Separable prefixes and verb positions in Cimbrian

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In this work we examine the position of separable prefixes in Cimbrian, a German dialect spoken in Northern Italy, which has the interesting property of having a productive set of separable verbs but also of being a VO language. The peculiarity of Cimbrian is that apparently separable prefixes change their position with respect to a) sentence type b) main versus embedded character of the clause c) auxiliary versus main verb. This poses a challenge on all the research that takes separable prefixes to occur in a fixed position to argue for movement of other elements in the clause. The aim of this work is to show that prefixes are indeed unmovable and that the apparent displacements are due to independently motivated movements of verbal forms

to Luigi, with admiration and in friendship

1. Introduction

This paper investigates the position of separable prefixes in a VO language that still displays several significant residua of an earlier OV stage. Such a language is the variety of Cimbrian spoken in Lusern, which is located in the South Eastern part of Trentino. Prefixes exist in all varieties of German and have an effect on the argument structure of verbs in that they change the number of arguments and their distribution. In addition, they seem to interact with aspectual properties (or better 'Aktionsarten') of the verb itself, which may be taken to indicate that prefixes are generated in those domains of phrase structure that encode aspectual distinctions. It is well-known that there is a close relationship between the aspectual properties of a verb and the number and type of its arguments, and prefixes might provide a good starting point for the study of this relationship. In this connection, Cimbrian may be of particular interest since it is one of the few languages exhibiting a diachronic stage that shows properties of an OV language like German, which has separable prefixes, as well as properties of a VO language like English, in which the same prefixes have become so-called "particles" of phrasal verbs (or verbs with prepositions). It may therefore well be the case that the observed OV- and VO-orders are in fact not determined inside the VP by a parameter that determines the order of the verbal head and its complement but that both orders are the result of verb- and/or object-movement to positions within the functional area designed to the expression of aspect. The prefixes of Cimbrian are thus also of particular theoretical interest since at first sight they seem to conflict with the assumption,

defended by many authors, that prefixes are immobile within the structure of the clause. As for OV-languages like German and Dutch, the relevant assumption is that in main clauses, the finite verb moves to the left clausal periphery leaving behind the prefix, while in embedded clauses and wi th composed tenses, the prefix precedes the verb, since there is no verb movement:

(1)	a.	Ich	habe ihn	anges	schaut.					
		I	have hin	n pref-l	ooked					
		'I looked at	'I looked at him'							
	b.	Ich	schaue	ihn	an.					
		I	look	him	pref					
	c.	dass	ich	ihn	an schaue					
		that	I	him	pref-look					

Due to their unmovable nature, prefixes often serve theoretical syntacticians as a test for finding out whether or not other elements of the clause, like the verb or the direct object, undergo movement. Van Kemenade (1987) and Tomaselli (1995) use exactly this test to determine the historical period in which English as an OV-language developed into a VO-language and in which Middle High German showed the beginning of a similar process (which then stopped). They try to show that a language has become VO if the finite verb precedes the prefix not only in main but also in embedded clauses. In OV languages, the prefix in fact precedes the verb in embedded clauses while in VO languages, no such asymmetry between main and embedded clauses can be observed.

The standard account assumes a similar analysis for the particles of "phrasal verbs" in English, which, as already pointed out above, are the VO-counterpart of separable prefixes in German: the particle remains in situ and it is the pronominal object that may move into a position in front of it:

- (2) a. I gave up the job.¹
 - b. I gave it up.
 - c. What did you give up?

According to this account, the difference between German and English does thus not lie in the position of the prefix/particle but in the possibility of verb (and possibly object) raising. In other words, we can assume that it is not the prefix/particle that undergoes reanalysis in the development from OV to VO, but it is the clausal structure around it that is reorganized, while the prefix/particle does not change its position. Since the prefixes in question generally express

In English, the nominal elements can occur on the right or on the left of the particle. The pronouns, however, generally occur on the left of the particle, at least with a specific class of verbs. This generalization provides strong evidence for the claim that it is not the prefix that undergoes movement, but the object of the verb. This kind of movement is obligatory for the pronouns but optional for the nominal objects and depends on the "heaviness" of the object itself. In other cases, the verb and the particle are always adjacent.

aspectual differences,² we will assume that this position is an aspectual position of the kind suggested in Cinque (1999).

Should we come across a language in which there is evidence that separable prefixes undergo movement, not only the test for the order of phrasal constituents (as proposed by van Kemenade 1987 and others) would become obsolete but basic tenets of the cartographic approach as a whole would be called into question.³ Indeed, if the prefixes encode nothing other than aspectual or Aktionsart differences, they should not be able to move to clausal domains that syntactically encode other types of features (as, e.g., tense, modality or clausal typing).

In the case of Cimbrian we are concerned with a Germanic variety with VO order (but residues of OV orders to be considered below) that might help us to understand the structure of the so-called "low area" of the clause, i.e. the area in which aspectual features are realized and which contains the participle, the complements and low adverbs such as *sempre*, *più*, *già*, *ancora*, *bene* etc. In the cartographic approach, these adverbs are located in the specifier position of aspectual projections that correspond with their semantic status. The prefixes thus seem to represent syntactic heads located in the low area of the clausal structure (the area of aspect), heads to which the verb adjoins whenever it does not raise to the left periphery.⁴

2. The problem: how many positions do Cimbrian prefixes occupy?

Grewendorf/Poletto (2005) point out that Cimbrian separable prefixes can follow as well as precede the perfect participle in declarative main clauses and in embedded clauses introduced by the complementizer *ke* (which derives from Romance *che*):

(3)	a.	I		offegeton pref-made door.'		die the	Ture ⁵ door
	b.	I	hon	geton offe	di	Ture.	

² One might invoke the distinction between aspect and Aktionsart here. However, Cinque (1999) does not make use of this distinction in his purely syntactic approach. The question of what the semantic contribution of the prefixes is, is therefore left to future research (see Damonte/Padovan 2011).

³ The syntactic theory that is known as "the cartographic approach" is based on the assumption that for every functional semantic category (tense, aspect, modality etc.), there is a functional projection that realizes this category. Every functional projection can thus be marked or not marked by a positive value but cannot receive other values. This means that every aspectual category (continuative, terminative, incoative etc.) has its specific functional projection. Thus the structure of the clause seems to become more complex, since it contains more projections. Upon closer inspection, however, it turns out to be less complex, since every projection has only one single value. In addition, increasing the number of projections implies an increase of functional heads. As a consequence, this approach provides head positions for the various morphemes and auxiliary forms that can be observed in many languages, as well as specifier positions, where the adverbs that realize functional distinctions such as tense, aspect etc. can be represented.

⁴ From a strictly technical point of view, it cannot be the verb that right-adjoins to the prefix, since there is no adjunction to the right. However, adapting Kayne's (2004) analysis of functional prepositions, we could assume that the verb moves to the position immediately dominated by the prefix.

⁵ The first example is taken from Grewendorf/Poletto (2005). Here, *offe* could originate from an adjective and not be a true prefix. To avoid this objection, we use the prefixes o and au in the other examples, since o and au correspond to the true German prefixes an and auf.

'H. has called'

I have made pref the door

(4)	a.	I I 'I have	hon have e finishe	pref-fi	ort nished ork in	the		ka in		Tria. Trento.
	b.	I I	hon have	gehort finishe	au ed pref	di the	Arbat work		ka in	Tria. Trento
(5)	a.	I I 'I thin	gloabe think k that H	that	dar the	Hons John	is is		gont-	
	b.	I I	gloabe think	ke	dar the	Hons John		is is	vort-g	
(6)	a.	*Dar he 'He sa	hat has id that l	khoett said H. has c	that	dar the	Hons John	o pref	hat has	gerieft. called
	b.	*Dar	Hons John		o pref	hat has		gerieft called	·•	

In main clauses and in embedded clauses introduced by complementizers of the *ke* type, these are the only two possibilities that can be observed.

There are two opposite ways to analyze these data: (a) we can assume that the prefix remains in situ and that the perfect participle optionally moves to a higher position in the clause, or (b) that by contrast, the perfect participle remains in situ and the prefix optionally moves to a position in front of it. Before discussing these two hypotheses, we would like to present a complete picture of the facts.

The Cimbrian variety spoken in Lusern has a second class of complementizers: These are complementizers such as az and bo, which behave differently from complementizers of the ke-type (see Grewendorf/Poletto 2009 for an analysis of the two types of complementizers). Complementizers of the ke-type are basically conjunctions, in the traditional sense of this expression: they do not involve any modification of the clausal structure, so that an embedded clause introduced by ke behaves in the same way as a main clause with respect to the following syntactic properties: (a) the position of object clitics, which attach enclitically to the verb, (b) the position of negation, which occurs after the inflected verb but before the participle, (c) the position of the particle da, which enclitically attaches to the finite verb, (d) the possible occurrence of the expletive pronoun 'z, which corresponds with the so-called 'Vorfeld-es' in German, (e) the position of the prefixes relative to the verbal forms. In contrast, complementizers of the az-type behave differently from main clauses with respect to the analogous properties: (a) object clitics attach enclitically to the complementizer rather than to the finite verb; (b) negation occurs before rather than after the finite verb; (c) the particle da attaches enclitically to the complementizer and not to the finite verb; (d) the expletive pronoun 'z is not allowed to occur; (e) prefixes occur in a position different from where they occur in main clauses. In particular, in main clauses and embedded clauses introduced by the complementizer ke, the prefix can only occur directly before or after the perfect participle, but always after the finite verb; in embedded clauses introduced by complementizers of the az-type, the prefix can also occur in front of the auxiliary or the finite verb, in addition to the other two possibilities that exist in main clauses and embedded clauses introduced by ke:

(7)	a.		azz-ar- that-he that he		him'	o pref	hat has	gerieft. called
	b.			pref				
	c.		that I i azz-e that-I	inished	hoear finish		au. pref	
(8)	a.	dar The 'The n	Mann man nan who	that	da prt La new	hat has	o-geheft a pref-started a	_
	b.	dar the	Mann man		da prt	hat has	geheft-o started-pref	a naüga Arbat. a new job
	c.	dar the	Mann man	bo that	da prt	o hat pref has	geheft started	a naüga Arbat. a new work

There is no detectable difference in interpretation associated with the varying positions of the prefix. In this case, the first hypothesis mentioned above (according to which the participle moves past the prefix) should be extended to the inflected verb, stating that only in embedded clauses introduced by complementizers of the *az*-type can the finite verb stay in a low structural position on the right of the prefix. The second hypothesis still assumes that the prefix raises to positions not encoding aspect but tense or event modality. In (9) and (10), the two hypotheses are illustrated for the case of a simple verb.⁶

(9) $[C^{\circ} \text{ az/bo-ar}^{7} [TP [T^{\circ}] [AspP pref [Asp^{\circ}] [VP V]]]]$

(10)
$$[C^{\circ} \text{ az/bo-ar } [XP \text{ pref. } [TP \text{ } [T^{\circ} \text{ } V] [AspP \text{ pref } [Asp^{\circ}t] [VP \text{ } t]]]]]$$

In the presence of an auxiliary, the following distinction should be made: for the second hypothesis nothing changes, apart from the fact that the element in T⁰ is not a main verb but an auxiliary. As for the first hypothesis, we have to assume that the inflected auxiliary is generated in a very low position, but still above the VP, which contains the main verb and its objects; this is a position that we define

7 See Grewendorf/Poletto (2009) for an analysis of the clitic subject pronouns as elements that occur in the left clausal periphery forming a cluster with the complementizer.

⁶ For theory-internal reasons we provisionally assume that the prefix is located in a specifier position. Otherwise verb movement would be blocked (for further discussion see sect. 5).

here as an aspectual position (even if it may eventually turn out to be another type of position internal to the complex VP-structure).

- (11) $[C^{\circ} \text{ az/bo-ar } [TP] [AspP \text{ pref } [Asp^{\circ} \text{ AUX}] [VP \text{ V}]]]]$
- (11) shows that the relative order of auxiliary and perfect participle still remains VO in Cimbrian, i.e. the auxiliary precedes the participle. The structure is thus not identical to the order we find in OV languages like German, even if the prefix precedes the entire verbal complex.

We thus arrive at the conclusion that the hypothesis illustrated in (10) (according to which the prefix moves rather than the verb), although it appears to be simpler than its alternative, obviously faces a serious theoretical problem. If movement has to be motivated, as assumed in modern syntactic theory, there must be a reason why a prefix that originates from an aspectual position undergoes movement to a tense or mood position without modifying the semantic properties of the clause. On the other hand, there are many languages in which the verb does not leave its base position or undergoes only a short step of movement. The movement of the prefixes could be explained by the assumption that prefixes are actually clitic particles, thus movement of prefixes, as assumed in structure (10), is triggered by the clitic properties of the prefix. This suggestion may derive some plausibility from the fact that, as shown by Damonte and Padovan (2011), prefixes are originally locative prepositions that could be treated on a par with the locative clitic ci in Italian. If the hypothesis that prefixes are clitics turns out to be correct, Cimbrian prefixes should be located in the area where clitic pronouns move. Languages that have clitic elements other than pronouns show that all the clitics, whether auxiliaries, negation, or adverbial clitics, are located in a specific area of the clause that "collects" them. In order to evaluate such a hypothesis, we should therefore take a closer look at the interaction of clitic pronouns and prefixes.

Furthermore, in order to find out which of the two structures (9) and (10) is correct, we can make use of a further test. This is a test that considers the position of prefixes in relation to other elements that, like the verb, are taken to be "immobile", as, for example, adverbs. Cinque (1999) has shown that adverbs are in fact generated in a fixed order and that they can only undergo movement if they are focused. Since focusing involves specific intonational patterns, it is not difficult to design a test with an adverb placed in base position rather than in Focus position, and determine whether it is the prefix that undergoes movement or the verb (be it the participle or the finite verb).

3. Prefixes are not clitics

In order to test the hypothesis that prefixes have become clitics (and thus raise to a preverbal position like other clitic elements) we have to check whether prefixes in fact show the characteristics typical of clitic elements, such as rigidity of position. A first observation in support of this hypothesis is that prefixes, like clitics, do not occur in all the available positions, but only in those illustrated above:

(12) *dar Mann bo au da hat gerieft.
the man that pref prt has called
'The man who has called'

In Grewendorf/Poletto (2009), the element da is analyzed as a particle that marks a phrase as Ground and heads a GroundP located in the Topic area of the left clausal periphery. This particle obligatorily occurs in subject relatives that do not contain a weak pronoun. In the presence of a weak pronoun, da is obligatorily omitted.

The particle da seems to have a fixed position in relation to other clitic elements in that it always precedes the latter:

(13) Da soin vortgont ena az-ta⁸-s niamat barn. prt are gone-away without that-prt-it nobody noticed 'They went away without anybody noticing'

The hypothesis that the prefix has become a clitic and raises to the position of clitic elements can thus be maintained and is also supported by data like (14), in which the prefix occurs adjacent to the object clitic *en*:

(14) ... azz-ar-en o hat gerieft.
... that-he-him pref has called 'that he called him'

In the sequence of the clitics, the prefix would thus occur as the last element, following the object. At any rate, the prefix cannot pass another clitic.

(15)*azz-ar-o-en hat gerieft. a. that-he-pref-him has called 'that he called him' *azz-o-ar-en b. hat gerieft. that-pref-he-him has called

Nevertheless, as can be seen from the example in (16) (and from the examples with adverbs given in the next paragraph), there are cases where the prefix occurs in a position below the negation and can thus not occupy a position within the sequence of clitics.

(16) Dar hat khött ke dar rüaft net o.
he has said that he calles not pref
'He said that he has not called.'

Cases like (14), where the prefix occurs immediately after the object clitic, are therefore better analyzed as a linear rather than a structural adjacency of clitics and prefix, which can be attributed to the fact that elements that in principle may intervene are not realized.

A final argument against the clitic nature of the prefix can be derived from the cooccurrence of prefixes with high adverbials such as *furse* ('perhaps'). As already pointed out above, Cinque (1999) shows that unfocused adverbials occupy a fixed position. We can therefore use these adverbs as a test for determining the exact position of the prefix. According to Cinque's hierarchy, the adverb *furse* occupies a position for modality, located lower than TP but higher than adverbs like *za*

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⁸ In this case, the particle da appears as ta for reasons of assimilation to the preceding unvoiced fricative.

('already') and *herta* ('always'), which express aspectual properties. As the examples in (17) clearly show, the prefix cannot be located in the area of the clitics, since the adverb *furse*, which precedes the prefix, occupies a position lower than the clitics.

(17)	a.	•••	az	ar	furse	O	rüaft		
	b.		that	he	perhaps	Pref	calls		
			'that !	he mig	ht call'				
	c.		*az a	r o furs	se rüaft				
	d.		*az ar o rüaft furse						

We can therefore conclude that prefixes are not clitics of the kind Cimbrian pronouns are. We can further conclude that the prefix cannot move to a position higher than the position for modality, where *furse* is located.

4. Prefixes and adverbs

Let us now take a closer look at adverbials such as *garecht* ('well'), *za* ('already') and *herta* ('always'), which Cinque's hierarchy characterizes as "low" adverbs, since they express aspectual properties of the verb and most likely occupy a position adjacent to aspectual prefixes.

The reason for this comparison between the position of prefixes and the one of lower adverbs is that both types of elements are said to be unmovable in the syntax (unless adverbs are contrastively focussed, a reading which can easily be controlled for and excluded). Therefore, if prefixes do not move, and adverbs do not either, the prediction we make is that there is a rigid order between the two types of elements, and the only element having more than one position should be the verb (either the simple inflected verb, the auxiliary or the past participle).

This will shed further light on the problem mentioned above concerning the position of inflected verbs, past participles and auxiliaries in main and embedded clauses introduced by the "Germanic" type of complementizers that blocks V to C so that both a simple inflected verb and an auxiliary are trapped within the IP. Given that Cimbrian is considered as a linguistic island and its VO order is often attributed in the literature to an influence of the neighbouring Romance varieties, one could expect that both simple inflected verbs and auxiliaries can raise up to the head of T, as it is the case in Romance.

For this investigation we use three of the low adverbs present in Cinque's hierarchy, namely *garecht* 'well', *herta* 'always' and *za* 'already', because, as we will see, they are representative of three distinct behaviours of the verb. We illustrate their position in bold in the sentence structure in (18):

(18) [Asp habitual usually [Asp repetitive I again [Asp frequentative I often [Asp celerative I quickly [T anterior already [Asp terminative no longer [Asp continuative still [Asp perfect always [Asp retrospective just [Asp proximative soon [Asp durative briefly [Asp generic/progressive characteristically [Asp prospective almost [Asp sg completive I completely [Asp pl completive tutto [Voice well [Asp celerative II fast, early [Aspsg completive II completely [Asp repetitive II again [Asp frequentative II often]]]]]]]]]]]]]]]]

We will present data with simple and compound tenses in turn.

4.1 Simple tenses

The adverb *garecht*, corresponding to the Specifier of Voice always occurs on the right of both the prefix and a simple inflected verb:

(19) I bill asto åhefst garècht di arbat I want that-you start well the work 'I want you to start your job well.'

The simple tense always raises higher than the adverb *herta* ("always"):

(20) a. Dar bill az-e herta rüaf dahuam he wants that-I always call pref. at home 'He wants me to always call home.' b. I bill asto årüafst hèrta hèrta I bill asto årüafst 'I want you to always call.'

The simple tense can but need not raise higher than the adverb and carries the prefix with it.

(21) * Dar bill az-e å herta rüaft dahuam He wants that-I prf. always call home 'He wants me to always call home.'

As the ungrammaticality of (21) shows, the prefix cannot raise alone to the left of the adverb.

The last adverb we consider is the one sitting in the Specifier of TanteriorP, namely *za*, 'already':

(22)	a.	 az	ar	za		0	rüaft
		that	he	alread	y	pref	calls
		'that he is alr	eady ca	lling'		_	
	b.	 *az	ar	0	za		rüaft
		that	he	pref	alread	y	calls
	c.	 *az	ar	0	rüaft	za	
		that	he	pref	calls	alread	y

The adverb za must occur higher than the simple verb; moreover, the ungrammaticality of (22b) confirms the fact noted above that the prefix cannot raise alone.

We can conclude that simple tenses have to raise higher than VoiceP, can raise higher than PerfectaspectP and cannot raises higher than TanteriorP. Moreover, the prefix cannot raise alone.

4.2 Compound tenses

In the case of compound tenses, the number of combinations multiplies, as we have to test the position of the adverb with respect to a) the auxiliary, b) the past participle, c) the prefix.⁹

As is the case with simple verbs, the adverb *garecht* has to be realized on the right side of both the auxiliary and the past participle. The prefix occurs to the immediate left of the past participle.

(23) vordo hasto augespüalt garècht di piattn before have-you Pref-washed well the dishes 'before you have washed well the dishes'

This means that both the auxiliary and the past participle are located higher than the adverb, hence also the past participle moves to the (low) functional domain of the clause.

In the case of *herta*, the auxiliary can but need not raise higher than the adverb, while the past participle remains below, with the prefix on its left.

(24) dar bill asto hast **herta** augespüalt di piattn he wants that-you have always Pref-washed the dishes 'He wants you to always have washed the dishes.'

dar bill asto **herta** hast augespüalt di piattn he wants that-you always have Pref-washed the dishes

Hence, apparently no distinction is found between auxiliaries and simple main verbs, as both can but need not raise higher than PerfectAspectP.

On the contrary, the position with respect to the third adverb, *za*, shows that there is indeed a distinction in the raising possibilities of an auxiliary with respect to inflected main verbs:

(25)azzar hatt ågerüaft a. sa Pref-called already has that-he 'that he has already called' b. azzar hatt ågerüaft Pref-called that-he has already

While inflected verbs cannot raise higher than the adverb, auxiliaries can, as shown by the grammaticality of (25b).

Summing up, we can say that all verbal forms (inflected main verbs, auxiliaries and past participles) must raise higher than Voice. This is the only position that past participles can reach, because they do not seem to go higher than either *herta*

⁹ At the moment we have not tested all the combinations yet, and therefore do not have a complete set of data, but we discuss what our informants found a natural translation of the Italian sentences that were given to them.

or za. This is totally expected under the well-known observations that past participles raise lower than inflected verbs (see Belletti 1990 on this).

Both auxiliaries and simple verbs can but need not raise higher than Perfect Aspect and auxiliaries can raise higher than *sa*, but need not.

The following structure displays the three types of movements (we do not display all the non-relevant projections here):

Moreover, the co-occurrence of the prefix with aspectual adverbs confirms our assumption about the low position of the former. The investigation with adverbs further shows that the inflected verb has to remain lower than Tanterior, hence it cannot raise to the TP (past or future) where inflected verbs raise in Romance. Auxiliaries have the possibility to raise higher than TanteriorP but need not. Hence, the type of VO found in Cimbrian might have been influenced by the neighbouring Romance varieties, but has clearly not "copied" the Romance structure.

4.3 Another piece of the puzzle: embedded interrogatives

Embedded interrogatives are like other cases of "Germanic" embedded clauses in not admitting the raising of the past participle alone higher than the prefix. However, the auxiliary seems to be forced to raise higher than the prefix, which is not the case in other embedded clauses. The contrast between the ungrammaticality of (27c)-(28c) and the grammaticality of (14), repeated here, illustrates the point:

(27)	a	that	ber who has was	Part	has	Pref-v	best vashed		piatn dishes	3
	b. *	. zega that	ber who	da Part	hat has	gebes	t ed	abe Pref	di the	piatn ¹¹ dishes
	c.*	zega that	ber who	da Part	abe Pref	hat has	gebest washe		piatn dishes	3
(28)	a	that	ber who among	vo of us has v	üs us vashed	has	Pref-w	best vashed		piatn dishes
		zega that zega	ber who ber	vo of	üs us üs	hat has abe	washe	abe d Pref gebest	the	piatn dishes piatn
	C. ·	that	who	vo of	us	Pref	has	washe		dishes
(29)		azz-ar	-en	o	hat		gerief	t.		

¹⁰ As can be seen from (26), prefixes are located in the functional field of the low IP-area, which implies that prefixes are functional elements, as already suggested by Zeller (2001), among others.

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¹¹ Note that the position after the perfect participle is not possible; compare, however, declarative clauses.

... that-he-him Pref has called 'that he called him'

This means that, contrary to main and embedded declarative clauses, embedded interrogatives have a fixed word order, according to which the auxiliary must raise higher than the prefix, while the past participle cannot. Hence, the possibility of raising the past participle (found in main clauses) is banned, as is the possibility of leaving the auxiliary below the prefix.

As for the reasons why the auxiliary is forced to move higher than the prefix, we propose that the wh-feature assigned by the matrix verb to the embedded C percolates down to T¹² and requires a lexical host, hence forcing the movement of the auxiliary. This derives the contrast between (27c) and (28c), which are interrogative clauses, and (29), which is not and therefore has no obligatory raising of the auxiliary to T, given that there is no wh-feature requiring it.

Notice, however, that embedded interrogatives are not only different from embedded declarative clauses, but also from main interrogative clauses. The contrast between embedded and main interrogative clauses is represented by the ungrammaticality of (27b) and (28b) which contrast with the following example:

(30) ... azz-ar-en hat gerieft o that-he-him has called Pref 'that he called him'

In this case, the distinction has to do with the position of the past participle, which can raise higher than the prefix only in embedded declaratives but not in embedded interrogative clauses. At present we do not have a fully-fledged theory that accounts for this contrast, and can at best exclude a number of possibilities and offer a rather speculative answer, which will have to be further tested on the basis of new empirical evidence.

The first hypothesis we exclude is that the reason why the past participle is trapped within the vP is to be attributed to (a reformulation of) the phase impenetrability condition, which somehow would only allow for one element to move outside the vP, thus blocking movement of the past participle if the wh-item has already been moved out of it.

According to this hypothesis, we predict that main interrogative clauses work like embedded ones, as also in this case the wh-item has to move outside the vP. However, main interrogative clauses where the past participle precedes the prefix are perfectly grammatical:

(31) ber hat gerüaft o? who has called Pref 'who called?'

Hence, we exclude that the ban against past participle movement is due directly to the fact that the wh-item blocks any other movement outside the vP.

12 Recall that in Rizzi's (1991) original proposal of the wh-criterion, the wh-features are generated under T/I and that T must move to C in main interrogatives because the wh-features of the verb and those of the whitem must be in a spec-head configuration.

An alternative solution might be to say that past participle movement is blocked only in embedded domains because there is some sort of parallel between phases, so that the head of C and the head of v are either both free (hence we get V2 and past participle movement) or both blocked, (hence V2 is blocked on a par with past participle movement). This analysis would predict that cases like (30) are ungrammatical, which is not the case.

What we actually need to explain this set of data is a combination of the two hypotheses, so that the past participle is blocked only when a) the C position is blocked (i.e. we are in an embedded clause with a complementizer of the "Germanic type" which blocks the whole CP heads) and also b) a wh-item has been extracted out of the vP. This singles out precisely the class of sentences that ban past participle movement, namely only embedded interrogatives.

Our tentative proposal is to derive both conditions from a single factor, i.e. from the wh-criterion: suppose that the wh-item and the verb must be in a spec-head configuration at some point in the derivation. This is achieved in the CP in main interrogatives, but not in embedded interrogatives, where C° is occupied by the complementizer. The projection where this configuration is achieved cannot be the TP either, because SpecTP is the position of the subject (Cimbrian is not a pro-drop language in the usual sense of Italian). Hence, the only head where this can be achieved is the head of vP, before the wh-item is further moved higher to the C domain. ¹³

5. The position(s) of the prefix

The final part of our analysis suggests a fixed position for separable prefixes in Cimbrian, exploiting the fact that Cimbrian is a VO language. Since they occur on the left of the adverb *garecht*, separable prefixes must be located in aspectual positions. Hence they are functional items and do not belong to the lower vP phase where the thematic requirements are satisfied.

We can immediately derive the position of prefixes by considering Cinque's hierarchy and the position of adverbs:

According to our data, the position of aspectual prefixes is between AspperfectP and VoiceP. It could also be the case that prefixes encoding different aspectual features have different positions and thus display a different ordering with respect to some of the adverbs located in the low IP area (though probably not the highest and lowest adverbs). Given that this would require a systematic investigation of all types of prefixes combined with several low adverbs, we leave this further elaboration to future research.

The last set of data we need to investigate concerns the position of the prefix with respect to verbal complex constructions like the one in (33).

One might wonder why the vP does not become a freezing position for the wh-item as it is for the past participle. However, in several languages wh-items are assumed to raise to a Focus position located in the low CP area, which means that they also have a Focus feature (at least in some languages). Hence, if the whitem has additional features to check, it must go on raising, while this is not necessary (hence, not possible)

for the past participle. Moreover, Belletti (2004) has already discussed this problem of the vP left periphery in Italian and has reached the conclusion that the vP is not a freezing position for the XP moving through it.

(33)	a.	Di	baibar ham	geboellt	aulesan	di	patatn.	
		the	women have	wanted	Pref-pick	the	potatoes	
'The women wanted to pick the potatoes.'								

geboellt b. baibar ham lesan Di di patatn. women have the wanted pick Pref the potatoes Di baibar ham di au geboellt lesan patatn. c. the women have Pref wanted pick the potatoes

We will assume that the example in (33c) corresponds to the basic word order. Given that the prefix, as we have just seen, is located in an aspectual position, it precedes the whole verbal complex. The case in (33a) can be derived through movement of the modal past participle to a higher position, most probably to the modal head located immediately higher than the aspectual set of projections (hence, immediately on top of the projection expressing habitual aspect), as illustrated in (34):

[Volitionmod geboellt [HabAsp Tanterior already [... AUX/V Aspperfect always PrefixP au [AUX/V/PPart lesan Voice well [...geboellt VP di patatn]]]]]

In this case, the most natural assumption is that the modal verb moves higher than the prefix by means of a head movement procedure, which in turn suggests that the prefix might be a specifier and not a head, as this would block the movement of the modal past participle.

The case of (33b) is more complex, as we see that both verbs have moved higher than the prefix, which means that this movement cannot be achieved through head movement.

An alternative would be to suggest that the reason why the two verbs move together is that it is the whole remnant vP that can raise higher than the prefix, so that the modal past participle pied pipes the whole vP also containing the lexical verb to the specifier of the volitional modality projection. This presupposes that the object has first vacated the vP (or better, it is located in the left periphery of the vP, as proposed by Belletti 2004 for postverbal subjects in Italian) before remnant vP movement applies. The structure would thus be the following:

[Volitionmod [VP] geboellt lesan di patatn] [HabAsp [Tanterior already [... AUX/V [Aspperfect always [PrefixP au [AUX/V/PPart [Voice well [LP di patatn]]]]]]

This opens up the possibility that also the case in (33a) is to be analysed as remnant movement where the whole VP has moved out and the vP only containing the modal auxiliary moves to VolitionmodP, thus yielding a structure like the following:

[Volitionmod [VP] geboellt lesan....[VP] di patatn.]] [HabAsp [Tanterior already [... AUX/V [Aspperfect always [PrefixP au [AUX/V/PPart lesan [Voice well [LP [VP] lesandi patatn]]]]]]]

This would in turn mean that the prefix is not necessarily a specifier, but could also be analyzed as a head, as its phonological form suggests. We leave this problem open for the moment, as we do not have any empirical evidence that excludes one of the two possible derivations.

6. Concluding remarks

In this work we have examined the position of Cimbrian prefixes with respect to other elements of the sentence like verbs, adverbs and clitics. Although separable prefixes seem to occur in several positions in the clause, we have shown that they occur in a low functional position located in the aspectual field of the low IP area, and that they do not move. The fact that they occur either to the right or to the left of auxiliaries, inflected verbs and past participles is due to the movement of the verbal form higher than the prefix. This has been shown by comparing the position of prefixes with the one of adverbs, which are also known to be unmovable categories (once Focus is controlled for). As we expected, the relative order of adverbs and prefixes is rigid, the only element that moves being the verb. The position of the prefix is located lower than PerfectAspP but higher than VoiceP.

Moreover, we have shown that the different verbal forms change their position according to the sentence type:

- a) In main clauses the inflected verb or the auxiliary are in a C position due to the V2 property of Luserna Cimbrian, and the past participle can raise higher than the aspectual position where the prefix is located. This is true both of declarative and of interrogative main clauses.
- b) In embedded clauses with complementizers of the "Germanic type", i.e. with complementizers that block V to C, the inflected verb can be lower or higher than the prefix, and the same is true of the past participle. A further test on adverbs has shown that there are differences in the raising properties of auxiliaries, which can (but need not) reach a position higher then TanteriorP, but can also remain below the prefix. Simple verbs can only raise higher than PerfectAspP but need not. Past participles can occur higher or lower than the prefix, but do not move beyond PerfectAspP, as they cannot bypass the adverb *herta* 'always'. All verbal forms, however, need to raise higher than VoiceP, hence no verbal form remains inside the VP.
- c) Embedded interrogatives display a different distribution of verbal forms with respect to other embedded clauses, as the auxiliary verb has to raise higher than the prefix, while the past participle has to remain below it. Hence, embedded interrogatives are the only type of sentence where the position of the prefix is actually fixed, due to a combination of factors, namely the requirements of the wh-operator and the fact that the C position is blocked for the verb.

Although the picture that emerges from this study is very intricate, and requires a further more thorough investigation of the data, we think we have provided convincing evidence that prefixes can continue to be used in the syntactic literature as a test to determine the position of the verb in the Germanic languages because they never move - not even in Cimbrian.

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