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The war of the left periphery

This paper concerns the complex syntax of the preverbal part of the Hungarian clause. For the most part, I will be drastically oversimplifying and consciously ignoring many of the complexities which are undoubtedly relevant to a fuller treatment of the subject. However, we will see that even with the drastic simplification that I will impose on the data, the subject remains extremely complex, which is my justification (excuse) for the simplification: to make headway in the real world of Hungarian clause structure, it is wise to start with a simplified model.

What I hope to show is that a number of elements are battling each other for the privilege of being first in some well defined domain in the Hungarian clause (and some try to be first in more than one domain). Some elements are always winners, others are easy losers. Obviously, if such a description of the Hungarian clause can be maintained, it strongly suggests an Optimality Theory treatment of the phenomena, as this is the best theory for dealing with elements in competition.

1 Some assumptions

This paper takes its lead from various sources. First is a recent paper by Grimshaw (1998) which attempts to impose constraints on the notion of a constraint. This, I believe, is essential in OT syntax, as without a theory of constraints we are operating in a vacuum with little hope of attaining real explanatory power. Grimshaw's constraints on constraints are far from perfect and much work is still needed. However, they are a starting point.

The constraints which will be of use here are:

(1) a. Constraints are maximally general.
    b. Constraints belong to families.

As Grimshaw points out, the first of these constraints is rather natural, given an OT framework. The assumption of violable constraints pushes in the direction of generality as apparent "exceptional" behaviour of certain elements can be explained in terms of constraint interaction, leaving the expression of the constraints themselves in their maximally general forms. With rigid constraints, such exceptions can only be handled by complicating the statements of the constraints in order to exclude the exceptions, thereby forfeiting generality. This constraint is important for the present paper as it resists the temptation to adopt a convenient but ultimately vacuous account for specific phenomena which uses constraints which refer directly to the elements involved. Clearly, constraints which make reference to particular lexical elements of particular languages will not be general: general constraints must be formulated using the vocabulary of the general theory of language, not in terms of the specific elements of the language under investigation. Therefore constraint (1a) rules out constraints such as '*dog*-left' (Grimshaw's example) which places the word *dog* to the left of the NP, or to take a real, but equally invalid example, ALIGN NEM (Payne & Chisarik, forthcoming), which aligns the Hungarian negative marker *nem* to the left edge of a projection of the verb. Of course, the adoption of this metatheoretical constraint does make it difficult to account for some specific phenomena in a language which appear to affect only certain words.[1] However metatheoretical constraints are not there to make life easy, but to import explanation.

The second constraint does not follow from the assumptions of OT and is subsequently weaker. Instead it follows from empirical observations concerning OT accounts of given phenomena. Grimshaw points out that it is beginning to emerge that the most important constraints group together in constraint families which are surprisingly relevant to a wide range of linguistic phenomena, both syntactic and phonological. While this isn't a particularly strong constraint for injecting explanatory content into the theory, it may play a role in directing the theory's development. It is important for the present paper as I will be making virtually sole use of a family of constraints (alignment) which have been used in both the syntactic and phonological arenas.

A second influence on the present paper is a number of papers which deal with syntactic phenomena using alignment constraints (Grimshaw 1997, 1998; Pesetsky 1995; Samek-Lodovici 1996, forthcoming and Costa 1998).

[1] For example, how to account for the postpositional nature of the English *ago,* when the vast majority of English adpositions are prepositional.

These indicate the importance of alignment considerations for a wide amount of phenomena and also the importance of these constraints in current OT thinking.

A final influence comes from Payne & Chisarik (forthcoming) who present an analysis of some of the Hungarian data that I will be considering using alignment constraints. The present paper is basically a reaction to Payne and Chisarik, though I will not have time to review and criticise their perspective. Suffice it to say that they do two things which I am against. First, many of their constraints are too specific, referring directly to elements such as *nem* and phrases which start with *nem* or end with *sem*. This clearly violates the first of Grimshaw's metatheoretical constraints. Secondly their theory is roughly couched within a version of X-bar theory which tries to avoid the use of functional projections, by replacing these with four projection levels of the VP. Whilst their aim of avoiding the overuse of functional projections, which ultimately leads to vacuity, is laudable, their means of achieving it leave a lot to be desired: increasing the number of projection levels allowed in X-bar structures seems to me to cause at least as many, if not more, problems for the theory which ultimately rob it of explanatory content.[2]

[2] For example, unless we are to abandon the Uniform Projection Hypothesis, adopted by Jackendoff (1977) and maintained through to current day versions of X-bar, we must assume that all structures project to four levels. Yet there is very little evidence to favour a four level analysis of the NP, the AP or the PP, to say nothing of the CP or the IP, if one wants to adopt the minimal number of functional projections. Furthermore the standard "two level" theory allows for the structural definition of three other elements, beside the head: complements; adjuncts and specifiers. There is much discussion whether these are too many. For example Larson (1988) claims that all adjuncts are complements, while Kayne (1994) claims that specifiers are really adjuncts. Increasing the bar projections to four compounds this problem by providing structural definitions for a possible five elements.

2 Alignment Syntax

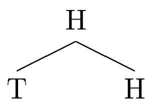
In this section, I want to briefly introduce the notion of alignment in syntax and show how it gives rise to different structural properties to hierarchical syntax, standardly assumed.

The notion of alignment is of course directly borrowed from phonology (in particular McCarthy & Prince 1994). Alignment constraints simply align one edge of a TARGET constituent to one edge of a HOST constituent. There are four logical possibilities:[3]

(2) a. (le T : le H) = $[_{\mathrm{H}} [_{\mathrm{T}} \ldots] \ldots]$
b. (le T : re H) = $[_{\mathrm{H}} \ldots] [_{\mathrm{T}} \ldots]$
c. (re T : le H) = $[_{\mathrm{T}} \ldots] [_{\mathrm{H}} \ldots]$
d. (re T : re H) = $[_{\mathrm{H}} \ldots [_{\mathrm{T}} \ldots]]$

Of these four possibilities, I will be making use of only (2c). I will leave undiscussed the issue of whether the other three are necessary for the description of human languages.

The alignment requirement in (2c) is interesting for what it says about the ways structures are put together. It only requires that the right edge of the target be aligned with the left edge of the host, but not that they be immediately dominated by the same node. In principle, the two elements could be dominated by two entirely different nodes and yet still be in the required alignment configuration. Therefore alignment requirements themselves do not force hierarchical configurations. But this is not to say that alignment requirements have nothing to say about domination relations. For example, consider the simple case where the target and the host are immediately dominated by the same element. A standard theory would demand that one of these elements projects, presumably the host, thus:

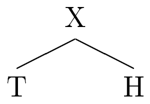
(3)


But if by projecting the host in this way we extend its edges we end up destroying the original alignment conditions. In (3), the left edge of the

[3] The formulae are read in the following way: (X : Y) means “align some edge of X to some edge of Y,” where the specific edges involved are indicated by *le* (left edge) and *re* (right edge).

target, not its right edge, is aligned to the left edge of the host. In fact, the only configuration in which the alignment condition can be met is where the projected element is taken to be a new element, defining its own edges and leaving the other edges unaffected:

(4)



At first sight, this seems to violate standard assumptions about projection: the projected element seems not to have a head. On the contrary, however, I think it accounts for certain features of projection that have previously only been stipulated. Suppose we embed these ideas within a theory which also forces projection (e.g., Newson 1998a), then the host does project, in that it shares the relevant features with its projection. However, if the relevant alignment relations are to be maintained, the projection must be a separate category from the head. This captures the X-bar insight that projections differ from their heads. While X-bar theory captured this notion through the stipulation that projections differ from their heads in terms of their projection levels (i.e., an X′ differs from an X and an X″ differs from an X′), the notion of alignment forces the two to be different categories and thereby eliminates the need for the stipulation of bar levels entirely.[4]

In what follows, I will be making the assumption that each projection of a head is defined as a separate element from it.

A second point needs to be made about the syntax of alignment. The alignment configuration we will be concerned with here (as in (2b)) will normally only allow for the alignment of two elements: the target and the host. Thus when we find single positions defined with respect to the left periphery of some domain and for which certain elements compete with each other to occupy, then it seems that this is a situation which can be captured in terms of an alignment constraint. However, when we find cases of multiple

[4] One might wonder what this view has to say about adjunction, which in standard X-bar theory is characterised as the projection of a head to another element of the same projection level. There are two responses that could be made. One would be to point to the discussion, indicated in footnote 2, that perhaps the notion of an adjunct does not have a structural reality. In this view, adjuncts are defined by their semantic functions as modifiers rather than by their structural positions. Another response would be to point out that there are more than one alignment possibilities, as shown in (2). The adjunction configuration would be capturable in terms of (2a) or (2d).

stacking of elements at the left edge of a domain, with no apparent complementary distribution between the elements, then this is not an alignment relationship, but something else.

This said, however, it should also be made clear that multiple alignments are possible. This may happen when one element is aligned internally to another, say with both elements having their left edges aligned, as in (2a). In this case a target which is aligned to the left edge of the more dominant host will also be aligned with the left edge of the contained host:

(5) $[_{\text{T}} \ \ldots] \ [_{\text{H1}} \ [_{\text{H2}} \ \ldots] \ \ldots]$

Thus, it is perfectly possible for a single element to satisfy two alignment constraints, under the conditions of the configuration in (5). We will see actual cases of this as we proceed.

3 A Simplified Description of the Hungarian Clause

As far as I can determine, the Hungarian clause simplified looks something like this:

(6)

$$\begin{array}{ccccc}
\text{Top*} & \text{Q}^{-3\text{a},\,-4\text{b}}* & \left\{\begin{array}{l} \text{a: Wh}^{-2,\,-3\text{b},\,-3\text{c},\,-4\text{a}} \\ \text{b: Foc}^{-3,\,-4\text{a}} \\ \text{c: } {\sim}\text{Q}^{-3\text{a},\,-3\text{b},\,-4\text{a},\,+4\text{b}} \end{array}\right\} & \left\{\begin{array}{l} \text{a: prev}^{-3,\,-4} \\ \text{b: nem}^{-4} \end{array}\right\} \ \text{V} & \left[\begin{array}{l} \text{Arg} \\ \text{Wh}^{+3\text{a}} \\ \text{Foc}^{+3\text{a},\,+3\text{b}} \\ {\sim}\text{Q}^{+4\text{b}} \\ \text{prev}^{+3,\,+4} \\ \text{Q}^{+3\text{b},\,+4\text{b}} \end{array}\right]^{*} \\
1 & 2 & 3 & 4 &
\end{array}$$

Key: X* —zero or more Xs may appear

$\left\{\begin{array}{c} \text{X} \\ \text{Y} \end{array}\right\}$ —a choice of X or Y

$\left[\begin{array}{c} \text{X} \\ \text{Y} \end{array}\right]$ —an unordered string made up of Xs and Ys

X^{-n}—X is in complementary distribution with element identified by n

X^{+n}—X is licensed in position by the appearance of element identified by n

I have attempted to make (6) as comprehensive as possible, within the limits of the simplifications I impose. However I will not have time to discuss all the details listed here. Therefore, I will skip over details concerning the topic and the negative quantifiers. Obviously a fuller account would include these, but for now I leave them unattended to.

Points of interest include the following:

- Quantifiers may follow the topic (if present) or they may follow the verb, but only in the presence of a wide scope focus or a negative marker. They only have a small role to play in restricting other elements, being incompatible with a following wh-element in the preverbal position.
- Preverbal Wh-elements and foci are in complementary distribution with each other, but whereas wh-elements may recurs, foci are also in complementary distribution with themselves. A wh-element is licensed postverbally only in the presence of a preverbal wh-element, whereas a focus is licensed postverbally by either a preverbal wh-element or by other foci.
- Preverbs are in complementary distribution with wh-elements, foci and the negative marker *nem.* They are licensed in the postverbal position when any of these elements appear.
- *Nem* is in complementary distribution with preverbs, but not the things that preverbs are in complementary distribution with. It never appears postverbally.
- Several things are in complementary distribution, but this is not a transitive relationship as might have been expected on a normal understanding of this concept. For example, *nem* is in complementary distribution with preverbs and preverbs with foci, yet *nem* is not in complementary distribution with foci. This pattern occurs several times in (6).

In the following sections I will discuss the distributional patterns of some of the elements indicated in (6), starting with the postverbal elements and moving towards the left edge of the clause.

4 Postverbal elements

One simplification I will make concerns the order of the postverbal elements. (6) indicates that there is no ordering restrictions on these, which is not strictly true. While most would agree that the order of postverbal arguments is unrestricted, there are some restrictions on other elements appearing in postverbal positions. For example, there is a preference for the postverbal aspectual particle to come immediately after the verb, so that (7a) is preferred to (7b), though the latter is not seen as being ungrammatical:

(7) a. Péter vette el a könyvet
Peter took away the book
'it was Peter who has taken the book'

b. Péter vette a könyvet el

As these restrictions are seen in terms of preferences rather than grammaticality and are open to individual differences, it is not entirely obvious what their cause is.

Another issue concerns how to characterise the free ordering of certain postverbal elements structurally. For example, É. Kiss (1995) demonstrates with the examples in (8) that postverbal foci may appear in any order with respect to other postverbal elements:[5]

(8) a. CSAK KÉT LÁNY olvasott CSAK EGY KÖNYVET el a vizsgára
only two girls read only one book PART. the exam-for
'it was only two girls who read only one book for the exam'

b. CSAK KÉT LÁNY olvasott el CSAK EGY KÖNYVET a vizsgára

c. CSAK KÉT LÁNY olvasott el a vizsgára CSAK EGY KÖNYVET

However, despite these observations É. Kiss concludes that postverbal foci occupy fixed focus positions (specifier of focus phrases) rather than being treated as *in situ* arguments with a focus interpretation. Her main arguments are based on the assumption that focused elements must move to syntactically defined positions in order to receive focus and scope interpretations, yet in making these assumptions she clearly runs into the problem of accounting for the apparent freedom of ordering of these elements. Her solution is that there are a number of functional projections (topic and quantifier phrases) which may appear between the verb (situated in the head of a dominating FP) and the lower FP containing the postverbal focus. This seems *ad hoc* at best and É. Kiss has no sound evidence to support it. Indeed, it runs against one of her own observations, that acceptability of sentences gradually deteriorates the further from the verb the postverbal focus is placed. If É. Kiss's proposal were correct, one would expect either a

[5] It should be noted that Surányi (1997) claims that postverbal foci must be adjacent to the verb, contra É. Kiss (1995). However the examples that Surányi cites involve stress marked foci as opposed to É. Kiss who uses *csak* ('only') as a device for forcing focus interpretation. It may be then that stress rules interfere with Surányi's data, if indeed they are at all valid.

sudden and drastic deterioration of grammaticality if there is a limit on how many functional phrases may intervene between the verb and a postverbal focus, or no deterioration at all if there is no such limit.

Rather than face up to these problems, it seems altogether preferable to avoid them by abandoning the assumption that postverbal foci must appear in a specific interpretation position. Under this view, postverbal foci simply occupy their *in situ* argument positions and receive their interpretations without (LF) movement. From an OT perspective there is simply no reason to maintain the assumption that because some operators move to certain positions in order to mark their scope, then so must all operators (Newson 1998a). In fact, postverbal foci already mark their obligatory narrow scope *in situ* and thus there would be no reason for them to move (see section **9** for some discussion of the syntax of scope marking). Thus, I will continue to assume that there are no syntactic restrictions on postverbal elements and that this is due to such elements being generated in a flat "argument structure" (Newson 1998b). Postverbal foci are simply foci which remain *in situ* in this flat argument structure and hence they too are unrestricted with respect to their order.

5 Preverbs

Preverbal modifiers (preverbs) come in a number of sizes and shapes. They may be particles which often have an aspectual role, or postpositions, certain adverbs or adjectives, or nouns:

(9) a. János elment
John left

b. János keresztülment a hídon
John across went the bridge-on
'John went across the bridge'

c. János odament
John to-there-went
'John went there'

d. zöldre festi a létrát
green-SUBL. paints the ladder
's/he paints the ladder green'

e. létrát fest
ladder-ACC. paints
's/he paints the ladder'

Interestingly, as pointed out by Csirmaz (1998), when there is more than one such preverb in a clause only one of them gets to be in the preverb position. The others appear postverbally. There is a hierarchy which determines which element get to be preverbal and which is postverbal. Csirmaz suggests the hierarchy in (10) based on data such as (11):[6]

(10) particle/postposition > adverb/adjective > noun

(11) a. befesti a létrát zöldre
in-paints the ladder-ACC. green-SUBL.
's/he paints the ladder green'

b. *létrát fest be zöldre

c. *zöldre festi be a létrát

d. zöldre festi a létrát
green-SUBL. paints the ladder-ACC.

e. *létrát fest zöldre

f. létrát fest
ladder-ACC. paints

This obviously suggests a degree of competition between the preverbs: each one wants to be first, but some are better at getting their own way than others. Assuming that the postverbal preverb is *in situ,* then it must move to the preverbal position, presumably to satisfy its morphological nature—essentially it is a proclitic. Apparently multiple cliticisation is not allowed and so in the case of multiple clitics appearing the highest one in the hierarchy in (10) will be cliticised and the others will remain *in situ.*

We can account for this with the following constraint:

(12) ALIGN CLITIC (re clitic : le V)

Given that the verb has only one left edge, this will mean that ALIGN CLITIC can be satisfied by only one clitic. If more than one clitic attempts to cliticise to the verb the constraint will be as much violated as it would be if the other clitics had remained *in situ.* Furthermore, there will be extra

[6] It should be pointed out that the ungrammatical cases in (11) are grammatical when the preverbal element is given a focus interpretation. The ungrammaticality judgement is only relevant for a neutral interpretation, which is what is intended here.

violations of the constraint that requires elements to remain *in situ,* for example Grimshaw's (1997) STAY constraint. Obviously ALIGN CLITIC must be more highly ranked than STAY in Hungarian as one preverbal element must align with the left edge of the verb (providing nothing else prevents the satisfaction of this alignment constraint).

To capture the hierarchy effects, we need to assume that ALIGN CLITIC is violated to a greater extent by those elements higher on the hierarchy. The idea is that some things are simply bigger clitics than others and thus have a greater need to satisfy the constraint. Perhaps the hierarchy has a semantic base, as suggested by Csirmaz, and elements with greater independent semantic content are less clitic-like and so violate the alignment constraint less.

The following table demonstrates the relevant results:

(13)

			ALIGN CLITIC	STAY
a.	☞	elment…		*
		ment el…	***!	
b.	☞	befesti zöldre	**	*
		zöldre festi be	***!	*
		zöldre befesti	**	**!
c.	☞	zöldre festi a létrát	*	*
		létrát fest zöldre	**!	*
		létrát zöldre fest	*	**!

6 *Nem*

The negative marker *nem* is also in complementary distribution with the preverbal clitics. However, *nem* never appears behind the verb. This could be put down to the assumption that this element is higher on the clitic hierarchy than all the others and hence will always be cliticised when present. However, other differences between *nem* and the preverbs indicate that this is not the right way to capture the data. As we will discuss in the next sections, the preverbs are in complementary distribution with wh-elements and foci, whereas *nem* is not. This at least points to a fundamental difference between the two. But then, of course, we face the problem that if *nem* and the preverbs are fundamentally different structurally, why is it that they are in complementary distribution? Let me begin to answer this question by presenting an analysis of *nem* that will ultimately enable us to capture the facts without specific reference to this element in the constraints.

There is no real agreement over what kind of syntactic thing *nem* is. It may be a head of a negative phrase or it may be an adjunct to the verb, to mention two possibilities. Semantically it is also an ambiguous element, serving as both a marker of sentential negation and as a meaningless element of concord with certain negative elements:

(14) a. János nem ment el
John not went PART.
'John didn't go'

b. János nem szeret semmit
John not likes nothing
'John doesn't like anything'

The claim I want to make here is that *nem* is in fact a marker of a "negative predicate". This borrows an idea from Reinhart & Reuland (1993) who propose that *reflexive* predicates must be marked as such either directly by a verbal morpheme or indirectly by a *self* morpheme situated on one of the predicate's arguments. They claim that a reflexive predicate is one for which at least two of its arguments are coreferential.

I will make the following claim:

(15) a predicate is negative if at least one of its *components* is negative

The components of a predicate include its arguments but this notion also covers other relevant semantic elements such as tense, aspect and mood. Thus a predicate is straightforwardly negative if one or more of its arguments is negative, but it is also negative if some other aspect of its semantics is negated. I assume that with sentential negation, a fairly basic semantic component of the verbal predicate is negated. As with Reinhart and Reuland's notion of a reflexive predicate, the idea will be that when a predicate is negative, it must be negatively marked and this is the function of *nem* in Hungarian. Clearly if *nem* is a marker of a negative predicate, it is closer in nature to the morphological reflexive markers that attach directly to reflexive predicates, rather than being a morpheme attaching to one of the arguments. In fact, my claim is that *nem* is a morpheme that attaches to the negative predicate as a prefix, something which is supported by the fact that *nem* is not separable from the predicate by any other element.[7]

I will suggest the following constraint (based on Reinhart and Reuland's principles A and B):

(16) PRINCIPLE N
a negative predicate is negative marked

I will not follow up these speculations further at this point, but let us turn to what this has to say about the nature of *nem* and its relationship to the preverbs. The first point to be made is that *nem,* as a marker of a negative predicate, is clearly different from a preverb in that it does not have a postverbal *in situ* position. It is simply a morpheme and not itself a component of the predicate. Suppose we therefore have the following constraint:

(17) ALIGN PREF (re prefix : le V)

This places prefixes, such as *nem,* in competition with preverbs as they both want to be aligned with the left edge of the verb. If ALIGN PREF outranks ALIGN CLITIC then we also capture the fact that *nem* always wins out as the left adjacent element to the verb, forcing clitics to remain *in situ.* These results are summarised in the following table:

[7] It has been pointed out to me that *nem* may be separated from the predicate by a focus:

i. nem János ment el
not John went PART.
'it wasn't John who left'

However, in this case, it is not the predicate itself which is negative, but the focused element and this is what *nem* appears to be marking. Interestingly, it seems that when an argument of a verb is in focus and the focus is negative, then the predicate is not negative, otherwise we would expect the form:

ii. nem János nem ment el

But while this form is grammatical, it does not have the same meaning as (i), as each of the *nem*s mark an independent negation rather than entering a concord relationship with each other as is normal in Hungarian. I suggest that this is because a focus is semantically, and perhaps even syntactically, part of an independent clause, as is directly suggested by the English cleft construction.

(18)

		ALIGN PREF	ALIGN CLITIC	STAY
☞	nem ment el		∗∗∗	
	nem el ment	∗!		∗
	el nem ment		∗∗∗	∗!

The important point to make is that by including *nem* in the class of prefixes, we are able to account for its distribution without specifically referring to it directly in the constraints. Hence we are able to maintain maximally general constraints, even in the face of the fairly individual behaviour of certain elements.

7 Focus

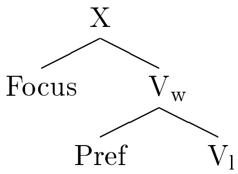
We now come to an interesting point in the paper, where the real problem is addressed and where things start coming together and we see patterns emerging which, I believe, give real insight into what is going on at the left periphery of the Hungarian clause.

As is well known, foci want to be left adjacent to the verb. Clearly this is going to put them in competition with other left adjacent elements, such as the preverbs. Of course, this particular battle is always won by the focus and in the presence of a focus, preverbs always remain *in situ.* However, we cannot simply propose a high ranking constraint such as the following:

(19) ALIGN FOCUS (re focus : le V)

The reason for this is that foci are not in complementary distribution with preverbal affixes such as *nem,* which they would be if (19) were correct.

Clearly what we want to say is that prefixes such as *nem* do not interfere with the adjacency requirement between the verb and the focus, presumably because of its affixal nature. Prefixes, after all, are part of the verb itself. To capture this idea, what we must say is that the element that the prefix wants to be adjacent to is different to the thing that the focus wants to be adjacent to. Recall our discussion about alignment syntax. There we claimed that when the alignment relationship is right edge target/left edge host, that the projection of the host must be considered as some other element to enable the alignments to be fulfilled. A fairly natural way of interpreting the present situation is to claim that the prefix is adjacent to the bare stem or the LEXICAL VERB, while the focus is adjacent to the element projected from this stem, but including the prefix. Presumably, this is the VERBAL WORD. We thus have the following situation:[8]

(20)


This has a certain naturalness to it that is quite appealing. Of course, we must make the relevant changes to the constraints:

(21) ALIGN PREF (re prefix : le lexical verb)

(22) ALIGN FOC (re focus : le verbal word)

But, here is the crunch. How can the preverbs be in complementary distribution with both the focus and the negative prefix if these are both in different structural positions? If we say that the alignment for clitics is similar to prefixes (i.e., to the left edge of the lexical verb) then they should not be in complementary distribution with foci and if we say that it is similar to foci (i.e., to the left edge of the verbal word), then they should not be in complementary distribution with prefixes.

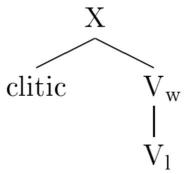
This is, of course, the conundrum that everyone faces, spelled out in a particular way. My solution will be to claim that preverbs are categorised both as clitics and prefixes. This may sound a contradiction, but it turns out to be a situation that the system that I have been developing allows, due to the nature of the alignment constraints. Suppose we restate the clitic alignment constraint thus:

(23) ALIGN CLITIC (re clitic : le verbal word)

[8] I will not comment on the nature of the element which projected from the V_w as this issue lies beyond the scope of the present paper. Elsewhere (Newson 1998b) I have argued that contra to current wisdom, the clausal nodes above the VP are exocentric and hence are not projected from either the verb or the subject. Whether or not the same can be said for the node dominating the Hungarian preverbal focus remains to be seen.

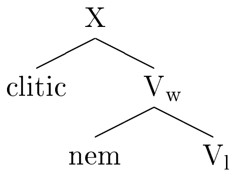
This places clitics in competition with foci for the left edge of the verbal word. If we assume that the focus alignment constraint is ranked higher than that of the clitic, we account for why the focus wins the battle and why in the presence of a focus the preverb remains *in situ.* Now, suppose that clitics are also prefixal and hence the ALIGN PREF constraint is also relevant to them. This is no problem for the theory, as something can be left adjacent to two things as long as the left edges of both of these are aligned. The configuration that would satisfy the two alignment constraints for clitics is then:

(24)



This also places the preverbs in competition with *nem* which as a prefix also wants to be left adjacent to the lexical verb. Note that even though the preverb is attached as a sister to the verbal word, the following structure also violates the ALIGN PREF constraint:

(25)



Now we face the question of why the negative marker wins the battle for the left edge of the lexical verb. The reason, I suggest, is the same as why some preverbs win out over others for the verbal left edge. The claim is that there are prefixes and prefixes and some are more affixal than others in the sense that we get a greater violation of the ALIGN PREF constraint if they are not left adjacent to the lexical verb. It is reasonable to assume that *nem* is more of a prefix than preverbs given that preverbs are independent components of the verb and *nem* is just a morphological marker of a property of the verb. This is the reason why a clitic will remain *in situ* in the presence of the negative marker.

Finally, the result we want is that if a preverb looses out to either a focus or a stronger prefix, the optimum solution would be for it to stay *in situ.* This will only be the case if STAY out ranks ALIGN CLITIC as if this were not the case, the preverb would prefer to violate ALIGN PREF and STAY in order to satisfy ALIGN CLITIC. By placing the latter low down in the ranking, we ensure that the preverb will remain *in situ* in cases of conflict. However, this does not mean that the preverb will always stay *in situ* as when it can it will satisfy ALIGN PREF which therefore must be higher than STAY in the hierarchy.

The following table summarises these results:

(26)

		ALIGN FOC	ALIGN PREF	STAY	ALIGN CLITIC
a. ☞	nem ment el		*		***
	el nem ment		*	*!	
	nem elment		**!	*	
b. ☞	JÁNOS nem ment el		*	*	***
	JÁNOS nem elment	*!	**	**	
	JÁNOS el nem ment	*!	*	**	
	nem ment el JÁNOS	*!	*		***
c. ☞	elment			*	
	ment el		*!		***
d. ☞	befesti zöldre		*	*	**
	zöldre festi be		*	*	***!
	zöldre befesti		*	**!	***
	be zöldre festi		*	**!	**
	festi be zöldre		*	**!	*****

8 Wh-elements

In a language such as English the domain of Wh-elements is typically the complementiser system where they have scope over the whole of the rest of the clause, which is fitting as they are normally supposed to be obligatory wide scope elements. However, in Hungarian, wh-elements are in complementary distribution with foci and have a similar effect as foci of sending the preverb into the postverbal part of the sentence. Therefore it is often assumed that wh-elements are focused, occupying a position inside the VP.

One problem this creates is for the interaction between wh-elements and quantifiers, which are standardly assumed to sit outside the focus position, adjoined to VP. This would predict that it would be possible to have a wide scope quantifier preceding the wh-element:

(27)*mindenki mit vett
everyone what bought
'what did everyone buy'

It is typically pointed out that the way to express the meaning of (27) is through a double wh-question:

(28) ki mit vett
who what bought
'who bought what' — requiring pair-list answer

É. Kiss (1994) has claimed that in this case *ki* sits in a quantifier position and receives the relevant quantificational interpretation. Thus, it is claimed that we do get structures in which a quantifier may precede a wh-element in the "focus" position. However, it is clearly strange that we cannot get a normal quantifier in this position and the ungrammaticality of (27) still requires explanation.

The situation is more complex however. Most informants that I have asked find that it is possible to get the pair-list interpretation without having two fronted wh-elements:

(29) ki vett mit
'who bought what' — can be given a pair-list answer

Note that it is not possible to claim that the preverbal wh-element in this case is in the quantifier position, as it is still in complementary distribution with the preverb and quantifiers are not:

(30) a. ki ölt meg kit
who killed PERF. who (pair-list answer still possible)
b.*ki megölt kit

If the pair-list reading is available even when no wh-element occupies a "quantifier position", this rather undermines the argument that the first wh-element in (28) is in a quantifier position at all. Therefore (28) turns out not to be a very convincing example of a quantifier preceding a wh-element. I will assume that there is a general ban on quantifiers preceding wh-elements.

But the question we now face is how come wh-elements are in complementary distribution with quantifiers, foci and preverbs, when quantifiers are not in complementary distribution with foci and preverbs?

(31) a. mindenki EZT A KÖNYVET olvasta el
everyone this the book read PART
'it was this book that everyone read'

b. mindenki elolvasta ezt a könyvet
'everyone read this book

This question is more tricky than the previous puzzles we have faced, the reason being that quantifiers may be recursively stacked in the left periphery of the clause:

(32) mindenki mindig mindenkivel egyetért
everyone always everyone-with agrees
'everyone always agrees with everyone'

This suggests that the distribution of quantifiers should not be handled by alignment constraints, as alignment can only be satisfied by one element. The fact that we can have stacked preverbal wh-elements, suggests that their distribution is determined by similar principles to quantifiers, not foci. But then we would expect them not to be in complementary distribution with foci and preverbs, whose distribution is determined by alignment considerations.

What we need to say is that wh-elements, under ideal circumstances, should be aligned with the left edge of the verbal word, and hence will be in competition with foci and preverbs for this position. However, if this is not possible, because another wh-element already satisfies this, they can either stay *in situ* or move in front of the other wh-element.

Thus, there seem to be two reasons for moving a wh-element, one which is obligatory and aligns it with the left edge of the verbal word and one which is optional and moves it to the left of this position. The second movement is only allowed after an instance of the first. We can capture this in the following way. Suppose that wh-elements are foci, as is standardly assumed in the Hungarian literature, and hence are subject to the ALIGN FOCUS constraint. As this constraint is ranked higher than STAY, the alignment of a wh-element to the left edge of the verbal word will be obligatory only once and all other wh-elements, other things being equal, should be forced to stay *in situ.* The second constraint will ensure that other things are not equal and hence that the remaining wh-elements may satisfy STAY or violate it. This would suggest that the relevant constraint is equal ranked with STAY. This constraint is not an alignment constraint, as discussed above, but it is not entirely clear to me at present what form it should take. For the time being, let me propose something rather weak, such as:

(33) FRONT WH- a wh-element must be fronted

Presumably, whatever the true nature of this constraint, it is this which is responsible for the fronting of wh-elements in languages which have obligatory fronting of multiple wh-elements, such as Polish.[9]

Following the previous discussions, we are also led to the conclusion that wh-elements violate ALIGN FOCUS more than foci do. It is not exactly clear why this should be the case, but it is suggested by the data. I will put the problem aside here.

The following table summarises the results:

(34)

			ALIGN FOC	ALIGN PREF	STAY	FRONT WH-	ALIGN CLITIC
a.	☞	ki ment el		*	*		*
		elment ki	**!		*	*	
b.	☞	mit vett MARI	*		*		
		mit MARI vett	**!		**		
		MARI vett mit	**!		*	*	
c.	☞	ki vett mit	**		*	*	
	☞	ki mit vett	**		**		
		vett ki mit	****!			**	

[9] Note that the obligatory fronting of the wh-element in English seems to be due to an alignment constraint as only one wh-element is fronted in the case of multiple wh-elements.

9 Quantifiers

Finally, we turn to quantifiers. We have already seen that these are not in complementary distribution with other preverbal elements, apart from wh-elements. Furthermore, they may be recursively stacked at the left edge of the VP. These things suggest that quantifiers are not situated by an alignment constraint, but that some other constraint is responsible for their distribution.

É. Kiss (1994) reports the following properties of universal and existential quantifiers (excluding negative and '*some*' phrases):

- Quantifiers must (normally) move to the left periphery and may only be preceded by a topic or another quantifier.
- When they are stacked in the left periphery their order indicates their scope relations.
- When their scope is such that it is narrower than a focus or a negative, they remain *in situ* and indeed, as a quantifier never has scope over a negative it is always *in situ* in the presence of the negative element *nem*:

(35) a. János mindent meg evett
John everything PERF. ate
'John ate everything up'

b. *János megevett mindent

c. mindenki mindent megevett

(36) a. JÁNOS táncolt minden lánnyal
John danced every girl-with
'it was John who danced with every girl

b. minden lánnyal JÁNOS táncolt
for every girl, it was János who danced with her

c. János nem táncolt minden lánnyal

d. *minden lánnyal János nem táncolt

To capture these data I will propose a single constraint which has been suggested elsewhere (Newson 1998a, Payne & Chisarik, forthcoming):

(37) MARK SCOPE the scope of an operator is marked at the left periphery of its scope domain.

Crucially, this constraint must be ranked lower than ALIGN FOCUS and ALIGN PREF as it is these constraints which prevent the quantifier from moving to the left periphery in the presence of a wider scope focus or negative. This is because if a quantifier attempted to mark its narrow scope with respect to a focus or a negation, it would necessarily have to move to a position which separates the focus and *nem* from the verbal word and lexical verb respectively. As this would violate ALIGN FOCUS or ALIGN PREF we can conclude that these must be more highly ranked with respect to MARK SCOPE.

Note also that this constraint plays a role in the interaction between quantifiers and wh-elements. We have suggested that these are incompatible with each other in the preverbal position. This may be due to the fact that wh-elements are obligatory wide scope elements and hence a quantifier can never move in front of a wh-element.

These results are summarised in the following table:

(38)		ALIGN FOC	ALIGN PREF	MARK SCOPE	STAY	FRONT WH-	ALIGN CLITIC
☞	mindenki elment				*		
	elment mindenki			*!			
☞	JÁNOS látott mindenkit			*	*		
	mindenkit JÁNOS látott			*	**!		
	JÁNOS mindenkit látott	*!			**		
☞	nem láttam mindenkit			*			
	mindenkit nem láttam			*	*!		
	nem mindenkit láttam		*!		*		

10 Conclusion

In this paper I hope to have demonstrated that a theory couched in terms of maximally general alignment constraints can fairly successfully account for some rather complex phenomena concerning the left periphery of the Hungarian clause. The very common "non-transitive" complementary distribution pattern we find between the elements which war over the left periphery makes it virtually impossible to satisfactorily account for these observations using inviolable constraints and as such Optimality Theory has clear advantages over others in accounting for the data.

I also hope to have demonstrated that alignment syntax has interesting properties which when used in combination with domination requirements can import a greater understanding of syntactic phenomena.

The specific proposal I have made concerning the relevant constraints dealing with those elements which conflict with each other at the left periphery can be summed up in the following ranking of constraints.

(39) ALIGN FOCUS > ALIGN PREF > MARK SCOPE > STAY = FRONT WH- > ALIGN CLITIC

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