Tanulmány

Viktória Virovec

Expressing Proximity in Hungarian*

The case of most 'now' and éppen 'just'

Abstract

As part of a study on the properties of the Gitskan pre-predicate element *hlaa* 'just, now', Matthewson et al. propose the hypothesis that "there is possibly such a thing as proximal aspect" (2019:45). In their interpretation, the meaning that a proximity marker can give to a sentence is 'the temporal distance between the time of the event described by the predicate and the reference time is small' (ibid.). In this study, I argue that Hungarian *most* 'now' and *éppen* 'just' can mark proximity when they are used together with the morphologically marked past tense and future time reference. Concerning the types of proximity, I distinguish two types: absolute and relative. Additionally, I show that *most* 'now' and *éppen* 'just' are relative proximity markers by comparing the grammatical behavior and meaning of *most* 'now' to the Gitskan element *hlaa* 'just, now'. I argue that despite their differences, absolute and relative proximity markers can have the same formal semantic representation and that all differences between these two types of proximity markers are pragmatic in nature. To support this, I provide a formal semantic representation of Hungarian sentences containing the proximity markers *most* 'now' and *éppen* 'just'.

Keywords: relative proximity, Hungarian, future time reference

1 Introduction

Matthewson et al. argue that the Gitskan pre-predicate element *hlaa* 'just, now' can mark proximity (2019). In their interpretation, the meaning that a proximity marker can give to a sentence is 'the temporal distance between the time of the event described by the predicate and the reference time is small' (Matthewson et al. 2019:45). They also claim that "there is possibly such a thing as proximal aspect" (ibid.).

In this study, I argue that the Hungarian *most* 'now' and *éppen* 'just' can mark relative proximity when they are used together with explicit markers of past and future time reference.¹

(1) a. (Éppen/ most) feksz-ek le. just/ now lie-1SG PRT 'I'm going to bed just now.'

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Similarly to English, Hungarian distinguishes two tenses morphologically: the past and the non-past.

b. *Éppen* le-feküd-t-em/ *Most* feküd-t-em le. PROX down-lie-PST-1SG PROX lie-PST-1SG PRT 'I have just gone to bed.'

c. Le-feküd-t-em. PRT-lie-PST-1SG 'I went to bed.'

In the case of (1a), *most* 'now' and *éppen* 'just' occur with the progressive aspect, but they themselves do not mark it. The reading of the sentence remains the same even these words are omitted. By contrast, in the case of (1b), if the proximity markers are omitted, the reading of the sentence changes. Namely, (1b) means that 'there is a time t' that precedes the utterance time, there is a (completed) going to bed event at t', and the temporal distance between the utterance time and the event time (t') is small in the speaker's view'. (1c) has a different reading, which is the following: 'there is a time t' that precedes the utterance time, and there is a (completed) going to bed event at t''. Therefore, *most* 'now' and *éppen* 'just' do change the meaning of the sentence in the case of (1b). Namely, they add the proximal reading to the sentence, which is absent in the case of (1c).

In this study, I focus on the use of *most* 'now' and *éppen* 'just' that is shown in (1b). First, I briefly discuss how other languages, Gitskan and English, express proximity. Then, I focus on the various uses of *most* 'now' and I compare *most* first to the Gitskan *hlaa*, then to the Hungarian *éppen* 'just'. I then proceed to show that both *most* and *éppen* can mark relative proximity (i.e. proximity in the speaker's view) in Hungarian. Finally, I give the formal semantic analyses of sentences containing these Hungarian proximity markers.

2 Proximity in other languages

2.1 The notion of proximity in Gitskan

Studying Gitskan, Matthewson et al. (2019) discuss the various uses of *hlaa* 'just, now' and conclude that pre-predicative *hlaa* (P) 'just, now' can signal that the event time is proximal to the reference time (Matthewson et al. 2019: 27). In this subsection, I summarize their claims.

Gitskan morphologically marks the future tense with the pre-predicate element *dim*. In the absence of *dim*, a sentence has either a present or a past interpretation. *Hlaa* 'just, now' can combine with the covert non-future tense. In such cases, the resulting sentence is ambiguous between the event-in-progress and the proximal readings.

(2) a. Hlaa wis.

PROX rain

'It's raining/ it rained recently.'

Matthewson et al. (2019: 35)

The proximity reading expresses that 'there is a raining event at the contextually salient non-future-time *t*, and the distance between *t* and the utterance time is small'.

As exemplified by (3), *hlaa* 'just, now' is compatible with *gyu'un* 'now', but incompatible with *ky'oots* 'yesterday'.

(3) Context: My friend Sally arrived five minutes ago for a visit. I tell you the news:

- a. Hlaa ky'etsxw dip Sally (**gyu'un**). PROX arrive ASSOC Sally (**now**) 'Sally and they have arrived/they are here now.'
- b. # Hlaa ky'etsxw dip Sally **ky'oots**.

 PROX arrive ASSOC Sally **yesterday**'Sally and they arrived yesterday.'

Matthewson et al. (2019: 27)

Hlaa 'just, now' can combine either with plain future dim or with progressive future yukw dim. Hlaa combined with future tense conveys imminency and is understandably very often translated as just or about to. However, similarly to its incompatibility with ky'oots 'yesterday' as shown in (3), hlaa is also incompatible with a description of an event which is going to happen tomorrow, as in (4b).

- (4) Hlaa (yukw) dim wis. PROX (PROG) FUT rain 'It is just about to rain.'
 - a. $\sqrt{\text{if rain is imminent}}$
 - b. # if talking about tomorrow

Matthewson et al. (2019: 29)

It can thus be said that as *hlaa* 'just, now' expresses proximity in an absolute sense, it is not appropriate to use *hlaa* when the event in question happened yesterday or is going to happen tomorrow.

Matthewson et al. (2019) also discuss the use of *hlaa* 'just, now' in embedded contexts. *Hlaa* can place events proximally to a salient past reference time: "Everything precedes as before, except that the evaluation time is set to the contextually salient past time." (Mathewson et al. 2019: 41). As is the case with non-embedded contexts, the event of this particular reference time should be proximal in an absolute sense.

(5) Context: I called Neda yesterday and she told me that her mother had just arrived for a visit, one minute before I called.

a. Mahl-di=s Neda hlaa 'witxw=s nox-t. tell-TR=PN Neda PROX arrive=PN mother-3SG 'Neda said her mother had arrived.'

Consultant's comment: "Yeah if she arrived while talking to her."

Context: I called Neda yesterday and she told me that her mother had arrived for a visit the day before yesterday.

b. #Mahl-di=s Neda loo-'y ky'oots hlaa 'witxw=s tell-TR=PN Neda OBL-1SG yesterday PROX arrive=PN nox-t gado'ohl ky'oots. mother-3SG day.bef.yest. '

'Neda said her mother had arrived the day before yesterday.'

Consultant's comment: "Mixed metaphors ... hlaa is imminent."

Matthewson et al. (2019: 38)

(6) 'Wihl ligi hlaa dim sigetxw-diit. around INDEF PROX FUT cry.PL-3PL 'The people looked like they were going to cry.'

Matthewson et al. (2019: 39)

Where *hlaa* 'just, now' places the event is summarized in the following table (Matthewson et al. 2019: 40).

	NO FUT	WITH FUT
SALIENT TIME = UT	past or present of UT,	future of UT, close to UT
	close to UT	
PAST SALIENT TIME	past or present of tr^2 , close	future of <i>tr</i> , close to <i>tr</i>
tc	to tr	

Table 1. Where hlaa places the event time (ibid.)

Matthewson et al. suggest the following formal analysis³ to define the additional meaning *hlaa* can give to a sentence (2019):

(7)
$$[[hlaa]]^{t_0} = \lambda P_{\leq lt} > \lambda t \lambda e[P(e) \& \tau(e) \circ t \& DIST(t, t_0) < n]$$

n is *contextually given* and the temporal distance between the t (*event time*) and t_0 (the utterance time) is less than this.⁴

Matthewson et al. (2019: 35)

In other words, *hlaa* 'just, now' gives the following additional meaning to a sentence: 'the temporal distance between the time of the event described by the predicate and the reference time is small (less than n)'. This additional meaning is not present when *hlaa* is omitted. Therefore, it can be said that *hlaa* is a proximity marker which expresses that the event time is close to the reference time in an absolute sense.

2.2 English just

A very popular view regarding the semantics of *just* is that of Lee (1987, 1990), the main idea of which that, besides its other uses, *just* can contribute to the prepositional content of the sentence in which it appears, in turn producing the concept of marginality. *Before midnight* is the example used to provide support for this, and it is also argued that the period of the time identified by the expression extends indefinitely into the past but ends precisely at twelve. Accordingly, *just before midnight* means that the event happened close to this sharply defined

Where tr is the contextually salient reference time (Matthewson et al. 2019: 40).

Matthewson et al. assume the following base types: l denotes events and t denotes truth values. Following Condoravdi (2002), τ is a function yielding the temporal trace of an eventuality. If P is a property of eventualities, then P is instantiated at t if there is an eventuality e such that P hold of e and the temporal trace of e bears a certain temporal relation with t. The temporal relations are the following: temporal inclusion (\subseteq) and temporal overlap (\circ) (Condoravdi 2002: 70). DIST(x, y) denotes the temporal distance between x and y.

In embedded context, instead of t_0 (the utterance time) we use t_r (the reference time) without changing the analysis.

boundary. Lee further claims that such situations contain a 'marginal phrase', and the function of *just* is to focus on that marginal phrase (Lee 1990: 48). According to him, this marginality can be interpreted temporarily or locatively and this distinction is not part of the meaning of *just* itself. He calls this the specificatory function of *just*. Lindemann & Mauranen (2001) adopt the view held in Lee (1987). I use one of their examples to further explain the main idea of Lee's argument (ibid.).

Authentic example:

(8) I just talked to Annie last night.

'The time period extends indefinitely into the past but ends precisely at the utterance time and the event happened close to this boundary (the utterance time).'

Lindemann & Mauranen (2001: 466)

However, neither Lee nor Lindemann & Mauranen consider the idea of relative proximity, i.e. that the event time should only be relatively close to the so-called precisely defined boundary. For example, *e happened just before midnight* means that the event happened a few minutes before midnight. However, in the case of (8), even though *last night* was at the very least hours ago, it is still appropriate to use *just*.

In (9), 4 different contexts are provided. The differences between the recurrence frequency of the events in question and the significance of the events expressed by the predicates are apparent. Having a baby and your brother's death are both significant life events that happen rarely in a person's life. On the other hand, eating and brushing your teeth are insignificant events and happen rather frequently. In the case of eating and brushing your teeth, native speakers seem to agree that a few hours (such as eight and five hours in (a) and (c), respectively) is too long a time to use just for. However, a significant and rare event such as having a baby allows the use of just even if the event occurred a week ago. Nonetheless, native speakers agree that 2 weeks is too long a time to be able to use just, regardless of the frequency and significancy of the given event.

(9) Context: The last time you ate something was eight hours ago. You say:

a. # I have just eaten.

Native comment: This sentence is really bad. Eight hours is much too long a time to use "just".

Context: Sally gave birth a week ago. You say:

b. Sally has just had a baby girl.

Native comment: Even though it's a week ago, it's still okay and within time restraints to use "just". The baby is still extremely new and exciting. Also, if you need to defend the mother...for example: Why is Ann missing so much work?... She's just had a baby! It is a big life occurrence, so maybe that's why it applies, whereas eating do not. Maybe after a week or two, you can use "she recently had a baby".

Context: Your brother, John brushed his teeth eight hours ago. He brushes his teeth two times a day. You say:

c. # John has just brushed his teeth.

Native comment: "Just" only works if he brushed his teeth one to five minutes ago.

Context: Your friend's brother died two weeks ago. You say:

d. ?His brother has just died.

Native comment: I would prefer "His brother recently died." Let's say your friend lashes out at someone and storms away, which is totally out of character for your friend. In that situation, you could say: sorry, his brother has just died. The use of "just" makes a stronger impact, so it's the only time it can be used, to forgive unusual behavior. Whereas "his brother recently died" can be used in any situation.

Based on this small-scale research,⁵ it can be concluded that the acceptability of *just* changes depending on the frequency and the significance of the event expressed by the predicate. Although *just* may be able to express some kind of relative proximity, the question concerning how the context and the choice of the event expressed by the predicate affect the appropriacy of the use of *just* remains open. Moreover, it is also important to be aware of how much variation can be detected among individual speakers. Due to the extensive answer such questions would require, a detailed investigation into the nature of relative proximity that *just* can express in English is not the aim of this paper. Nonetheless, I believe that the interpretation suggested by Lee (1987) might not properly account for the fact that the absolute distance between the utterance time and the event time that still allows the use of *just* changes from context to context and from predicate to predicate, as in (9). Additionally, the approach Lee adopts gives no information concerning how this distance is calculated and the factors this distance is affected by.

In conclusion, the type of proximity that *hlaa* 'just, now' expresses differs from the type *just* can express. Namely, in the case of the former, the event must be proximal in an absolute sense. In contrast, the latter expresses a kind of proximity that is affected by the recurrence frequency and the significance of the event expressed by the predicate. Accordingly, the additional meaning that *just* can give to a sentence is that the event time and the utterance time (or the reference time in embedded contexts) are close to each other in the speaker's view (relative proximity), but not necessarily in an absolute sense.

3 The notion of proximity in Hungarian

Having provided some insight into the kind of proximity *hlaa* 'just, now' and *just* can express, I would like to turn my attention to the discussion of the Hungarian data. In this subsection, I intend to show that *most* 'now' and *éppen* 'just' can mark relative proximity similarly to English *just*.

3.1 The case of most 'now'

Most 'now' – when used with present tense – allows the event-in-progress reading.

(10) a. Péter (most) bolt-ba megy.

Peter now shop-INTO go.3SG

'Péter is going to the shop (now).'

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For the purposes of this study, two native speakers of American English and one native speaker of British English were interviewed. The speakers were shown contexts and sentences and their task was to tell me how appropriate each sentence was in the given context on a five-point scale. I also asked them to tell me the reason why they chose that particular number. Their comments are presented in (9).

b. (Most) nyár van. now summer be.3SG 'It is summer now.'

Most 'now' is often used as a temporal adverb referring to the present. In the cases shown in (10), *most* 'now' means 'at the moment' (10a) or 'during a time interval that continues during the time of speaking' (10b). Normally, temporal adverbs with present reference are expected to be incompatible with the morphologically marked past tense. However, as shown in (11), this is not the case:

- (11) a. Most csinál-t-am meg a házi feladat-om-at egy órája.

 PROX do-PST-1SG PRT the homework-POSS.1SG-ACC an hour.ago

 'I have just finished doing my homework.'
 - b. Most meg-csinál-t-am a házi feladat-om-at.
 Now PRT-do-PST-1SG the homework-POSS.1SG-ACC
 'This time, I did my homework.'

The sentences in (11) are perfectly grammatical. If *most* 'now' were a temporal adverb referring to the present in (11), it would not be possible to use *most* 'now' with the past tense. The question here is how the usage of *most* 'now' as seen in (11) can be accounted for.

In this study, I argue that *most* 'now' can mark relative proximity (as in (11a)) when it cooccurs with the Hungarian past tense or with future time reference (*fog* 'will, be going to' or the Hungarian futurate). The other use of *most* with the morphologically marked past tense – that is shown in (11b) – is rather different. In such sentences, *most* 'now' refers directly to the closest recurrence of the event and also gives the sentence the additional meaning that the closest recurrence of the event is different from the other recurrences and the speaker wants to emphasize how these are different. In line with this, such usage of *most* is often translated as 'this time' when translated into English. The contrast between this usage and that expressing relative proximity will be elaborated on a later stage in this paper; here, I concentrate on the use of *most* 'now' which expresses proximity.

The evidence supporting my claim that *most* 'now' can mark relative proximity in Hungarian is the following:

i) *Most* 'now' co-occurs both with temporal adverbials referring to the future and with those referring the past. Moreover, *most* 'now' and *tegnap* 'yesterday' do not necessarily have a complementary distribution. When *most* 'now' is used as a proximity marker, it can co-occur with other temporal adverbials such as *tegnap* 'yesterday'. However, peculiarly enough, when *tegnap* 'yesterday' is focused the sentence changes its meaning in such a way that *most* 'now' is no longer a

There is an idiomatic expression in Hungarian slang that involves the use of *most* 'now' and past tense; *most mentem/ léptem* 'it's high time I went'. In this case, *most* is not a *relative proximity* marker. If it were a proximity marker, the sentence would mean the following; 'there was a time t' that precedes the utterance time, and there was a *leaving* event at t' and the temporal distance between the event time and the utterance time is small'. This is clearly not the case: the sentence refers to the present or the future and it expresses that the *leaving* event is so urgent that it should (already) be in progress or even completed at the time of speaking. *Most megyek/lépek* 'I am about to leave' is also used, and in that case, *most* is a proximity marker.

proximity marker, as exemplified in (12b). The examples in (12) have been adopted from Egedi (2009) and slightly modified.

- (12) a. Hugó <"most díszít-ette fel a karácsonyfá-t tegnap.> Hugo PROX decorate-PST.3SG PRT the christmas.tree-ACC yesterday 'Hugo just decorated the Christmas tree yesterday.'
 - b. ?Hugó <"tegnap díszít-ette fel a karácsonyfá-t most.> vesterday decorate-PST.3SG PRT the christmas.tree-ACC now Hugo 'This time, Hugo decorated the Christmas tree yesterday.'
- Most 'now' can co-occur with a wide range of temporal adverbials, but the ii) acceptability of the sentence depends on the relative proximity of the event to the utterance or reference time. For example, in the case of a person who eats lunch every single day, but paints their room triennially, (13b) is acceptable, but (13a) is not.
- (13)Context: I eat dinner every day.

a. # Most fog-ok vacsoráz-ni holnap. **PROX** will-1SG eat.dinner-INF tomorrow 'I will have lunch tomorrow.'

Context: I paint my room triennially.

b. Most fog-om ki-feste-ni szobá-m-at a PROX will-1SG PRT-paint-INF room-POSS.1SG-ACC the holnap. tomorrow 'I will paint my room tomorrow.'

In the second case as in (13b), the additional meaning that *most* 'now' gives to such sentences is that 'the temporal distance between the event time and the utterance time is less than or equal to a contextually defined n'. The reason for the difference in acceptability is that n is different in each case. I argue that n depends not on the absolute temporal distance between the event time and the utterance or reference time but instead on both the speaker and the frequency and significance of the event expressed by the predicate.

In order to understand how n depends on both the event expressed by the predicate and the speaker, therefore the context, the previous examples are examined here in a different light.

Egedi (2009) discusses the difference between sentence adverbs and temporal adverbs. She argues that the latter are able to occur in structural focus position. I adopt her example (1) shown in this footnote to demonstrate that most 'now' and tegnap 'yesterday' do not necessarily have a complementary distribution.

⁽¹⁾ Hugó <"tegnap/ most díszít-ette fel karácsonyfá-t.> Hugo yesterday/ now decorate-PST.3SG PRT the christmas.tree-ACC 'Hugo decorated the Christmas tree YESTERDAY/NOW.'

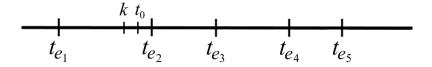


Figure 1: The recurrences of an event and the calculation of n

As in Figure 1, t_0 is the utterance time. Let t_{e_1} , t_{e_2} , t_{e_3} , t_{e_4} , t_{e_5} be the times of the recurrences of an event e in the speaker's life. t_{e_2} is the closest recurrence of the event that the predicate expresses. k is given in the following way: k is an imaginary reference or utterance time, whose distance is the longest from t_{e_2} such that it still allows the use of the proximity marker most. Therefore, $|t_{e_2} - k| = n$. n depends on the event's significance (felt by the speaker) and the recurrence frequency of the event expressed by the given predicate in the speaker's life. For example, n may differ in the case of two events that have the same frequency but different significance. If $|t_{e_2} - t_0| \le n$ (where t_0 is the reference time, or when the sentence is not an embedded sentence, the utterance time), then and only then can the Hungarian 'proximity markers' be used. The acceptability of *most* 'now' does not depend on the absolute distance between the utterance time (or reference time) and the event time, because tomorrow will be exactly one day away from now in both cases. The main difference between (13a) and (13b) is that the contextually given k –and therefore n– are different. In the case of (13a), it is probably a maximum of five to ten minutes apart from the time of speaking which is why the use of holnap 'tomorrow' makes the sentence unacceptable. As for the second case as exemplified by (13b), it can be a maximum of two to three days or sometimes even longer depending on the context and the speaker, meaning that holnap 'tomorrow' is within this time interval. This is the reason why the relative proximity marker most 'now' can be used when the event is proximal not only in a relative, but also in an absolute sense. The closer the event time is to the reference (utterance) time, the more likely it is that the distance between the event time and the utterance or reference time is less than or equal to the contextually defined

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If there is no recurrence, i.e. the event occurs only once in the speaker's life, then there is only one event time *e* and the time interval considered here is the speaker's whole lifespan. In any other case, we consider the number and the frequency of recurrences of an event (or similar events) in the speaker's life during a time period that contains the time of speaking, maintaining that this time interval depends on the speaker and the event itself. Concerning which events are taken to be similar, let us consider, for example, that although it is true that a person can lose a certain baby tooth only once in their life, a lot of baby teeth fall out during a fairly short period of time in that same person's life. In turn, the frequency of losing a tooth is what should be taken into account with the exception of cases where the particular tooth lost is of some special importance to the speaker. Therefore, such an event is most certainly not the same as *dying* or *being born*: as one can be born and can die only once in a whole lifetime, *dying* and *being born* are events that are unique and incomparable to any other event. Moreover, the perceived proximity of an event can also change over the course of time because the recurrence frequency of an event can change. For example, *eating ice-cream* in summer is much more frequent in most people's lives than the very same event in winter, which bears the consequence that *n* can change accordingly. In line with this, the acceptability of the following example may change according to the season when such a sentence is uttered.

⁽¹⁾ Most et-t-em fagyi-t tegnap.
PROX eat-PST-1SG ice.cream-ACC yesterday.

n. As a consequence, there is no need for strong contextual support in these cases and the predicate can also be relatively frequent.

- When the relative proximity marker most 'now' is used, the absolute distance between the reference or utterance time and the event time can be relatively long. Following from this, I propose the hypothesis that n depends on the significance of the event and the frequency of the recurrences of the event expressed by the predicate P^9 . If this hypothesis is true, then the absolute distance between the time of the event and the utterance or reference time should be fairly long when events that are generally considered to be significant and ideally happen only once in everyone's lifetime are talked about, as can be seen in (14).
- (14) a. Most fog-ok jövőre férj-hez men-ni. will-1SG **PROX** next.year husband-TO go-INF 'I will get married next year.' b. Most hal-t meg Csukás István tavaly. **PROX** die-PST.3SG PRT Csukás István last.year 'Csukás István died last year.'

The examples in (14) support the hypothesis that the distance n depends on both the frequency of the recurrences and the felt significance of the event expressed by the predicate. In these cases, even though n is large in an absolute sense, the speaker still feels that the event time is proximal to the utterance time.

In conclusion, *most* 'now' can mark relative proximity when it is used with the morphologically marked past tense or future time reference. The use of the proximity marker *most* 'now' never specifies the time of the eventuality expressed by the predicate, as can be seen considering that the sentence *Most fogok elutazni 7 órakor* 'I'm going to leave at 7 o'clock' cannot possibly be truthfully uttered at 7 o'clock. Therefore, *most* 'now' always gives the additional meaning to the sentence that 'the temporal distance between the event time and the reference time is small, smaller than the contextually defined *n*'. The time interval that can allow the use of the proximity marker *most* extends from a few seconds to one or two years. Thus, it can be said that *most* 'now' is capable of marking relative proximity.

3.2 Similarities and differences between hlaa 'just, now' and most 'now'

I would like to dedicate this subsection to the comparison of the Gitskan *hlaa* 'just, now' and the Hungarian *most* 'now' in order to show that the formal semantic analysis that Matthewson et al. (2019) suggest for *hlaa* can be adopted to define the meaning of *most* 'now'. Here, I concentrate on contrasting the two words' similarities and differences in meaning, word order and scope.

This does not mean that a proximity marker can only be used with first person pronouns: in Hungarian, it is completely possible to assign proximity to events that happen to others. For example, one can assign proximity to the event *anyukám ebédet főz* 'my mother cooks dinner' or to the event a *szomszédom meghal* 'my neighbor dies' because the frequency of such events is known. However, the very same event could be seen as proximal by one speaker, but not proximal by another. This bears the consequence that calculating *n* poses great difficulty because *n* varies both from predicate to predicate and from speaker to speaker.

The Gitskan word *hlaa* 'just, now' always precedes the predicate. Accordingly, *hlaa* is considered to be a pre-predicate element. In Gitskan, future tense is marked by the pre-predicate element *dim*, while the progressive aspect is marked by the pre-predicate element *yukw*. When all of these elements occur in the same sentence, their order is the following as per (15).

(15) Hlaa yukw dim saabax-t gaa=hl Gitsegukla.

PROX PROG FUT leave-3 LOC=CN Gitsegukla. 'He is just about to leave for Gitsegukla.'

Matthewson et al. (2019: 29)

In contrast with *hlaa*, *most* 'now' is considered to be an adverb and can appear both preverbally and postverbally. However, it cannot be said that *most* has the same scope and same prosody in each and every pre- and postverbal position, which is unusual for temporal adverbs in Hungarian. Following É. Kiss (2009), I assume that there are two types of adverbials: predicate adverbials, which are also called lower adverbials, and sentence adverbials. In the following, I demonstrate how *most* behaves when used in a sentence containing both a sentence and a predicate adverbial. To aid this demonstration, I use the adverbials *szerintem* 'according-to-me' and *törvényesen* 'legally' as examples of the two adverbial classes.

Szerintem 'according-to-me' is a sentence adverbial. Its unmarked position is a pre- or post-topic position in the left periphery, preceding everything except the topic constituent. Moreover, *szerintem* can even precede the topics themselves as its scope extends over the sentence part it precedes and c-commands. When *szerintem* appears postverbally, although its relative position is free, it has the very same scope possibilities and the very same prosody as it has preverbally (É. Kiss 2009: 23). In Hungarian, the main stress falls on the functionally extended predicate; accordingly, sentence adverbials bear secondary stress (É. Kiss 2009: 36).

Törvényesen 'legally' is a predicate adverbial. Predicate adverbials in Hungarian precede the particle + verb + arguments string in the unmarked case, take scope over the constituents they precede and bear primary stress (É. Kiss 2009: 22).

- (16) a. **Most** szerintem 'JÁNOS-T törvényes-en választ-ott-ák meg. this-time according-to.me John-ACC legal-ly elect-PST-3PL PRT 'This time, in my opinion, they elected JOHN legally.'
 - b. Szerintem **most** 'JÁNOS-T törvényes-en választ-ott-ák meg. according-to.me this-time John-ACC legal-ly elect-PST-3PL PRT 'In my opinion, this time, they elected JOHN legally.'
 - c. Szerintem János-t '**most** választ-ott-ák meg törvényes-en. according-to-me John-ACC PROX elect-PST-3PL PRT legal-ly 'In my opinion, they JUST elected John legally.'

Here, I will only focus on the use of *most* 'now' together with the morphologically marked past-tense, as this is the only case where it is clear that *most* 'now' does not mean 'right now' and that *most* 'now' cannot trigger the event-in-progress reading.

É. Kiss (2009) claims that Hungarian adverbials seem to have the same scope and prosody both in a preverbal and in a postverbal position (É. Kiss 2009:23).

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- d. Szerintem János-t 'törvényes-en '**most** választ-ott-ák meg. according-to.me John-ACC legal-ly PROX elect-PST-3PL PRT 'In my opinion, they legally elected John very RECENTLY.'
- e. Szerintem 'JÁNOS-T törvényes-en választ-ott-ák meg **most**. according-to-me John-ACC legal-ly elect-PST-3PL RRT this-time 'In my opinion, they legally elected JOHN this time.'

In (16a), (16b) and (16e), *most* 'now' is a sentence adverbial meaning 'this time'. The examples of particular interest for the purposes of this article are (16c) and (16d) because these are the cases where *most* 'now' directly precedes the verb and marks proximity. (16c) and (16d) also differ from the other examples in (16) concerning their prosodic feature: in these two examples, the main stress falls on *most* while in the other cases, it does not. One could argue that *most* is simply a predicate adverbial when it is used as a proximity marker. However, predicate adverbials can appear postverbally and when they do, they can stand in any order concerning both the major constituents and one another (É. Kiss 2009: 22). *Most* means 'this time' when it is in the postverbal domain and can only mark proximity when it directly precedes the verb. Consequentially, the relative proximity marker *most* is not a predicate adverbial. It must also be noted that in (16c) and (16d), *most* is obligatorily focused with the meaning 'John was elected RECENTLY (and not a long time ago)'. Additionally, when there is any degree of contrast in the context, the proximity marker *most* is frequently *only*-focused.

(17) János-t CSAK MOST választ-ott-ák meg és máris le-mond-ott. John-ACC only now elect-PST-3PL PRT and already PRT-say-PST.3SG 'John got elected only recently, but he has already resigned.'

In conclusion, we can claim that *most* 'now' behaves very differently when it directly precedes the verb, as this is the only case where *most* expresses proximity. Moreover, the proximity marker *most* does not have the same properties as other predicate or sentence adverbials. In order to provide adequate evidence for the claim that *most* 'now' is a proximal aspect marker, we shall further examine its interaction with tense, other aspects, and modality in Hungarian. In order to show that a proximity marker can have aspectual properties across various languages and to better understand the nature of proximal aspect, further crosslinguistic studies on this topic are necessary.

The difference in meaning between *hlaa* 'just, now' and *most* 'now' is best shown by means of the following two examples. The context and examples in (18) have been adopted from Matthewson et al. (2019).

(18) Rain context:

[We were enjoying the sunshine in the garden. Black clouds have just gathered, and it looks like it is about to rain any minute now.]

a. # Yukw dim wis.

PROG FUT rain

'It is going to rain' [imminent

'It is going to rain.' [imminence prefers *PROX*]

b. Hlaa yukw dim wis. PROX PROG FUT rain 'It is going to rain.'

Matthewson et al. (2019:33)

(18a) is odd in the rain context because the rain is imminent and therefore proximal in an absolute sense. Not surprisingly, in that case, speakers prefer the use of the proximity marker as in (18b). However, in Hungarian, both *Esni fog* 'Rain-INF FUT' and *Most esni fog* 'PROX rain-INF FUT' are possible in such a context. The only difference between the two is the degree to which the speakers wish to emphasize the proximity of the event.

(19) Wedding context:

[You are talking to an old friend and telling them about your life. You are going to get married next month. You feel like the utterance time is very close to the event time of your wedding considering how infrequent and significant the event is in your life.]

- a. # A jövő hónap-ban férj-hez megy-ek.

 the next month-IN husband-TO go-1SG

 'I am going to get married next month.' [this is a neutral statement about the wedding that is going to happen next month]
- b. Most megy-ek férj-hez a jövő hónap-ban.
 PROX go-1SG husband-TO the next month-IN [this sentence expresses and emphasizes that the event is seen as proximal]

Therefore, it is not true that *most* 'now' can always be omitted with no change in sentence meaning. If the event is proximal in the view of the speaker and they want to emphasize this felt proximity, *most* 'now' must be included. *Most* gives the sentence the additional meaning that 'the temporal distance of the event time and the utterance time is small in the speaker's view, given the significance and the frequency of the event'. Without *most*, we cannot say anything about the felt proximity of the event, therefore we do not know if the distance between the event time and the utterance time is less or more than *n*. In other words, although we do know the distance between the utterance and the event time without *most*, without *most*, the utterance contains no information on the felt proximity of the event.

As we continue contrasting *hlaa* 'just, now' and *most* 'now', it must be noted that whereas *hlaa* 'just, now' is obligatory if the event is proximal in an absolute sense, *most* 'now' is obligatory if the event is relatively proximal and the speaker wishes to emphasize the felt proximity of the event. The following examples serve as further evidence of the latter statement. The adverbial used in these examples, *mostanában* 'these days', is an adverbial that expresses proximity and behaves quite similarly to *most* when it is followed by the *verb* + *particle* + *arguments* string.

- (20) a. Mostanában/most nevez-t-ék ki elnök-nek. PROX appoint-PST-3SG PRT president-DAT 'He has just been appointed as president.'
 - b. Mostanában ki-nevez-t-ék elnök-nek. these.days PRT-appoint-PST-3SG president-DAT 'He was appointed as president recently.'

(20a) expresses relative proximity. In this example, the speaker wishes to emphasize that the event time is close to the utterance time in their view considering how frequent and significant the event is. Therefore, (20a) can be truthfully uttered even if the event in question happened a few months ago. However, in a context where the speaker is talking about what happened recently, (20b) can be only be truthfully uttered if the event happened a few weeks ago at most.

Despite the differences between hlaa 'just, now' and most 'now', it can be claimed that both most and hlaa can give a sentence the additional meaning that 'the temporal distance between the reference time and the event time is small'. However, this contextually defined n is clearly calculated differently in the case of hlaa and most as they express different kinds of proximity. The significance and the frequency of the recurrences of the same predicate clearly play a very important role in determining n in the case of most 'now'. As for hlaa, the emphasis is, instead, on the absolute distance between the event time and the utterance time.

Therefore, I argue that the meaning the proximity marker *most* adds to a sentence in which it appears can be defined formally in the following way:

(21)
$$[most(RROX)]^{t_0} = \lambda P_{\langle lt \rangle} \lambda t \lambda e[P(e) \& \tau(e) \circ t \& DIST(t, t_0) \le n]^{12}$$

3.3 The case of éppen 'just'

After the detailed discussion of the use of *most* 'now' as a proximity marker and before I turn my attention to the formal semantic analyses of sentences containing the relative proximity marker *most* 'now', I shall explore the question of whether there is any other element other than *most* 'now' or *mostanában* 'nowadays' that can mark relative proximity in Hungarian. The best possible candidate for meeting the required criteria is *éppen* 'just'. Hetzron (1982) points out that *éppen* 'just' has two readings depending on the aspect it is used with. "With descriptive aspect, its reading is 'right at this moment, in progress', but with factual aspect, it may be used to express immediately preceding completion often translatable as 'has/had just finished doing'" (Hetzron 1982:168). In this subsection, I would like to show that – similarly to most 'now' – *éppen* 'just' can mark relative proximity. However, it must also be remarked that there are some notable differences between the usage of most 'now' and *éppen* 'just', some of which are discussed in this subsection.

Similarly to *most* 'now, *éppen* 'just' can be used with the progressive aspect. This particular use of *éppen* 'just' has been given a lot of attention in previous literature; see e.g. É. Kiss (2002), Csirmaz (2004), and Palffy-Muhoray (2016). É. Kiss argues that for the progressive aspect to arise, which in turn allows the optional use of *éppen* 'just', the prefix (or particle) must immediately follow the verb and the verb must have an appropriate Aktionsart feature (É. Kiss 2002: 66). For example, the verb cannot denote a momentary action (ibid.).

(22) *János (éppen) pillant-ott fel az újság-ból, amikor be-lép-t-em.

John just glance-PST.3SG PRT the newspaper-from when 'John was just glancing up from the newspaper when I entered.'

(É. Kiss 2002: 63)

I assume that the temporal distance can be equal to n, but it does not make a big difference because the only thing that changes is that the upper limit that allows the use of the proximity marker is included. However, it does make the model describing how n is calculated simpler.

Csirmaz (2004) adds to É. Kiss' claims by stating that bare verbs can either have a perfective or an imperfective interpretation. Furthermore, Hungarian possesses elements whose distribution mimics that of particles and which are preverbal in both perfective and imperfective sentences.

- (23) a. Amikor meg-érkez-t-ünk, Juli (éppen) ebéd-et főz-ött. when PRT-arrive-PST-1PL Julie just lunch-ACC cook-PST.3SG 'When we arrived, Julie was cooking lunch.'
 - b. Amikor meg-érkez-t-ünk, Juli (rögtön) ebéd-et főz-ött. when PRT-arrive-PST-1PL Julie straight.away lunch-ACC cook-PST.3SG 'When we arrived, Julie cooked lunch straight away.'

(Csirmaz 2004: 11)

However, neither discuss the use of *éppen* 'just' with perfective interpretation. Instead, *éppen* is treated as a highly aspect-sensitive adverb that optionally co-occurs with the progressive aspect. As of yet, the only detailed discussion of the uses of éppen with perfective aspect (in this case, a full chapter of a doctoral dissertation) is to be found in Palffy-Muhoray (2016). She argues that, when used in certain contexts, éppen can mark aspectual distinctions. To support this, she examines the use of *éppen* with perfective aspect and the morphologically marked past tense and claims that with perfective predicates, éppen conveys that the reference interval is no longer than run-time of the event (Palffy-Muhoray 2016: 29). She also provides the examples in (24) as evidence and argues that if the temporal frame expression specifies an interval that is substantially longer than the run-time of the event, éppen is not acceptable, as can be seen in (24a). However, if the temporal frame expression denotes an interval that is relatively short when compared to the run-time of the event, éppen can be used (see 24b). In the absence of explicit temporal information, the addition of éppen conveys that the event happened precisely at a contextually salient time as per (24c). According to Palffy-Muhoray, (24c) can thus only be uttered in the following situation: you were walking alongside the tower and John ran out of the tower precisely when you reached the tower.

- (24) a. # János éppen hazament a múlt hónap-ban. John just home.go.PST.3SG the last month-IN 'John just went home last month.'
 - b. János éppen hazament 3-kor. John just home.go.PST.3SG 3-TEMP 'John just went home at 3 o'clock.'
 - c. János éppen ki-fut-ott a torony-ból. John just PRT-run-PST.3SG the tower-from 'John ran out of the tower (just then).'

(Palffy-Muhoray 2016:48)

I argue that *éppen* 'just' can have an interpretation very different to those previously discussed when used with the past tense and a perfective predicate, namely, that *éppen* can mark proximity. (25) is an example for such use.

(25) Context: Do you know anything about Kati?

Kati-nak éppen gyerek-e szület-ett. Ez a múlt hét-en Kati-DAT PROX child-POSS.3SG born-PST.3SG this the last week-on történ-t.

happen-PST.3SG

'Kati just had a baby. It happened last week.'

In the case of (25), the contextually salient reference time specifies an interval that is substantially longer than the run-time of the event. If we try to apply the criterion of Palffy-Muhoray to this, *éppen* 'just' should be unacceptable, but this is clearly not the case.

Furthermore, the addition of *éppen* 'just' can change the meaning of a sentence. Palffy-Muhoray considers the explanation of this phenomenon an open question (2016: 51). She further notes that (26b) can only have the interpretation in which the event in the main clause precedes the event in the *when*-clause. Accordingly, (26b) implies that John managed to avoid getting wet.

(26) a. János el-fut-ott a torony-hoz, amikor el-ered-t John AWAY-run-PST.3SG the tower-TO when AWAY-start-PST.3SG az eső. the rain

'John ran to the tower when the rain started.'

b. János éppen el-fut-ott a torony-hoz, amikor John PROX AWAY-run-PST.3SG the tower-TO when el-ered-t az eső. AWAY-start-PST.3SG the rain

'John had already run to the tower when the rain started.'

(Palffy-Muhoray 2016: 51)

I argue that in (26b), $\acute{e}ppen$ 'just' is a relative proximity marker and as such places the eventtime of the 'arriving at the tower' event proximal to the event expressed by the \it{when} -clause. Because $\acute{e}ppen$ is combined with the morphologically marked past tense, it conveys the meaning that 'the event happened in the past and close to the reference time (defined by the \it{when} -clause)'. Formally, (26b) means the following; 'there was a time \it{t} ' that precedes the reference time (the time of the start of the raining event), John arrived at the tower at \it{t} ' and the temporal distance between \it{t} ' and the reference time is small'. In cases such as that in (26b), the use of the proximity marker $\acute{e}ppen$ is obligatory in order for a proximal interpretation to arise, as the sentence receives a very different reading when $\acute{e}ppen$ is omitted (see (26a)).

At this point, one can still argue that *éppen* 'just' is not a proximity marker and simply triggers the perfective interpretation instead. However, if we consider sentences in which *éppen* 'just' co-occurs with future time reference, it is easy to see this is not so.

(27) Nekem úgy tűn-t, hogy Péter éppen vizsgáz-ni fog. for.me like.that seem-PST.3SG that Peter PROX take.an.exam-INFwill.3SG 'It seemed to me that Peter was just about to take an exam.'

Formally, (27) means the following: 'there was a time t' that followed the reference time (the time of Peter being seen), Peter probably took an exam at t', and the temporal distance between the reference time and t' is small'.

Éppen 'just' can occur with the perfective (26) and the prospective (27) aspects, but it does not mark either of them. Instead, *éppen* adds the additional meaning to the sentences that the time of the event is proximal to the reference time. In other words, the temporal distance between the event time and the utterance time is small.

The last step here is to show that the proximity *éppen* 'just' expresses is relative. In order to achieve this, I have chosen to exemplify this with two predicates whose significance and frequency of recurrence differ greatly. In the case of (28a), *éppen* can be used even if the event happened two weeks ago. However, (28b) is very unlikely to be uttered considering how frequent the event is.

(28) a. Context: Did you see John? How was he?

János szomorú-nak tűn-t, éppen el-veszt-ette mert a seem-PST.3SG because PROX PRT-lose-PST.3SG John sad-DAT the két báty-já-t. Α báty-ja hete hal-t meg. brother-POSS.3SG-ACC brother-POSS.3SG two week.ago die-PST.3SG **PRT** the 'John seemed sad because he had lost his brother. His brother died two weeks ago.'

b. Context: What has John done today?

János éppen meg-mos-ta a fog-á-t. Ez John PROX PRT-wash-PST.3SG the tooth-POSS.3SG-ACC This körülbelül öt órája történ-t. approximately five hour.ago happen-PST.3SG 'John has just brushed his teeth. This was about 5 hours ago.'

In (28), $\acute{e}ppen$ 'just' marks the relative proximity of the event time and the reference time. Accordingly, similarly to most 'now', $\acute{e}ppen$ can give the sentence the additional meaning that 'the temporal distance of the event time expressed by the predicate and the reference time is less than or equal to a contextually defined n'. As opposed to most 'now', in the case of $\acute{e}ppen$ 'just', the event time can be expressed in the context, but not in the clause that contains $\acute{e}ppen$ 'just' as shown in (29).

- (29) a. *Éppen* úį állás-t (*két hete), (amikor ki-tör-t kap-t-am PROX new job-ACC get-PST-1SG two week.ago when **OUT-break-PST.3SG** a pandémia). Két hete dolgoz-t-am ott akkor. the pandemic two week.ago work-PST-1SG there then 'I had just got a new job when the pandemic broke out. I had been working there for two weeks by then.'
 - b. *Most* kap-t-am új állás-t *két hete*.

 PROX get-PST-1SG new job-ACC two week.ago
 'I just got a new job two weeks ago.'

Moreover, éppen 'just' is followed by the particle + verb + arguments string when it marks relative proximity. Additionally, éppen can neither be focused¹³ nor *only*-focused as can be seen in (30a) and (30b), respectively.

(30) a. *Juli-nak ÉPPEN szület-ett kislány-a és nem Judy-DAT PROX born-PAST.3SG little.girl-POSS.3SG and not régebben szül-t. long.ago give.birth-ACC 'Judy has JUST had a baby girl and it wasn't a long time ago that she gave birth.' b. *CSAK ÉPPEN hal-t meg a báty-ja. PROX die-PST.3SG PRT the older.brother-POSS.3SG only 'His/Her brother ONLY RECENTLY died.'

As a result of this phenomenon, we cannot say that the two sentences János most vesztette el a nagyapját 'John RECENTLY lost his grandfather' and János éppen elvesztette a nagyapját 'John has just lost his grandfather' can always be used interchangeably. Let us consider, for example, the following context.

(31) Context: You and your friends are talking about big life events. Peter and John both say that their granddad recently died. Peter's granddad died 4 years ago. John's granddad died just a few weeks ago. You think that Peter is not right. You do not see the event as proximal. Therefore, you say:

a. János nagyapja MOST hal-t meg, grandfather-POSS.3SG just PROX die-PST.3sg John PRT de a Péter-é már régen. the Peter-POSS.3SG already long.time.ago 'John's grandfather RECENTLY died, but Peter's died a long time ago.' b. *János nagyap-ja ÉPPEN hal-t John grandfather-POSS.3SG PROX die-PST PRT de a Péter-é már régen. Peter-POSS.3SG already long.time.ago 'John's grandfather JUST died, but Peter's died a long time ago.'

Drawing from this, whenever there is some kind of contrast in the context, the use of *éppen* 'just' becomes unacceptable.

When $\acute{e}ppen$ 'just' is used together with the verb + particle + arguments string, it triggers the progressive reading ¹⁴. In this case, $\acute{e}ppen$ can occur in almost every position of the sentence.

(32) (Éppen) ment (éppen) le (éppen) a lépcső-n (éppen), amikor... just go.PST.3SG just PRT just the stairs-ON just when 'He/She was just going down the stairs, when....'

(Palffy-Muhoray 2016: 52)

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Palffy-Muhoray also notes that *éppen* 'just' cannot receive stress associated with focus, despite the fact that it is frequently pre-verbal (2016).

Palffy-Muhoray argues that the delimited habitual reading is also available in this case (2016: 52).

Palffy-Muhoray claims that "éppen pre-verbal placement does not indicate a special status of the sort claimed for other pre-verbal elements such as negation, focus, and wh-words in Hungarian. Rather, éppen's syntactic behavior is parallel to the one of other discourse particles" (Palffy-Muhoray 2016: 54). I agree with this statement to a certain extent. Namely, éppen 'just' can indeed occur in various positions in the sentence, but when it co-occurs with the perfective aspect and changes its position, similarly to most 'now', the meaning of the sentence can change, too. For example, according to Palffy-Muhoray, if éppen precedes a toronyhoz 'to the tower' forming the string éppen a toronyhoz, éppen gives rise to the precisifying effect (Palffy-Muhoray 2016: 65). As for the proximity reading, there are only two positions in which éppen has this reading, one being that in the pre-predicate domain when it directly precedes the verb and the other being that in the post-predicate domain. However, the latter is slightly marked and requires a special kind of prosody.

(33) a. János 'éppen el-fut-ott torony-hoz, amikor John PROX AWAY-run-PST.3SG the tower-TO when el-ered-t az eső. AWAY-start-PST.3SG the rain 'John had already run to the tower when the rain started.' el-fut-ott torony-hoz 'éppen. b. ?János amikor AWAY-run-PST.3SG the tower-TO PROX John when el-ered-t eső. az PRT-start-PST.3SG the rain 'John had already run to the tower when the rain started.'

Therefore, although éppen 'just' can satisfy all the criteria that a relative proximity marker must satisfy, it has many properties that set it apart from *most* 'now'. The properties of *most* 'now' and éppen 'just' are summarized in the table below. The first two properties are essential properties (henceforth abbreviated E.P.): a lexical item must meet these two criteria in order to be capable of marking relative proximity.

Property	most 'now'	<i>éppen</i> 'just'
E.P.1: The lexical item can	\checkmark	$\sqrt{}$
express the meaning that the		
temporal distance between		
the event time and the		
reference time are small (i.e.		
less than or equal to n).		
E.P.2: n^{15} depends solely on	$\sqrt{}$	$\sqrt{}$
the context, the significance,		
and recurrence frequency of		
the event expressed by the		
predicate, and the speaker.		
The event time can be		_
expressed in the same clause	in the same clause	only in different clauses

The maximum of the temporal distance between the event time and the reference time (utterance time) that still allows the use of the proximity markers.

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that contains the proximity marker. The lexical item always precedes the verb in its unmarked position. (When it is in a different position, it does not mark relative	always precedes the verb directly	directly precedes the verb in its unmarked position
proximity.)		
It is always focused and can	V	_
be <i>only</i> -focused	always focused	cannot be focused

Table 2. Properties of the relative proximity markers most 'now' and 'eppen 'just'

Éppen most 'just now' also exists and can trigger the proximal interpretation. In the case of éppen most 'just now', most 'now' marks the proximity and éppen 'just' only modifies this proximity. The evidence supporting my claim is that éppen most 'right now' has the exact same properties as most 'now' as presented in Table 2.

- (34) a. (Éppen) most/ Éppen *(most) takarít-ott-am ki két órá-val ezelőtt. just PROX just PROX clean-PST-1SG PRT two hour-with ago 'I cleaned up just now, two hours ago.'
 - b. (ÉPPEN) MOST/ ÉPPEN *(MOST) takarít-ott-am ki és just now just now clean-PST-1SG PRT and nem tegnapelőtt.

 not yesterday.before

'I have cleaned up JUST NOW and not the day before yesterday.'

3.4 The use of most 'now' and éppen 'just' in embedded contexts

There is one last notable topic that has not been discussed so far in connection with the use of the Hungarian proximity markers, which is their use in embedded contexts. In this subsection, I discuss how the Hungarian proximity markers *most* 'now' and *éppen* 'just' behave in embedded contexts.

Most 'now' and éppen 'just' can be used with a past salient reference time and in such cases, they can place the event proximal to the past salient reference time. The event can happen either before the past salient reference time as in (35), henceforth referred to as the anterior past reading, or after the reference time as in (36), henceforth referred to as the future in the past reading.

(35) Context: You called your friend a month ago and he told you that he had just passed his last exam 2 days before you called.

- a. János az-t mond-t-a egy hónapja, hogy most fejez-te be John that-ACC say-ACC-3SG a month.ago that PROX finish-PST.3SG PRT a vizsgá-i-t.
 - the exam-POSS.PL.3SG-ACC
 - 'John told me a month ago that he had just finished his exams.'

b. János az-t mond-t-a egy hónapja, hogy éppen be-fejez-te John that-ACC say-ACC-3SG a month.ago that PROX PRT-finish-PST.3SG a vizsgá-i-t. the exam-POSS.PL.3SG-ACC 'John told me a month ago that he had just finished his exams.'

(36) Context: Your wife called you two months ago (at which time she was pregnant) and told you that she was about to give birth. Your baby would have been premature. Fortunately, your child was born one and a half months later than the time of the call and is perfectly healthy.

a. Egyik feleség-em hív-ott fel. este az-zal a wife-POSS.1SG one.of evening the that-INST call-PST.3SG PRT hogy szül-ni. most fog that PROX will.3SG give.birth-INF 'One evening, my wife called me and told me that she was about to give birth.' feleség-em hív-ott b. Egyik este az-zal fel. a wife-POSS.1SG call-PST.3SG one.of evening the that-INST **PRT** hogy éppen szül-ni give.birth-INF will.3SG that **PROX** 'One evening, my wife called me and told me that she was about to give birth.'

The main difference between *most* 'now' and *éppen* 'just' is that sentences containing the proximity marker *most* can always have the reading that the event is proximal to the utterance time rather than the salient reference time. With very strong contextual support such as that in (35a) and (36a), this aforementioned reading can be suppressed, but the sentences in (35a) and (36a) are ambiguous in their interpretation without context. However, we do not experience the same ambiguity in the case of the sentences in which *éppen* 'just' is used.

The properties of *most* 'now' and *éppen* 'just' discussed in this subsection are summarized in the following two tables.

			WITH THE PAST	WITH THE NON-PAST
SALIENT TIME = UT		$\mathbf{U} = \mathbf{U}\mathbf{T}$	past of UT, close to UT (in	present or future of UT,
			the speaker's view)	close to UT (in the speaker's
				view)
PAST	SALIENT	TIME	past of tr, close to tr (in the	present or future of tr, close
(tr)			speaker's view) OR past of	to tr OR present or future of
			UT, close to UT	UT, close to UT (in the
				speaker's view)

Table 3. Where most 'now' places the event time

	WITH THE PAST	WITH THE NON-PAST
SALIENT TIME = UT	past of UT, close to UT (in	
	the speaker's view)	close to UT (in the speaker's
		view)
PAST SALIENT TIME	past of tr, close to tr (in the	present or future of tr, close
(tr)	speaker's view)	to tr (in the speaker's view)

Table 4. Where éppen 'just' places the event time

4 The formal semantic analysis of sentences containing Hungarian proximity markers

In order to be able to discuss the interaction of proximity markers, future time reference and past tense properly, first, the formal semantic interpretation of the Hungarian past tense and Hungarian future time reference must be elaborated on. The Hungarian tense system has been discussed in the literature of this topic by many, e.g. Lotz 1962, Papp 1989, Csató 1992, É. Kiss 2006, Palffy-Muhoray 2013 and Palffy-Muhoray 2016. I shall adopt the view of Lotz (1962), É. Kiss (2006) and Palffy-Muhoray (2013, 2016) and assume that Hungarian distinguishes two tenses, the past and the non-past.

The Hungarian past tense can be formally represented in the following way:

(37)
$$[PAST] = \lambda P \lambda t. \exists t' [t' < t \& P(t')]^{16}$$

In Hungarian, one can refer to the future in Hungarian either by using fog 'will, be going to', or by using the Hungarian non-past tense with future reference. Whether future time reference should be analyzed as tense or modality is a much-debated question in the literature; see Copley (2002) and van de Vate (2011). In this study, following Palffy-Muhoray (2016), ¹⁷ I adopt the modal analysis of Hungarian future time reference. Accordingly, I consider *fog* 'will, be going to' a universal quantifier over possible worlds and assume that it combines with prospective aspect. ¹⁸

$$(38) \ \llbracket FOG(PROSP) \rrbracket : \lambda P\lambda t \ \lambda w. \ \forall \ w' \ [w' \in MB(w,t) \rightarrow \exists t' [t < t' \ \& \ P(t')(w')]]$$

That is, 'in every world w' that is accessible from our world w at t, which are the worlds in the modal base MB, there is an event described by the predicate P at t' and t < t'.

Tegnap amikor haza-jött-em, Attila mond-ta, hogy valami-t énekel-ni yesterday when home-come.PST-1SG Attila say-PST.3SG that something-ACC sing-INF fog. will.3SG

I adopt this interpretation from von Stechow (2009).

Here, I must note that I do not adopt the author's analysis of *fog* 'will, be going to', as I do not share her view that *fog* does not allow the future in the past reading. This is partly due to the fact that although she does not consider the following sentence grammatical (Palffy-Muhoray 2013:390), I do.

⁽¹⁾ Future in the past reading:

^{&#}x27;Yesterday, when I got back home, Attila said he would sing something.'

Prospective aspect places the time of the event subsequent to a given reference time. The formal semantic analysis of prospective aspect is adopted from Rullmann and Matthewson (2018).

Since a formal semantic representation of the Hungarian tense system is beyond the scope of this study, the formal representation of the Hungarian futurate is not dealt with here. I thus turn my attention to the formal semantic analyses of sentences containing proximity markers.

Hungarian proximity markers can mark proximity when combined with the morphologically marked past tense.

The meaning of the formal analysis in (39) is as follows: 'There is a t' which precedes the utterance time, there is an event '*i.get.married*' at t' and the distance between t_0 (the utterance time) and t' is small, i.e. less than or equal to a contextually defined n.'

Hungarian proximity markers can also be used with future time reference. Here, I give the formal semantic representation of a sentence that contains the proximity marker *most* 'now' and *fog* 'will, be going to'.

The meaning of the formal analysis in (40) can be described as follows: 'Every world w' that is available from w at t_0 (the utterance time) is such a world in which there is a time t' which follows the utterance time, there is an event 'i.sing' at t' and the distance between t_0 (the utterance time) and t' is small, i.e. less than or equal to a contextually defined n.'

Most 'now' and *éppen* 'just' can also be used in embedded sentences. In embedded sentences, both the anterior past reading and the future in the past reading are available. All the formal semantic analyses of sentences where proximity markers are used in embedded clauses are based on Matthewson et al. (2019). The following example is an example for the anterior past reading.

(41) Péter úgy néz-ett ki, mint aki *éppen/most* sír-t. Peter like.that look-PST.3SG PRT like who PROX cry-PST.3SG 'Peter looked as if he had cried recently.' $[\![\acute{e}ppen|most - s\acute{i}r\ (PAST)]\!]^{t_r}$: $\exists t'[t' < t \& \exists e [peter.cries(e) \& \tau (e) \circ t' \& DIST(t', t_r) \le n]],$

where $t \le t_r$, t_r is the reference time, i.e. the time at which we looked at Peter and made this assumption, $t_r < t_0$ (the utterance time) so that the reference time is in the past.

I use examples in which *most* 'now' clearly expresses that the event is proximal to the contextually salient reference time rather than the utterance time.

The meaning of (41) can be summarized as follows: 'there was a crying event at t' which preceded a contextually silent time t preceding or at t_r (the reference time) and the temporal distance between the reference time (t_r) and the time of the crying event (t') is less than or equal to n'.

Fog 'will, be going to' allows the future in the past reading. This becomes even more complex when combined with proximity markers²⁰.

 $= \{t' \& \exists e [peter. cry(e)(w') \& \tau(e) \circ t' \& DIST(t', t_r) \le n]\}$

where $t \le t_r$, $t_r < t_0$ and t_r is the reference time, the time at which we looked at Peter and made this assumption, and t_0 is the utterance time.

(Example translated from Matthewson et al. (2019))

The meaning of this formal analysis is as follows: 'Every world w' that is available from w at t is such a world in which there is a time t' which follows a contextually salient time t preceding or at t_r , there is a crying event at t', and the distance between t' and t_r is small.'

5 Conclusion

Matthewson et al. (2019) proposed the hypothesis that "there is possibly such a thing as proximal aspect" (Matthewson et al. 2019:45). In their study, they consider the Gitskan *hlaa* an element that can mark proximity, giving the sentence the following meaning: 'the temporal distance between the time of the event described by the predicate P and the relevance time is small'. They discuss 'small' temporal distance in an absolute sense. In this study, I have shown that Hungarian *most* 'now' and *éppen* 'just' can mark relative proximity, which gives the sentence the additional meaning that the speaker sees the time of the event or state as proximal to the reference time (utterance time). I also argue that the formal temporal representation of *hlaa* can be adopted to analyze the meaning of the proximity marker *most*. Therefore, the nature of proximity (absolute or relative) is not a semantic, but a pragmatic property.

However, at this point, we do not have adequate evidence to state that *most* 'now' or *éppen* 'just' are indeed proximal aspect markers. Furthermore, cross-linguistic studies on this topic are necessary to show that a proximity marker (absolute or relative) can have aspectual features and in order to better understand the nature of proximal aspect. In our future research,

It is possible to use the Gitskan proximity marker *hlaa* with past salient reference times. This is an example for such usage, where t_c (reference time) is the past salient time.

^{(1) &#}x27;Wihl ligi hlaa dim sigetxw-diit. around INDEF PROX FUT cry.PL-3PL

^{&#}x27;The people looked like they were going to cry.'

^{[[}dim (hlaa sigetxwdiit)] (NON-FUT)]]^{tr} = $\exists t'$ [t < t' & $\exists e$ [cry(e) & $\tau(e)$ o t' & DIST(t', t_r) $\leq n$]], where $t \leq t_r$ 'There is a time t' which follows a contextually salient time t preceding or at t_r , and there is a crying event at t', and the distance between t' and t_r is small.'

[&]quot;close to their looking-like-time and after their looking-like-time"

more data will be collected and the interaction of Hungarian proximity markers with aspect and modality will be analyzed in order to find further evidence that can strengthen the hypothesis that these proximity markers have aspectual features and therefore can mark proximal aspect.

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Viktória Virovec University of Debrecen, Doctoral School of Linguistics H-4002 Debrecen Pf. 400 virovecviki@gmail.com