Fragment answers to polarity questions in Hungarian

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Abstract: This paper presents new data on fragment answers to yes/no questions in Hungarian. I argue that fragments consisting of verbal modifiers (particles and incorporated nominals), focus phrases, quantifier phrases, and verbs constitute answers derived through ellipsis of a full-sentence response. I propose an analysis that extends the work of Lipták (2012), in which these constituents move to an affirmative phrase to satisfy an EPP feature.

Keywords: Hungarian, fragments, ellipsis, polarity questions

1 Introduction

In the literature on Hungarian, it is known that verbal particles may be used as responses to polarity questions (Kiss 2002, Grimes 2003). The example in (1) illustrates.

(1) Be=mész? Be. into=go.2.SG.PRES into 'Are you entering? Yes.'

However, to date, little discussion has focused on the contexts in which such fragment answers are possible, or on what other types of syntactic elements may be used as responses to polarity questions in the language. This paper aims to address this gap by examining the acceptability of a variety of question/answer pairs. Using evidence from verbal particles as well as focus phrases, incorporated nominals, quantifiers, and topic phrases, I show that the phenomenon in (1) is part of a broader pattern in which the highest constituent below the topic phrase may be used alone as an affirmative response. I argue for an analysis that extends Lipták's (2012) movement to SpecPoIP, though I use an affirmative phrase AffP. I suggest that Aff has an EPP feature that forces movement of the highest constituent under Aff to its Spec position. I also show that topic phrases are impossible as fragments, and claim that it is because TopP is above AffP. Furthermore, to explain why fragments can consist of a constituent moved to AffP to the exclusion of the topic phrase, contrary to what we would expect from an analysis in which only the complement of Aff is elided, I suggest that Hungarian fragments are derived from fullsentence responses. Finally, I address the issue of optionality: when two constituents intervene between Aff and the verb, either one can be used as a fragment response, and I suggest that this phenomenon is due to equidistance with multiple specifiers.

The paper is structured as follows. Section 2 outlines the relevant facts about Hungarian syntax. Section 3 goes through the data and analysis, demonstrating first the basics (3.1), then the behaviour of topic phrases (3.2), and finally issues concerning multiple pre-verbal constituents and equidistance (3.3). Section 4 discusses some additional data related to negation and added modifiers, as well as Lipták's (2013) rejection of movement to PoIP and the relationship between the verb and the phrases being used as fragments. Section 5 concludes.

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2 Background on Hungarian syntax

Several facts about Hungarian syntax are relevant to the understanding of this paper. This section covers basic word order and assumptions about syntactic structure, with particular attention to verbal particles, incorporated nominals, and the formation of polarity questions.

In Hungarian, all possible orders of the verb, subject, and object are attested, yet word order is constrained by the functions of particular structural positions (Kiss 2002). For instance, the sentence-initial topic position has the function of identifying the topic; the word order SVO, with the subject in topic position, would be translated into English as an active transitive, while the order OVS, with the object in topic position, is translated into English as a passive (Kiss 2002). Some examples (from Kiss 2002) are given in (2).

- (2a) János fel hívta Mari-t John.NOM up called Mary-ACC 'John called up Mary.'
- (2b) Mari-t fel hívta János Mary-ACC up called John.NOM 'Mary was called up by John.'

The basic sentence structure of Hungarian, in particular of the pre-verbal field, is important to understanding the analysis presented in this paper. The structure that I assume is illustrated in $(3)^1$. (This structure will be revised slightly in Section 3.3.) I assume that this structure reflects both the syntactic structure and the linear ordering.

(3) $[_{TopP}$ Top $[_{AffP}Aff [_{QP} Q [_{FocP} Foc [_{TP} T [...]]]]]$

Outside the verbal predicate is the topic phrase, and within the verbal predicate, there are multiple positions for other constituents (Kiss 2002). Post-verbal positions are for arguments, but crucially, there are a variety of pre-verbal positions, including for verbal particles (discussed below) and for a focused constituents, which immediately precede the verb (Kiss 2002). Preceding the focus position (both structurally and linearly) are positions for distributive quantifiers, universal quantifiers, and 'also' phrases (Kiss 2002). Thus, Hungarian pre-verbal field includes a topic phrase (outside the verbal predicate), a focus phrase (immediately preceding the verb), and a quantifier phrase. Following Lipták's (2013) polarity phrase, I also assume the existence of an affirmative phrase, AffP, in the pre-verbal field, which hosts affirmative responses to polarity questions.² I assume that AffP occurs immediately below TopP.

As exemplified by the morpheme be in (1) above, Hungarian has a class of verbal particles, which may have locative or aspectual meanings (Kiss 2002). Crucial to this paper is the position of these particles: they occur immediately preceding the verb in 'neutral' cases (i.e. when not topicalized and in sentences without focus, negation, or incorporation), but appear following the verb when anything else, such as negation or a focused object, occupies the immediately pre-

¹ I make no particular claims about the structure below T, as it is not relevant to the present analysis.

 $^{^{2}}$ I use an affirmative phrase rather than a polarity phrase because this particular type of fragment response is possible almost exclusively with affirmative responses to polarity questions. An affirmative phrase would be present in only these types of sentences, while a polarity phrase might be expected to be present for negative responses and declarative sentences as well.

verbal position (Farkas and de Swart 2003). This distinction is shown in (4) below, with the particle in bold and the verb in italics. In (a), the particle *be* is pre-verbal; in (b), when *a kertbe* ('into the garden') occupies the pre-verbal position, *be* must be realized after the verb.³ Note that particles are phrasal in Hungarian (see e.g. Lipták 2012).

- (4a) **Be**=*mész* a kert-be. into=go.2.SG.PRES the garden-into 'You are going into the garden.'
- (4b) A kert-be *mész* be. the garden-into go.2.SG.PRES into 'It is into the garden that you are going.'

Furthermore, these particles may also be topicalized, in which case they appear before the verb but not necessarily immediately adjacent to it (Kiss 2002). Data will be shown in Section 3. Following Lipták (2012, 2013), I assume that verbal particles appear in SpecTP in all cases in which they are not topicalized; the post-verbal position of the particle in (4b) is derived via movement of the verb to Foc.

Incorporated nominals in Hungarian behave similarly to verbal particles, in that they are preverbal in the neutral case but realized post-verbally in the same cases as the particles. These incorporated nominals are said to be semantically incorporated, and they differ from focused DPs in that they do not allow determiners (Farkas and de Swart 2003). However, this phenomenon differs from the typical cases of incorporation in that the nominals still have case and can be complex (Farkas and de Swart 2003). An example is given in (5); note that the focus or topicalization counterpart of this example would require a determiner, and the lack of determiner diagnoses incorporation. I assume that incorporated nominals occupy SpecTP, just as particles do.

(5) Vers-et olvas-ol. poem-ACC read-2.SG.PRES 'You are reading poetry.'

This paper looks at fragment responses to polarity questions, which are derived in Hungarian by intonation only; that is, word order is the same as in a declarative sentence (Kiss 2002). For example, with a different intonation, the examples in (4) and (5) can also be used as polarity questions, as illustrated in (11a) and (8a) respectively.

As mentioned above, I assume that verbal particles and incorporated nominals are in SpecTP in the neutral (non-topicalized) case. Following the literature (e.g. Kiss 2002), I further assume that focused constituents are in SpecFocP, that quantifiers (both distributive and universal) are in QP, and that the verb is in T in neutral cases, but moves to Foc when focus is present. I further assume, following Lipták (2013), that sentence-initial subjects without focus occupy SpecTopP; focused subjects occupy SpecFocP like other focused constituents. Finally, I assume that subjects containing még...is 'even' occupy SpecQP like other quantified subjects. It has been independently argued that 'even' phrases cannot occupy FocP (Horvath 2005); instead, they behave like quantified phrases. Furthermore, for simplicity, I assume that 'also' phrases are also in SpecQP, since Kiss (2002) claims they are in a position distinct from other subjects.

³ Note that -be is also a nominal case suffix meaning 'into'. This case suffix is distinct from the verbal particle and will not be discussed further here.

3 Data and analysis

3.1 The basics

3.1.1 Pre-verbal (non-topicalized) constituents

As was illustrated in (1), it is possible for verbal particles to be used on their own as responses to questions, without the verb. Such fragments are possible with a variety of verbal particles, as the additional data in (6) show. As discussed in Section 2, I assume that in the questions given here, the particle is in SpecTP and the verb is in T.

- (6a) Be=mész? Be. into=go.2.SG.PRES into 'Are you entering? Yes.'
- (6b) Ki=mész? Ki. out=go.2.SG.PRES out 'Are you exiting? Yes.'
- (6c) El=mész? El. away=go.2.SG.PRES away 'Are you going away? Yes.'
- (6d) Meg=csinál-od? Meg. PERF=do-2.SG.PRES.DEF PERF 'Are you doing it? Yes.'

Following Lipták (2012), I propose that these fragments are derived through movement of the verbal particle from SpecTP to SpecAffP, followed by ellipsis of the complement of Aff. Under this analysis, the movement of the verbal particle to SpecAffP is triggered by the fact that Aff is empty, combined with a mechanism that states that it must be filled. I will refer to this requirement as the 'AffP EPP feature', or AffEPP for short. Specifically, this requirement is satisfied through spell-out of either SpecAffP (through phrasal movement) or Aff (through head adjunction). The feature therefore forces movement of the highest constituent, in this case the verbal particle, to fill one of those positions. The tree below illustrates for the general case of particle and verb. Note that Hungarian also has a dedicated affirmative response particle 'yes', which is spelled out in Pol (here Aff) according to Lipták (2012). In this way, Hungarian displays optionality in regards to whether the head is spelled out as 'yes' or whether a constituent moves to the specifier.⁴

⁴ Note that Lipták's analysis of the position of 'yes' is inconsistent with some of the data gathered for this study; 'yes' can appear as the highest constituent in a sentence, above even the topic phrase. For space reasons, a full discussion is omitted here.



Figure 1: Analysis of particles

This analysis predicts that particles should not be the only elements that can satisfy AffEPP and serve as fragment responses. In particular, as discussed in Section 2, various syntactic objects besides particles can occur in pre-verbal position, including focused DPs, incorporated objects, and quantified expressions (Kiss 2002, Farkas and de Swart 2003). The following data demonstrates that these constituents are all possible fragment answers, as predicted.

The examples in (7) show that focused DPs are acceptable as fragment answers.

(7a)	A ke	rt-be	mész	be?	А	kert-be.
	the gat	rden-into	go.2.SG.PRE	s into	the	garden-into
	'Is it th	ne garden	that you are	going into?	Yes	s.'
(7b)	Egy	vers-et	olvas-ol	?	Egy	vers-et.
	а	poem-A	CC read-2.8	G.PRES	а	poem-ACC
'Is it a poem that you are reading? Yes.'						

Similarly, incorporated nominals may also be used as fragment responses; these responses work for both incorporated objects (8a) and determiner-less subjects of intransitive verbs (8b).

- (8a) Vers-et olvas-ol? Vers-et. poem-ACC read-2.SG.PRES poem-ACC 'Are you reading poetry? Yes.'
- (8b) Levél érkez-ett? Levél. letter arrive-PST letter 'Did a letter arrive? Yes.'

Finally, quantified expressions are also possible fragment responses, as shown in (9). Note that quantified expressions on their own cannot be in the focus position (see Kiss 1998), and so such responses appear to constitute a distinct location for possible fragments.

(9)	Minden-ki	olvas?	Minden-ki
	every-who	read.3.SG.PRES	every-who
	'Does ever	yone read? Yes.'	

Since focus phrases, incorporated nominals, and quantified expressions all appear between Aff and the verb, in SpecFocP, SpecTP, and SpecQP respectively, and are all the highest constituents in their respective questions (see the bracketed diagram in (3)), the same analysis as for verbal particles can be applied here too. Specifically, AffEPP forces movement of the highest constituent (the focus phrase, incorporated nominal, or quantified expression) to SpecAffP, and then the complement of Aff is elided.

Recall that head movement is another way of satisfying EPP features, including AffEPP. Thus, in cases in which the verb is the highest constituent, it should be a possible fragment response. It is, as the example in (10a) demonstrates. I assume that the structure for the question in (10a) is as schematized in (10b), with the verb in Foc. To form the fragment response, the verb moves from Foc to Aff, through head adjunction, and satisfies AffEPP. The complement of Aff is then elided, precisely as in the phrasal examples above.

(10a) Mész be a kert-be? Megy-ek. go.2.SG.PRES into the garden-into go-1.SG.PRES 'Are you *going* into the garden? Yes.'

(10b) $[_{FocP} Mész [_{TP} be t_{verb} a kert-be]]$

3.1.2 Post-verbal elements may not serve as response markers

Given that the analysis relies on the fragment responses being the highest constituents below Aff, it predicts that these same phrases may not be used as fragment responses in cases in which they are not highest. Recall from Section 2 that verbal particles (and incorporated nominals) are realized in post-verbal position in cases where another constituent occupies the immediately preverbal position. As predicted, the particle is not possible as a fragment answer in such cases, as shown in (11). In (a), the particle is pre-verbal, and can be used as a response. However, in (b) and (c), the particle is post-verbal, and is ungrammatical as a response. Thus, the particle must be in the pre-verbal position of the question in order to be acceptable as a fragment answer.

- (11a) Be=mész a kert-be? Be. Into=go.2.SG.PRES the garden-into into 'Are you going into the garden? Yes.'
- (11b) A kert-be mész be? *Be. (cf. (8a) above) The garden-into go.2.SG.PRES into *into 'Is it the garden that you are going into? Yes.'
- (11c) Mész be a kert-be? *Be. (cf. (10a) above) go.2.SG.PRES into the garden-into 'Are you *going* into the garden? Yes.'

The ungrammaticality of (b) and (c) follows directly from assumption that only the highest constituent below Aff may be moved to fill the position. In (b), the focus phrase is highest, and it is this constituent rather than the particle that can be used as a fragment response (compare to (8a)). Similarly, in (c), the verb is the highest constituent, above the particle, and it is the verb that may be used as a fragment response (compare (10a)).

Furthermore, recall that the particle is in SpecTP in both (11b) and (11c); the verb is what has moved. In other words, the structure of the question in (11b) looks as follows in (12). To formulate the fragment response from here, the focus constituent then moves up to SpecAffP to satisfy AffEPP. The particle cannot move up because it is blocked by the focus constituent.

(12) $[_{FocP} A \text{ kert-be} \text{ mész } [_{TP} be t_{verb}]]$

From the examples in Section 3.1.2, it may have seemed that syntactic position was relevant to fragment responses: any constituent between Aff and T could be used as a response. However, any analysis that focuses on the position of the particle in SpecTP, rather than its status as the highest constituent, would have substantial difficulties dealing with these examples. Indeed, the particle is in the same position, namely SpecTP, in both (11a), where it is a grammatical fragment, and (11b) and (11c), where it is not. Instead, the analysis in which the highest constituent is able to move up to SpecAffP is more successful at dealing with these examples.

Like verbal particles, other syntactic elements, like object DPs, cannot be used as fragment responses when occurring post-verbally in the question, as shown in (13) (cf. (8a), (11a)).

(13) Be=mész a kert-be? *A kert-be. into=go.2.SG.PRES the garden-into *the garden-in 'Are you going into the garden? Yes.'

Thus, the claim that only the highest constituent may be moved to AffP, to satisfy the requirement of spelling out AffP, is borne out by data in which lower constituents are ungrammatical as fragment responses.

3.2 Topic Phrases

3.2.1 As the only pre-verbal constituent

Up to this point, the highest constituent in the example sentences has always been possible as a fragment answer. However, this analysis, combined with the assumptions about Hungarian sentence structure from Section 2, predicts that topic phrases should not be possible as fragment responses. Indeed, TopP is above AffP, and downward movement is forbidden. Thus, an element in TopP should not be able to move down to fill SpecAffP or Aff.

As Kiss (2002) notes, there is often difficulty determining which constituents are topics in Hungarian, except when other pre-verbal constituents separate the topic from the verb. Indeed, particles can be topicalized, yet also generally appear pre-verbally, and so sentences with a particle followed by a verb can be ambiguous between a topicalized interpretation and a neutral interpretation. However, recall that, in the neutral case, subjects in Hungarian are in SpecTopP while subjects with focus occupy SpecFocP. Thus, the proposed analysis predicts that unfocused subjects should be impossible as fragment responses, being in SpecTopP, while focused subjects, like other focused constituents seen in Section 3.1, should be grammatical fragments. As the examples in (14) show, this prediction is indeed borne out. In these examples, capitals indicate stress; when the subject is unfocused (a), the verb bears the main stress.

(14a) János OLVAS? *János. John read-3.SG *John 'Is John reading? Yes.'

(14b)	JÁNOS	olvas?	János.
	John	read-3.SG	John
	'Is JOHN		

3.2.2 With other pre-verbal constituents

I now turn to fragment answers to questions in which a topic phrase co-occurs with other preverbal constituents. Consider the examples in (15), with a subject in SpecTopP, an incorporated nominal in SpecTP, and a verb in T.

- (15a) János vers-et olvas? *János John poem-ACC read.3.SG *John 'Is John reading poetry? Yes.'
- (15b) János vers-et olvas? Vers-et John poem-ACC read.3.SG poem-ACC 'Is John reading poetry? Yes.'

These examples mirror those in (14a) and (8a) respectively; a topic is not a possible fragment response, since TopP is above AffP, while an incorporated nominal is possible, since it is the highest constituent below Aff. Note, however, that simply moving the incorporated nominal to SpecAffP and eliding the complement of Aff does not get the correct result. Indeed, in that case, we would expect the subject, in SpecTopP, to be pronounced as part of the fragment answer, as shown in (16).

(16) [_{TopP} János [_{AffP}vers-et [_{TP} t_{verset} olvas]]]

The same is true in cases with other elements in the topic phrase. Consider the example in (17), in which the question is taken from a sentence in Kiss (2002). According to Kiss (2002), the particle *fel* occupies the sentence-initial topic position in this question, while the constituent *csak János* occupies the immediately pre-verbal focus position. In this case, the particle is not possible as a fragment response (17a), while the focused constituent is (17b). Again, we expect this contrast, but eliding the complement of Aff predicts that the topicalized particle and the focus phrase should both pronounced in the fragment, as shown in the bracketed diagram in (17c).

(17a)	Fel csak	János	olvas-t-a	а	vers-e-i-t?	*Fel	
	up only	John	read-PST-3.SG.DEF	the	poem-3.SG.POSS-PL-ACC	*up	
	'Aloud, was it only John who read his poems? Yes.'						

(17b)	Fel csak	János	olvas-t-a	а	vers-e-i-t?	Csak János
	up only	John	read-PST-3.SG.DEF	the	poem-3.SG.POSS-PL-ACC	only John.
'Aloud, was it only John who read his poems? Yes.'						

(17c) [_{TopP} Fel [_{AffP} csak János [_{FocP}-t_{focus} olvas-t-a [_{TP}-t_{verb}-a vers-e-i-t]]]

For the questions in both (15) and (17), it is possible in some contexts to have a fragment response consisting of the topic plus the constituent that moves to Aff. However, the ideal response excludes the topic. Interestingly, in the most natural full sentence responses to questions

with topicalized constituents, the topic position is empty. For the question in (15), the subject is pro-dropped in a natural full-sentence response, and is only kept in instance of contrast, which are precisely the cases in which a fragment consisting of the topic plus the incorporated nominal is permitted. Similarly, the most natural full sentence response to the question in (17) is given below.

(19)	Csak	János	olvas-t-a	fel	а	vers-e-i-t.
	only	John	read-PST-3.SG.DEF	up	the	poem-3.SG.POSS-PL-ACC
	'Aloud	, was it only	John who read his p	oems? (Yes)	, only John read aloud his poems.'

I therefore propose that Hungarian fragment answers are derived from full-sentence responses, rather than from questions. Given this analysis, the data in (15b) and (17b) in fact corresponds to the account given above, in an identical way to normal incorporated nominals and focused phrases. Indeed, in the natural full sentence responses, the topic position is empty, and so moving the highest constituent to SpecAffP and eliding the complement of Aff produces a fragment in which the topic phrase is absent.

3.3 Multiple (non-topic) pre-verbal constituents

To this point, all data has involved only a single constituent between Aff and the verb, though these constituents occupy a variety of syntactic positions (SpecQP, SpecFocP, SpecTP). While the presence of focus affects the position of the verb, raising it so that particles appear postverbally, quantifiers do not affect the position of the verb, and so can co-occur with either focus or particles pre-verbally. The analysis thus far predicts that only the highest constituent below Aff, namely the quantifier phrase, should be possible as a fragment response in such cases. However, this pattern is not what we find. Instead, in cases with two constituents occurring between Aff and the verb, either one is a possible fragment response. The data in (20) and (21) illustrate for the case of quantifiers plus particles; (22) gives an example for quantifiers plus focus.

(20a)	every-		=olvas? =read.3.SG.PRES e read aloud? Yes (e	Minder every-v veryone)	who	
(20b)	every-		=olvas? =read.3.SG.PRES e read aloud? Yes (a	Fel up loud).'		
(21a)	John	is also ohn also	fel=olvas-t-a up=read-PST-3.SG. read his poems alou			vers-e-i-t? e poem-3.SG.POSS-PL-ACC d).'
(21b)	János	is	fel=olvas-t-a		а	vers-e-i-t?

(21b) János is fel=olvas-t-a a vers-e-i-t? János is. John also up=read-PST-3.SG.DEF the poem-3.SG.POSS-PL-ACC John also 'Did John also read his poems aloud? Yes (John also).'

Fel.

up

(21c)	János	is	fel=olvas-t-a	a vers-e-i-t?
	John	also	up=read-PST-3.SG.DEF	the poem-3.SG.POSS-PL-ACC

Még	János	is. ⁵
PERF	John	also.
'Did Jo	hn also i	read his poems aloud? Yes (even John).'

(22a)	Minden-ki egy every-who a 'Does everyone rea	read.3.SG.PRES	fel? up		inden-ki. ery-who
(22a)	Minden-ki egy every-who a 'Does everyone rea	read.3.SG.PRES	fel? up	Egy a	könyv-et book-ACC

In these examples, we would predict the only grammatical response option to be the quantified phrase, because it is highest in the structure (see (3)). As illustrated in Figure 2, the particle, which is lower down, should be unable to move across the QP to get to SpecAffP. The same applies to the focus phrase in (22). Thus, we predict that for the questions in (20) and (21), the particle should be an ungrammatical response, and similarly for the focused object in (22). The tree below illustrates for the general case of a quantified subject and particle.



Figure 2: Problem with multiple possible responses

Moreover, it is not the case that constituents in SpecTP can always be used as fragment responses. Indeed, recall from examples such as (11b) that a post-verbal particle, for instance in the case of focus, cannot be used as a fragment response. Nonetheless, due to the assumptions on Hungarian syntax outlined in Section 2, it is the verb that moves up; the particle remains in SpecTP in such cases. If we tried to analyze the examples in (20)-(22) by stating that any constituents between Aff and T can be used as a fragment response, we would predict that any constituent in SpecTP may be used as a fragment response, regardless of the position of the verb. However, this result is incorrect, since particles are not possible responses when they are postverbal. Instead, the possibility of multiple responses seems to depend on the position of the verb: it is precisely the constituents that are below Aff but above the verb, wherever the verb might be in the structure, that are possible as fragment responses.

⁵ Note that it is the discontinuous combination of *még* and *is* that gives the 'even' meaning (Horvath 2005). In particular, the response is not ambiguous between 'even John' and 'also John'.

I propose to resolve this problem using the concept of multiple specifiers. The issue occurs only with quantifiers, and Kiss (2010) proposes that quantifiers in Hungarian do not in fact have their own head, but are instead adjoined as a second specifier to FocP or NegP. I do not deal with cases of negation here, but I propose to extend this idea by claiming that quantifiers adjoin to FocP in cases where focus is present, and to TP in cases where focus is absent.⁶ Thus, examples with a co-occurring quantifier and particle actually look as in Figure 3.



Figure 3: Quantifiers as second specifiers

Since multiple specifiers of the same head are equidistant, the two specifiers of the head, namely the quantifier and either the particle or the focus, should both be possible as responses, exactly as seen in (20)-(22).⁷ Thus, multiple specifiers solve the issue of optionality in responses.

4 Additional data and consequences

This section addresses a few remaining points about the phenomenon of fragment responses in Hungarian. First, I discuss the semantic relationship between fragments and questions (4.1). Next, I outline some additional data that remains to be analyzed in the future (4.2). Finally, I discuss Lipták's (2013) rejection of the movement to SpecAffP analysis (4.3).

4.1 Semantic relationship

The majority of the examples in this paper have dealt with constituents that are phonologically identical in the question and the response. As such, a further question to address is the nature of the required relationship between the pre-verbal constituent in the question and the fragment response. Here, I show that there is no special relationship between fragments and the questions to which they respond, beyond requirements that already exist for full-sentence responses.

The example in (23) shows that a noun in the question may be replaced with a pronoun in the response, demonstrating that phonological identity is not required.

⁶ Since quantifiers do not trigger verb movement, they cannot be in SpecFocP when focus phrases are absent. If quantifiers do not have their own position, as Kiss (2010) claims, and are not in the topic phrase, as Kiss (2002) claims, then the only remaining position for them is adjoined to TP.

⁷ This issue of strict linear ordering among these specifiers is beyond the scope of the present paper.

(23) Fel csak János olvas-t-a a vers-e-i-t? Csak ő up only John read-PST-3.SG.DEF the poem-3.SG.POSS-PL-ACC only him 'Aloud, was it only John who read his poems? Yes.'

However, there remains a semantic relationship between the response in (23) and the focus constituent of the question: they are semantically identical. As such, a further question is whether semantic identity is required. The exact nature of the semantic relationship between the fragment and the question's pre-verbal constituent can be tested using adjectives modifying a focused DP. Such adjectives may be added to a fragment response, but they may not be removed. This result is consistent with entailment properties: a modified nominal is a subset of the original set defined by the unmodified nominal, and so is entailed by it, but the reverse is not true. Such examples suggest a relationship in which the fragment must be a (not necessarily proper) subset of the preverbal constituent from the question, since modification creates a subset of the original set defined by a nominal. Indeed, in (24), we see that the adjective 'long' is grammatical in the response regardless of whether it appears in the question (24a) or not (24b). In contrast, in (25), we see that the response without the adjective is grammatical when no adjective appears in the question (25b), but not when one does (25a).

(24a)	Egy	hosszú	vers-et	olvas-ol?	Egy	hosszú	vers-et.
	а	long	poem-ACC	read-2.SG	а	long	poem-ACC
	'Are yo	ou reading a	long poem?	Yes (a long	poem).'		

- (24b) Egy vers-et olvas-ol? Egy hosszú vers-et. a poem-ACC read-2.SG a long poem-ACC 'Are you reading a poem? Yes (a long poem).'
- (25a) Egy hosszú vers-et olvas-ol? *Egy vers-et. a long poem-ACC read-2.SG *a poem-ACC 'Are you reading a long poem? Yes (a poem).'
- (25b) Egy vers-et olvas-ol? Egy vers-et. a poem-ACC read-2.SG a poem-ACC 'Are you reading a poem? Yes (a poem).'

This generalization also holds for non-fragment responses to polarity questions, suggesting that the relationship between the fragment and the pre-verbal constituent is based on possible fullsentence responses rather than on any requirements specific to fragments. Indeed, adding the word for 'read-1.sg' is added to the end of each response in (24) and (25) produces exactly the same grammaticality judgements. (Full examples are omitted here for space reasons.)

As such, phonological identity is not necessary for fragment responses; however, a semantic subset relationship is required. Nonetheless, this relationship is also true of non-fragment responses, and so is not specific to the phenomenon investigated here.

4.2 Remaining Issues

4.2.1 Negation

Up to this point, only affirmative responses have been considered, raising the question of whether the negations of fragment responses are grammatical. They are not, as illustrated in (26).

(26) Be=mész? *Nem be. into=go.2.SG.PRES *NEG into 'Are you entering? No.'

However, it is grammatical to negate a locative particle in a fragment response in the case of contrasting it with another particle. This is only grammatical in very specific contexts of contrast evoking a set of alternatives, and with an intonational contour in the fragment response that emphasizes the pre-verbal particle. An example is shown in (27).⁸

(27) Be=mész? Nem be, ki. into=go.2.SG.PRES NEG into out 'Are you entering? Not entering, exiting.'

Interestingly, this type of contrast is precisely the case in which particles remain pre-verbal despite the presence of negation. Recall from Section 2 that Hungarian particles are usually post-verbal in the context of negation. However, as the example in (28) shows, this is not true in the case when the particle is being contrasted; a full-sentence response to the question in (27) has the particles as pre-verbal; a post-verbal particle would be odd and unnatural in this situation. As such, these examples of negation in (26) and (27) still fit the generalization that pre-verbal particles may be used as responses, while post-verbal ones may not be.

(28) Be=mész? Nem be=megy-ek, ki=megy-ek. into=go.2.SG.PRES NEG into=go-1.SG.PRES out=go-1.SG.PRES 'Are you entering? No, I'm not going in, I'm going out.'

Like with verbal particles, contrastively negated fragments are possible with incorporated nominals, as shown in (29).

(29) Vers-et olvas-ol? Nem vers-et, újsag-ot poem-ACC read-2.SG.PRES NEG poem-ACC newspaper-ACC 'Are you reading poetry? Not poetry, (a) newspaper.'

Given that these negative responses are grammatical in precisely the cases where the particle or incorporated nominal remains pre-verbal, it might appear that the same analysis that was developed for affirmative responses will work here too. However, the placement of the negation

⁸ The contexts required to create such contrasts are somewhat tricky. The consultant suggested a context where they were telling a story while inside the house and said that they would go into the garden, and then their friend asks the question in (10), emphasizing the particle for "in". This produces the relevant contrast because in Hungarian, you go *out* to the garden if you are inside the house; you cannot go *in* to the garden from inside a house.

in the structure is problematic.⁹ It is possible that there is a negation phrase above AffP where the negation belongs, which would reverse the polarity of Aff. If the particle or incorporated nominal moves to Aff and Neg is above it, then the result would be a negative response. However, working out the details of this structure is beyond the scope of the present paper.

4.2.2 Adverbs

As the examples in (30) show, a variety of adverbs may be added to a fragment response, including time adverbs, manner adverbs, and speaker-oriented adverbs.

- (30a) A kert-be men-t-él? (Igen) a kert-be tegnap. the garden-into go-PAST-2.SG (yes) the garden-into yesterday 'Did you go into the garden? Yes, into the garden yesterday.'
- (30b) A kert-be men-t-él? (Igen) a kert-be gyorsan. the garden-into go-PAST-2.SG (yes) the garden-into fast 'Did you go into the garden? Yes, into the garden quickly.'
- (30c) A kert-be men-t-él? (Igen) nyilvánvalóan a kert-be. the garden-into go-PAST-2.SG (yes) obviously the garden-into 'Did you go into the garden? Yes, obviously (I went) into the garden.'
- (30d) A kert-be men-t-él? (Igen) vonakodva a kert-be. the garden-into go-PAST-2.SG (yes) reluctantly the garden-into 'Did you go into the garden? Yes, (I went) reluctantly into the garden.'

These examples are problematic for the analysis, because it is unclear where these adverbs can attach without being elided. In particular, manner adverbs are generally low, closer to the verb, and therefore we would expect them to be elided with the verb. Determining exactly how it is possible for these adverbs to appear as part of the fragment response, specifically where they appear in the structure, is an important direction for future research, but is beyond the scope of the present paper.

4.3 Lipták (2013)

The analysis developed above is based on Lipták (2012), who uses a similar analysis, but with a polarity phrase rather than an affirmative phrase, and only for particles and verbs. However, Lipták (2013) rejects an analysis of movement to PolP for a similar phenomenon involving fragments consisting of both a particle and a verb. Her analysis instead involves ellipsis of the complement of T; this ellipsis is licenced by the presence of Pol. I adopt this analysis for the cases of particle plus verb fragments that she discusses in that paper. However, for particle-only fragments, movement to SpecPolP (here SpecAffP) is required, just as Lipták (2012) proposes. Without such movement, for the simple case of pre-verbal particles, we would require ellipsis of the T' (i.e. the sister of SpecTP), which is a node that should not be referred to by syntactic phenomena. More crucially, for the case of post-verbal particles, even eliding T' would not work, since that would predict that such particles should be grammatical as fragment responses. Thus,

⁹ While 'yes' can co-occur with fragment responses, it is separated by a comma in writing and a pause in speech, suggesting that the responses belong to different domains. 'No' is not separated in this way.

since Lipták's (2013) rejection of movement to SpecPolP is for the different, though related, phenomenon of particle plus verb fragments, and since her analysis of those responses does not work for the types of fragments considered here, I claim that the movement analysis developed above should hold. Future work should examine the relationship between the types of fragments considered here, in order to unify the analyses as much as possible.

5 Conclusions

In conclusion, this paper has provided new data on fragment responses to polarity questions in Hungarian. I have analyzed this phenomenon using movement to AffP, and shown that the data can be accounted for if anything between Aff and the verb may be used as a fragment. I have formalized this generalization by proposing revisions to Hungarian syntactic structure, with quantifiers adjoining to FocP in cases where focus is present, and to TP otherwise. Furthermore, I have suggested that the antecedents for ellipsis in Hungarian fragment responses are possible full-sentence responses, rather than questions.

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