

## Word Order and post-verbal Focus

Ádám Szalontai<sup>1</sup> and Balázs Surányi<sup>1,2</sup>

<sup>1</sup>Research Institute for Linguistics (HAS)

<sup>2</sup>Pázmány Péter Catholic University

**Introduction:** The Hungarian clause can be divided into two distinct domains separated by the verb. Pre-verbally the order and hierarchy of the constituents is strict, determined in a large part by their Information Structural (IS) roles. This organisational effect is borne out by the well known Topic-Predicate structure of Hungarian clauses, as well as by the well identifiable, immediately pre-verbal Focus position near the left-edge of the predicate. Post-verbally the picture is different; as has been pointed out in a number of places in the literature (eg: É. Kiss 2002) the word order in this domain appears to be “free”. While there are factors that influence word order, these appear to have a much higher degree of optionality.

Focus can also occur post-verbally, if the pre-verbal Focus position is filled, or if it is non-exhaustive (É. Kiss 1998a) or pragmatically exhaustive (Surányi 2011). However, there is little information about syntactic (word order) marking of post-verbal foci. Theories that assume an iterated focus structure, where the verb moves through a successive chain of focus projections before ending up in the head of the highest focus projection (as proposed by eg. É. Kiss 1998b) would predict that a post-verbal focused constituent should appear immediately post-verbally in a structural focus position. Other theories that would predict the Focus to appear in the clause-final position could be suggested, based on independent evidence of this position being prominent cross-linguistically, as proposed for example for Spanish by Zubizarreta (1998).

**Research Questions and Methods:** This study aims to find empirical evidence for the effect of the IS categories of Focus and Givenness on the post-verbal word order of the Hungarian clause. Givenness was included in order to better understand the role of non-focus marked given elements in influencing post-verbal focus placement. To achieve this, three forced choice experiments were run, on a total of 364 subjects. 16 target sentences were used in a Latin Square design, with three types of focus constructions: simple post-verbal focus as in (1), focus marked with the particle *is* ‘also’ as in (2), and double focus constructions with one pre- and one post-verbal component as in (3). All post-verbal constituents were adjuncts of the same size and structure.

- (1) Attila elájult [a málnásban]<sub>loc</sub> a melegtől  
Attila prt.fainted the raspberry field.in the heat.from  
‘Attila fainted in the raspberry field from the heat.’
- (2) Attila elájult [a málnásban is]<sub>loc</sub> a melegtől  
Attila prt.fainted the raspberry field.in also the heat.from  
‘Attila also fainted in the raspberry field from the heat.’
- (3) Attila<sub>loc</sub> ájult el [a málnásban]<sub>loc</sub> a melegtől  
Attila fainted prt the raspberry field.in the heat.from  
‘It was Attila who fainted and in the raspberry field from the heat.’

Subjects were presented with a context questions that elicited sentences in five conditions: broad focus(A), one post-verbal constituent as given(B), one post-verbal constituent as focused and the other discourse new(C), and one constituent as focused and the other as discourse given(D). The task of the subjects was to choose the word order they preferred. The results were analysed using logistic mixed effect models.

## Results and Discussion:

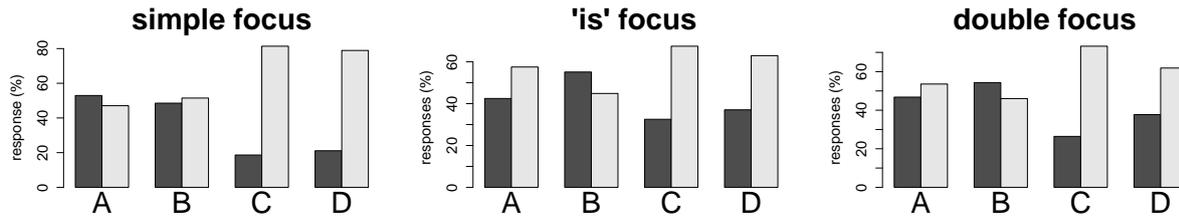


Figure 1: Placement of focus marked item: dark = clause-final, light = post-verbal. A = broad focus baseline, B = new-given, C = focus-new, D = focus-given.

As can be seen in the plots above, the results revealed a strong tendency for the Focus marked item to appear in the immediately post-verbal position as opposed to the clause final position. When compared to the baseline, these results were statistically significant in most cases, especially in the simple focus experiment. Givenness did not show as strong of an effect as focus, but there were some tendencies to have given elements precede contextually new elements, this slight effect rules out the possibility that the preference of Focus for the post-verbal position is due to a general rule of given elements following new element in Hungarian. When comparing the three different types of focus the main effect of placing the Focus marked constituent in the post-verbal domain holds, however there are differences in the magnitude of the results: if the focus is marked morpho-syntactically, or if it occurs in a clause with a pre-verbal focus in the canonical position, the effect is not as substantial.

The fact that focus had a clear effect on the word order and that this effect was to place the focus marked element in an immediately post-verbal position seems to correlate well with theories that assume a series of iterated focus projections. If we look at the different focus types examined, the picture becomes a bit more complicated. The three types of foci are different syntactically: simple focus is not linked to a functional projection, *is* marked focus does not occur in the pre-verbal Focus position, and double focus is linked to this position as it is exhaustive. The fact that the word order preference for all three was the same, but to varying degrees, suggests that this ordering phenomena is not syntactic in nature. As syntactic effects would be on the hand more substantial, and would also preferably need to differentiate between the three types.

**Proposal:** If we assume, based on the results, that focus is marked by linear order more, if there is no morpho-syntactic marking available, and it is the only focus in the clause, then we can formulate a theory that does not assume a post-verbal focus projection. This theory would only allow for the pre-verbal Focus position, for exhaustive identificational foci, leaving all other focus marking to be handled by an interaction of post-verbal scrambling and prosodic prominence marking. The motivation for movement is provided by the need for the focus marked element to get to the prosodically prominent pre-verbal position on the left edge of the predicate, as proposed by Szendrői (2003). However if this is not possible (the position is filled or the constituent is non-exhaustive), the focused element remains post-verbal, but as near to the left edge of the predicate as possible. This theory would allow for a system of graded violability, which allows for prosodic alignment requirements to be met in a gradient, sometimes optional manner, similarly to other prosodic features associated with prominence such as pitch movements, and final lengthening in certain cases (Ladd 2008).

This theory would solve the problem of differentiating between the lax ordering rules in the post-verbal domain, relegating them to prosodic alignment, from the much stricter syntax based rules in the pre-verbal domain.

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