent *e'* of *e* of type *P* that occurs at *t'*, where it is required that *t* have at least one extended initial proper part. In other words, *végig*<sup>t</sup> is basically a durative adverbial (see (68)) but with the difference that the time in question is not existentially introduced but has to be retrieved from the context of use.<sup>22</sup>

$$(73) \quad [\text{Adv } \text{végig}^t] \Rightarrow \lambda P \lambda e [P(e) \wedge \tau(e) = t \wedge \forall t' [t' \subseteq_{\text{ini}} t \wedge \text{Extend}(t') \rightarrow \exists e' [e' \subseteq_{\text{ini}} e \wedge \tau(e') = t' \wedge P(e')]] \wedge \exists t' [t' \subseteq_{\text{ini}} t \wedge \text{Extend}(t')]]] \\ =_{\text{def}} \text{Vegig-time}(t)$$

Since *végig*<sup>t</sup> is an adverb and applies to one-place event predicates, the corresponding syntactic argument of *végig*<sup>t</sup> should be a constituent in which the verb has already combined with its arguments. The smallest such constituent is a (subject-internal) VP, and I take this to be the appropriate argument for *végig*<sup>t</sup>, i.e., *végig*<sup>t</sup> is a VP-modifier:

$$(74) \quad [\text{VP } [\text{Adv } \text{végig}^t] [\text{VP } \alpha]]$$

It follows from (73) and (74) that *végig*<sup>t</sup> does not affect the argument structure of the verb. This is consistent with the data and the status of *végig*<sup>t</sup> as an adverb, as opposed to a preverb, as I argued above. All that *végig*<sup>t</sup> 'sees', so to speak, is the event argument of the verb — it is not able to change argument structure.

The status of the free variable *t* in (73) calls for comment. As already mentioned, the semantics of *végig*<sup>t</sup> presupposes a contextually salient time *t* that the event 'fills'. However, we might ask why *t* is not existentially bound—in other words, what would be wrong with existentially quantifying over *t* in (73)? To see why *t* should be free, consider the following example, based on (6a):

- (75) *Tamás végig<sup>t</sup> dolgozott.*  
*Tamás végig worked*  
 'Tamás worked throughout the time in question.'

Assuming that the unmodified VP in (75) is analyzed as the event predicate in (76a),

then the result of applying *végig*<sup>t</sup> to this VP is shown in (76b).

$$(76) \text{ a. } [\text{VP } \text{Tamás dolgozik}] \Rightarrow \lambda e [\text{Work}(e, \text{Tamas})]$$

$$\text{b. } [\text{VP } \text{végig}^t [\text{VP } \text{Tamás dolgozik}]] \Rightarrow \lambda e [\text{Vegig-time}(e, \lambda e' [\text{Work}(e', \text{Tamas})], t)] = \lambda e [\text{Work}(e, \text{Tamas}) \wedge \tau(e) = t \wedge \forall t' [t' \subseteq_{\text{ini}} t \wedge \text{Extend}(t') \rightarrow \exists e' [e' \subseteq_{\text{ini}} e \wedge \tau(e') = t' \wedge \text{Work}(e', \text{Tamas})]] \wedge \exists t' [t' \subseteq_{\text{ini}} t \wedge \text{Extend}(t')]]]$$

The formula in (76b) is a predicate of events in which Tamás works throughout a contextually salient time *t*. As this analysis makes clear, (75) does not (existentially) assert that there is a time during which Tamás worked, for that would be a rather weak claim: if he worked at all, then there is such a time, namely, the temporal trace of the event in which he worked. Instead, (75) presupposes that the time *t* is retrievable from context of use—it may be yesterday or last week or some other contextually salient time. For example, in the following question-answer pair, the time presupposed by *végig*<sup>t</sup> in the answer is most naturally identified with the time denoted by *tegnap* 'yesterday' in the question, i.e., the value of *t* in this case is the interval delimited by yesterday, and the answer there by asserts that Tamás worked throughout yesterday, as represented in (78). If *t* were existentially quantified over in (76b), it would not be feasible to identify *t* with Yesterday.

- (77) a. *Mit csinált Tamás tegnap?*  
 'what did Tamás yesterday'  
 'What did Tamás do yesterday?'

- b. *Végig<sup>t</sup> dolgozott.*  
*végig worked*  
 'He worked the whole time (yesterday).'

$$(78) \quad (77b) \Rightarrow \lambda e [\text{Vegig-time}(e, \lambda e' [\text{Work}(e', \text{Tamas})], \text{Yesterday}]] = \lambda e [\text{Work}(e, \text{Tamas}) \wedge \tau(e) = \text{Yesterday} \wedge \forall t' [t' \subseteq_{\text{ini}} \text{Yesterday} \wedge \text{Extend}(t') \rightarrow \exists e' [e' \subseteq_{\text{ini}} e \wedge \tau(e') = t' \wedge \text{Work}(e', \text{Tamas})]] \wedge \exists t' [t' \subseteq_{\text{ini}} \text{Yesterday} \wedge \text{Extend}(t')]]]$$

An explication of how *t* is assigned a value in context would require a more elaborate semantic framework than I have assumed here. However, it suffices for present purposes to simply emphasize that the semantics of *végig*<sup>t</sup> presupposes a contextually salient time *t* whose identity must be determined in order for an assertion to be made.

Observe that the value of *t* may also be determined sentence-internally, as in the following variation on (75):

<sup>22</sup> Recall that since *mindvégig* is synonymous with *végig*<sup>t</sup>, the analysis in (73) applies to *mindvégig* as well.

- (79) Tamás tegnáp végig<sup>t</sup> dolgozott.  
 Tamás yesterday végig<sup>t</sup> worked  
 'Tamás worked throughout the day yesterday.'

Here, just like in (77b), the value of *t* is the interval delimited by yesterday. It is easy to see that végig<sup>t</sup>, like durative adverbials (see (72a)), implies that the event type that it applies to is not a whole:

- (80) Fact.  $\exists e[\text{Vegig-time}(e, P, t)] \rightarrow \neg \text{Whole}(P)$

Since states/activities are analyzed as divisible event types, modification of them by végig<sup>t</sup> is unproblematic. However, since achievements are analyzed as wholes and accomplishments as strict wholes, it follows that végig<sup>t</sup> is incompatible with both accomplishments and achievements.

An example of végig<sup>t</sup> modifying an activity was already given in (76), and so it suffices here to point out that the predicate  $\lambda e[\text{Work}(e, \text{Tamas})]$  is not a whole and is in fact divisible. For an accomplishment consider (47a), the unmodified clause of which is analyzed as the event predicate in (81a) and is characterized as a strict whole in (81b). This event type is a strict whole because any event in which Tamás changes the light bulbs is both extended and lacks an initial proper subevent in which he changes those same light bulbs. Since végig<sup>t</sup> requires that the event type it applies to not be a whole, it is evidently incompatible with this event type.

- (81) a.  $[\text{vp Tamás ki-cserélte a körtékét}]$  'Tamás changed the light bulbs'  $\Rightarrow$   
 $\lambda e[\text{Change}(e, \text{Tamas}, \text{The-light-bulbs})]$

- b. Strict-whole( $\lambda e[\text{Change}(e, \text{Tamas}, \text{The-light-bulbs})]$ )

Parallel to (72b) for durative adverbials, the result of applying végig<sup>t</sup> to an event type *P* for a value of *t* is a strict whole:

- (82) Fact.  $\exists e[\text{Vegig-time}(e, P, t)] \rightarrow \text{Strict-whole}(\lambda e[\text{Vegig-time}(e, P, t)])$

Concerning the proof of (82), note that if an event *e* is of type  $\lambda e[\text{Vegig-time}(e, P, t)]$ , then *e* has *t* as its contextually salient temporal trace and no initial proper subevent of *e* also has *t* as its temporal trace.

As a final example, we apply this fact to the sentence in (5a), whose analysis is given in (83a) and whose characterization as a strict whole is stated in (83b).

- (83) a. Réka végig táncolt az éjszaka  
 'Réka danced throughout the night'  $\Rightarrow$   
 $\lambda e[\text{Vegig-time}(e, \lambda e[\text{Dance}(e, \text{Reka})], \text{The-night})] =$

$\lambda e[\text{Dance}(e, \text{Reka}) \wedge \tau(e) = \text{The-night} \wedge \forall t[t \subseteq_{\text{ini}} \text{The-night} \wedge \text{Extend}(t) \rightarrow$   
 $\exists e'[e' \subseteq_{\text{ini}} e \wedge \tau(e') = t \wedge \text{Dance}(e', \text{Reka})]] \wedge$   
 $\exists t[t \subseteq_{\text{ini}} \text{The-night} \wedge \text{Extend}(t)]]]$

- b. Strict-whole( $\lambda e[\text{Vegig-time}(e, \lambda e[\text{Dance}(e, \text{Reka})], \text{The-night})]$ )

### 5.3. The object-related interpretation

Recall that the object-related interpretation of végig has both a verb modifying and a transitivizing function (see (22)) and that the verb modifying function is not even realized uniformly syntactically (see (23a)). While there is enough in common between these two functions of végig<sup>o</sup> to justify speaking of the object-related interpretation of végig, there is also enough difference in detail between them to justify treating the two cases separately. In what follows, I will employ the subscripts '1' (*végig*<sup>o</sup><sub>1</sub>) and '2' (*végig*<sup>o</sup><sub>2</sub>) to designate the verb modifying and transitivizing functions of végig<sup>o</sup>, respectively.

5.3.1. *Végig* as a verb modifier. Since there is no evidence that végig<sup>o</sup> in its verb modifying function differs in meaning according to whether it is a preverb or an adverb, I give it a single analysis, presented in (84), where végig<sup>o</sup><sub>1</sub> is treated as a modifier of threeplace relations between events, physical objects, and physical objects or events (where *u*, *u'*, *u''*, ... are variables for physical objects or events).

- (84)  $[\text{prev/Adv végig}^o_1] \Rightarrow \lambda R \lambda u \lambda u' \lambda u'' [R(e, x, u) \wedge \forall u'[u' \subseteq u \wedge \neg \text{Atom}(u') \rightarrow$   
 $\exists e'[e' \subseteq e \wedge R(e', x, u')] \wedge \forall e''[e'' \subseteq e \wedge e'' \subseteq e \wedge \neg (e' = e'') \rightarrow$   
 $\neg \exists u'[u' \subseteq u \wedge R(e', x, u') \wedge R(e'', x, u')] \wedge$   
 $\exists e \exists u'[e' \subseteq_{\text{ini}} e \wedge u' \subseteq u \wedge R(e', x, u')] = \text{Vegig-object-1}]$

Syntactically, végig<sup>o</sup><sub>1</sub> is an adverb only if the verb it modifies lacks a preverb; otherwise it is a preverb (see (23a)). Technically, I implement this by saying that végig<sup>o</sup><sub>1</sub> is an adverb only if *V* branches; otherwise (i.e., if *V* does not branch) it is a preverb, as in (85a).<sup>23</sup> Furthermore, végig<sup>o</sup><sub>1</sub>, whether an adverb or a preverb, requires its argument *u* to be case-linked to nominative, accusative, or superessive, as shown in (85b).

- (85) a.  $[\text{v [Adv végig}^o_1] [\text{v } \alpha]]$  iff  $\alpha$  branches;  
 $[\text{v [prev végig}^o_1] [\text{v } \alpha]]$  otherwise

- b. végig<sup>o</sup><sub>1</sub>:  $\lambda u[\text{NOM} \vee \text{ACC} \vee \text{SUP}]$

<sup>23</sup> Thus végig<sup>o</sup><sub>1</sub> as an adverb contrasts with végig<sup>t</sup> in that the former modifies a *V* (i.e., a verb), whereas the latter, a *VP* (i.e., a clause). I see no choice but to treat végig<sup>o</sup><sub>1</sub> as semantically uniform despite its syntactic variability, and yet this entails that végig<sup>o</sup><sub>1</sub> must have direct access to the verb even as an adverb.

Let us consider the formula in (84) in more detail. The first line asserts that the relation  $R$  holds of an event  $e$ , a physical object  $x$ , and a physical object (or event)  $u$ . The second line states that every nonatomic part of  $u$  participates in a subevent  $e'$  of  $e$  of type  $R$ .<sup>24</sup> The third line prohibits the same subpart of  $u$  from participating in two distinct subevents of  $e$ . This has the effect of excluding divisible event types from the domain of  $végig^o_1$  (see (86a)). Finally, the fourth line guarantees that  $R$  also holds of an initial proper part  $e'$  of  $e$ ,  $x$ , and a proper part  $u'$  of  $u$ . This rules out the possibility that  $e$  is an instantaneous event (see (86b)). Consequently,  $végig^o_1$  does not modify achievements that denote instantaneous events (e.g. (52b)).

Given this semantics, it can be shown that if  $végig^o_1$  applies to a relation  $R$ , then  $R$  is not divisible with respect to its event argument, and that the result of modifying a verb by  $végig^o_1$  is an event predicate that is a strict whole. Notice that  $végig^o_1$  is like a time-span adverbial in these respects (see (72c) and (72d)). More informally,  $végig^o_1$  does not apply to states/activities and the result of modifying a verb by  $végig^o_1$  is an accomplishment.

- (86) a. *Fact.*  $\exists e[\vee\text{vegig-object-1}(e, x, u, R)] \rightarrow \neg \text{Div}(\lambda e[\text{R}(e, x, u)])$   
 b. *Fact.*  $\exists e[\vee\text{vegig-object-1}(e, x, u, R)] \rightarrow$   
 Strict-whole  $(\lambda e[\vee\text{vegig-object-1}(e, x, u, R)])$

As an illustration, the derivation of the modified verb  $végig^o_1$ -*olvás* 'végig-read' (cf. (12c)) is shown in (87).<sup>25</sup>

- (87) a.  $[\vee\text{olvás}] \Rightarrow \lambda y \lambda x \lambda e[\text{Read}(e, x, y)];$   
 Mixed  $(\lambda e[\text{Read}(e, x, y)])$   
 b.  $[\vee_{\text{rev}}\text{végig}^o_1][\vee\text{olvás}] \Rightarrow$   
 $\lambda u \lambda x \lambda e[\vee\text{vegig-object-1}(e, x, u, \text{Read})] = \lambda u \lambda x \lambda e[\text{Read}(e, x, u) \wedge$   
 $\forall u'[u' \subseteq u \rightarrow \exists e'[e' \subseteq e \wedge \text{Read}(e', x, u')]] \wedge$   
 $\forall e'Ve'[e' \subseteq e \wedge e'' \subseteq e \wedge \neg(e' = e'') \rightarrow$   
 $\neg \exists u'[u' \subseteq u \wedge \text{Read}(e', x, u') \wedge \text{Read}(e'', x, u')]] \wedge$   
 $\exists e \exists u[e' \subseteq_{\text{ini}} e \wedge u' \subseteq u \wedge \text{Read}(e', x, u')]]$

Note that in (87a) I assume that *olvás* 'read' denotes a mixed event predicate, i.e., it is aspectually underspecified between an activity and an accomplishment, and the addition of  $végig^o_1$  specifies an accomplishment interpretation.

The motivation for having the argument  $u$  of  $végig^o_1$  vary over physical objects or

<sup>24</sup> The restriction to nonatomic parts in the case of physical objects parallels the restriction to extended parts in the case of events or times (see (62) and footnote 19). In particular, it would be too strong to require in (84) that every atom of  $u$  participate in a distinct event of type  $R$ .

<sup>25</sup> In (87b) the variable  $u$  is replaced by  $y$  in the expanded formula, which is to emphasize that  $\text{Read}$  restricts the argument  $u$  to physical objects, per (87a).

events is to account for examples like (13) in which the object of the verb  $végig^o_1$ -*vinni* 'végig-take' is an event-denoting NP (specifically, a *magánosítás* 'the privatization'). The analysis in (84) states that  $végig^o_1$  applies to three-place relations. This means that  $végig^o_1$  does not modify intransitive verbs that are not three-place relations semantically. Most intransitive verbs, of course, are not three-place relations semantically and so modification by  $végig^o_1$  is unacceptable, even if the verbs in question fulfill the requirement of not denoting divisible event predicates (see (86a)), as in (88).

- (88) a. #A tanárak végig-indultak.  
 the teachers végig-departed  
 b. #A diákok végig-érkeztek.  
 the students végig-arrived

However, there are intransitive verbs that are compatible with  $végig^o_1$  and that arguably denote three-place relations, even though the external argument is not realized syntactically. One such example was given in (11a) with the verb *reped* 'cracked', and another is the following:

- (89) Az inguji végig<sup>o</sup>-i-hasadt.  
 the shirt-sleeve végig-tore  
 'The shirt-sleeve tore all over.'

The verbs *reped* 'crack' and *hasad* 'tear' participate in what is known as the causative alternation: they are detransitivized versions of the causative verbs *reprezt* 'crack' and *hasít* 'tear', respectively. While I cannot go into the details of the causative alternation here (see Levin and Rappaport Hovav 1994), it is plausible to think that the detransitivized forms are really three-place relations semantically and that this enables them to satisfy the requirements of  $végig^o_1$ . Some evidence that an external argument is semantically present is provided by the fact that it can be expressed by means of the ablative case:

- (90) a. Végig-repedt a föld a szárazság-tól.  
 végig-cracked the earth the dryness-ABL  
 'The earth cracked all over from the dryness.'  
 b. Az inguji végig<sup>o</sup>-i-hasadt a kés-től.  
 the shirt-sleeve végig-tore the knife-ABL  
 'The shirt-sleeve tore all over from the knife.'

If the analysis of *reped* 'crack' and *hasad* 'tear' as three-place relations is tenable, then they do not pose a problem for my account of  $végig^o_1$ .



5.3.2. *Végig as a transitive verb*. The semantics of the transitive function of *végig*<sup>o</sup> is unmistakably similar to that of *végig*<sup>t</sup>, as a comparison of (91) with (73) will reveal:

- (91) [Prev *végig*<sup>o</sup><sub>2</sub>]  
 $\lambda R \lambda t \lambda x \lambda e [R(e, x) \wedge \tau(e) = t \wedge \forall t' [t' \subseteq_{\min} t \wedge \text{Extend}(t') \rightarrow$   
 $\exists e' [e' \subseteq_{\min} e \wedge R(e', x) \wedge \tau(e') = t']] \wedge \exists t' [t' \subseteq_{\min} t \wedge \text{Extend}(t')]]$   
 $=_{\text{def}} \text{Végig-object-2}$

The essential difference between the analyses in (91) and (73) is that *végig*<sup>o</sup><sub>2</sub> introduces a time argument at the level of the verb, whereas *végig*<sup>t</sup> does so at the level of the clause. Specifically, *végig*<sup>o</sup><sub>2</sub> applies to two-place relations *R* between events *e* and physical objects *x* and enhances them with a time argument *t* that serves as the temporal trace of *e*. Syntactically, *végig*<sup>o</sup><sub>2</sub> is a preverb and requires its time argument to be case-linked to accusative:

- (92) a. [v [Prev *végig*<sup>o</sup><sub>2</sub>] [v *acc*]]

b. *végig*<sup>o</sup><sub>2</sub>:  $\lambda t [\text{ACC}]$

Parallel to the results in (80) and (82), it can be shown that *végig*<sup>o</sup><sub>2</sub> entails that the relation *R* is not a whole (hence accomplishments and achievements are excluded) and that the result of transitivity is a strict whole:

- (93) a. *Fact.*  $\exists e \exists t [\text{Végig-object-2}(e, x, t, R)] \rightarrow \neg \text{Whole}(\lambda e 0 [R(e', x)])$   
 b. *Fact.*  $\exists e [\text{Végig-object-2}(e, x, t, R)] \rightarrow$   
 Strict-whole( $\lambda e' [\text{Végig-object-2}(e', x, t, R)]$ )

Recall that an aim of this paper was to show how the (a)-sentences of (1)-(4) are synonymous with the (a)-sentences of (5)-(8), despite the difference that *végig* transitivizes the verb in the former and modifies the clause in the latter. Taking (1a) and (5a) as the key examples, the analysis of (5a) was given in (83a) and the derivation of (1a) is provided in (94).

$$\exists e [e' \subseteq_{\min} e \wedge \tau(e') = t' \wedge \text{Dance}(e', x)] \wedge \exists t' [t' \subseteq_{\min} t \wedge \text{Extend}(t')]$$

- (94) a. [v *táncol*] 'dance'  $\Rightarrow \lambda x \lambda e [\text{Dance}(e, x)]$ ; Mixed( $\lambda e' [\text{Dance}(e', x)]$ )  
 b. [v [Prev *végig*<sup>o</sup><sub>2</sub>] [v *táncol*]] 'végig-dance'  $\Rightarrow$   
 $\lambda t \lambda x \lambda e [\text{Végig-object-2}(e, x, t, \text{Dance})] =$   
 $\lambda t \lambda x \lambda e [\text{Dance}(e, x) \wedge \tau(e) = t \wedge \forall t' [t' \subseteq_{\min} t \wedge \text{Extend}(t') \rightarrow$   
 c. [v<sub>P</sub> Réka *végig-táncolta az éjszakát*] 'Réka danced throughout the night'  $\Rightarrow$   
 $\lambda e [\text{Végig-object-2}(e, \text{Reka}, \text{The-night}, \text{Dance})] =$   
 $\lambda e [\text{Dance}(e, \text{Reka}) \wedge \tau(e) = \text{The-night} \wedge \forall t' [t' \subseteq_{\min} \text{The-night} \wedge \text{Extend}(t') \rightarrow$   
 $\exists e' [e' \subseteq_{\min} e \wedge \tau(e') = t' \wedge \text{Dance}(e', x)]] \wedge \exists t' [t' \subseteq_{\min} \text{The-night} \wedge \text{Extend}(t')]]$

Although the sentences in (1a) and (5a) differ in how they are built up semantically, the resulting meanings are the same, as a comparison of the formulas in (83a) and (94c) makes clear.

Actually, this equivalence is no accident, and as a final result I point out that if a predicate *P* is identified with the corresponding event predicate of a two-place relation *R* for a value of its argument *x*, then the result of applying *végig*<sup>t</sup> to *P* for a value of *t* is equivalent to the result of applying *végig*<sup>o</sup><sub>2</sub> to *R* for the same value of *t*:

- (95) *Fact.*  $P = \lambda e' [R(e', x)] \rightarrow \text{Végig-time}(e, P, t) \leftrightarrow \text{Végig-object-2}(e, x, t, R)$



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## VÁ- AND VÁN- PARTICIPLES IN HUNGARIAN

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